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# INTRODUCTION

The importance of breeding purebred animals is essential for the livestock sector because of its economic, social and environmental implications.

Autochthonous livestock breeds constitute an important source of income for livestock holdings and their rural environment, due to the use of high genetic value animals, which contribute to the improvement of profitability and competitiveness of their productions.

The Spanish Official Catalog of Livestock Breeds contains the official listing and classification of all livestock breeds of different domestic species, recognized and used in Spain for their economic, productive, cultural, environmental or social interest.

In accordance with the provisions of Annex I, of the Royal Decree 45/2019, of February 8, which establishes the zootechnical standards applicable to purebred breeding animals, hybrid breeding pigs and their germinal products, the National Program for the Conservation, Improvement and Promotion of livestock breeds is updated.

Participating in the new edition of the catalog is for me a satisfaction and the opportunity to confirm that the task undertaken in the development of the National Program for the Conservation, Improvement and Promotion of Livestock Breeds, has resulted in the inventory, characterization and classification of a significant number of new breeds and new livestock species.

This work of continuous updating allows us to detect possible situations of deterioration or risk of disappearance of certain resources, and thus channel future trends and perspectives, in order to adopt the most appropriate measures, and establish the most appropriate policies. And this, always bearing in mind our international commitments, and, among others, the Convention on Biological Diversity, the commitment of the Kingdom of Spain for the development of FAO's Global Plan of Action for Animal Genetic Resources, accompanied by the Interlaken Declaration of 2007 and the ratification of the Nagoya Protocol in 2014.

In this new edition, it once more becomes clear that Spain is one of the countries with the greatest animal genetic diversity, with a large number of breeds of diverse species, which play an essential role in terms of biodiversity due to the genetic heritage they represent, but also in terms of food production, the maintenance of a suitable environmental balance and the sustainable development of rural environment.

It is of vital importance to carry out, not only the inventory of resources, but also the subsequent dissemination of the national livestock heritage to the members of the sector and society in general, a work of dissemination that is pursued with the publication of this new edition.

I would like to thank autonomous regions, breeders associations, Institutions, technicians and individuals committed to Spanish breeds, for their collaboration with the Ministry of Agriculture, Fisheries and Food in the preparation of this book, with the contribution of all manners of material and knowledge.

Our autochthonous livestock breeds are a hallmark of Spain; of our past, of our present, and also of our future.

> Luis Planas Puchades MINISTER OF AGRICULTURE, FISHERIES AND FOOD.

The Official Catalogue of Livestock Breeds, contained in the National Programme for the Conservation, Improvement and Promotion of Livestock Breeds, includes the following list of breeds:

#### **AUTOCHTHONOUS BREEDS**

- a) Bovine species: : Albera, Alistana-Sanabresa, Asturiana de la Montaña, Asturiana de los Valles, Avileña-Negra Ibérica (including Bociblanca variety), Berrenda en Colorado, Berrenda en Negro, Betizu, Blanca Cacereña, Bruna dels Pirineus, Cachena, Caldelá, Canaria, Cárdena Andaluza, Frieiresa, Lidia, Limiá, Mallorquina, Marismeña, Menorquina, Monchina, Morucha ( including the Black variety), Murciana-Levantina, Negra Andaluza, Pajuna, Pallaresa, Palmera, Parda de Montaña, Pasiega, Pirenaica, Retinta, Rubia Gallega, Sayaguesa, Serrana de Teruel, Serrana Negra, Terreña, Tudanca, Vianesa.
- b) Ovine species: Alcarreña, Ansotana, Aranesa. Canaria. Canaria de Pelo. Carranzana (including Blond Face and Black Face varieties), Cartera, Castellana (including Black variety), Colmenareña, Chamarita, Churra Lebrijana, Churra Tensina, Churra, Guirra, Latxa, Lojeña, Maellana, Manchega (including Black variety), Merina (including Black variety and Merina de los Montes Universales), Merina de Grazalema, Montesina, Navarra, Ojalada, Ojinegra de Teruel, Ovella Eivissenca, Ovella Galega, Ovella Mallorguina, Ovella Menorguina, Ovella Roja Mallorguina, Palmera, Rasa Aragonesa, Ripollesa, Roya Bilbilitana, Rubia del Molar, Sasi Ardi, Segureña, Talaverana, Xalda, Xisqueta.
- c) Caprine species: Azpi Gorri, Bermeya, Blanca Andaluza o Serrana, Blanca Celtibérica, Blanca de Rasquera, Cabra de las Mesetas, Cabra Galega, Del Guadarrama, Florida, Eivissenca, Majorera, Malagueña, Mallorquina, Moncaína, Murciana-Granadina, Negra Serrana, Palmera, Payoya, Pirenaica, Retinta, Tinerfeña, Verata.
- d) Porcine species: Chato Murciano, Euskal Txerria, Gochu Asturcelta, Ibérico

(including Entrepelado, Lampiño, Manchado de Jabugo, Torbiscal and Retinto varieties), Negra Canaria, Porco Celta y Porc Negre Mallorquí.

- e) Equine species (horses): Asturcón, Burguete, Caballo de Las Retuertas, Caballo de Monte de País Vasco, Cabalo de Pura Raza Galega, Cavall Mallorquí, Cavall Menorquí, Cavall Pirinenc Català, Pura Raza Española (with Cartujana lineage), Hispano-Árabe, Hispano-Bretón, Jaca Navarra, Losina, Marismeña, Monchina, Pottoka.
- f) Equine species (Ass): Andaluza, Ase Balear, Asno de las Encartaciones, Catalana, Majorera, Zamorano-Leonés.
- g) Avian species: Andaluza Azul, Combatiente Español, Euskal Antzara, Euskal Oiloa, Galiña de Mos, Gallina Castellana Negra, Gallina Eivissenca, Gallina Empordanesa, Gallina Extremeña Azul, Gallina del Prat, Gallina del Sobrarbe, Gallina Pedresa, Indio de León, Mallorquina, Menorquina, Murciana, Oca Empordanesa, Pardo de León, Penedesenca, Pita Pinta, Utrerana, Valenciana de Chulilla.
- h) Other species: Camello Canario, Conejo Antiguo Pardo Español, Conejo Gigante de España.

#### **NON-AUTOCHTHONOUS BREEDS**

- a) Bovine species: Blonda de Aquitania, Charolesa, Fleckvieh, Frisona, Limusina, Parda.
- b) Ovine species: Assaf, Berrichon du Cher, Charmoise, Fleischschaf, Île de France, Lacaune, Landschaff, Merino Precoz, Salz.
- c) Porcine species: Duroc, Landrace, Large White, Pietrain.
- d) Equine species: Anglo-Árabe, Árabe, Pura Sange Inglés, Trotador Español, Caballo de Deporte Español.

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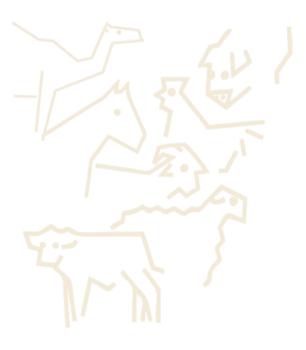
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## BOVINE

Albera Alistana-Sanabresa Asturiana de la Montaña Asturiana de los Valles Avileña - Negra Ibérica Avileña - Negra Ibérica (variedad Bociblanca) Berrenda en Colorado Berrenda en Negro Betizu Blanca Cacereña Blonda de Aquitania Bruna dels Pirineus Cachena Caldelá Canaria Cárdena Andaluza Charolesa Fleckvieh Frieiresa Frisona Lidia Limiá Limusina

Mallorquina Marismeña Menorquina Monchina Morucha Morucha (variedad Negra) Murciana - Levantina Negra Andaluza Pajuna Pallaresa Palmera Parda Parda de Montaña Pasiega Pirenaica Retinta Rubia Gallega Sayaguesa Serrana de Teruel Serrana Negra Terreña Tudanca Vianesa



# **ALBERA**



#### **GENERAL FEATURES**

Orthoid, medioline, subellipometric, of low mass and strong-boned. It has a uniform black or light brown-beige colour gradient known locally as "fagi" (there are two layers, the black and the brown), lightweight, being relatively small animals, unlike the typical structures of any of the productive breeds of bovine species. Physiologically, it symbolises the perfect adaptation of a domestic animal to a hostile environment, which requires it to live wild.

Adult males weigh an average of 500-550 kg and females about 300-350 kg. As for the height at the withers, males are about 125 cm on average and females 120 cm.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The breed lacks commercial specialization. Its genetic heritage, body form, functional characteristics, lifestyle, nutritious levels, management system and feral nature only allow it to be a calf producer as well as an excellent tool for forest clearance.

It produces a larger cow from the studs, diverse and heterogeneous due to the genetic variation among them and with no norm to reduce their waste. The calf is typically weaned at 6-7 months of age and sold at a year or a year and a half of age with a live weight of about 400-450 kg, with a carcass yield of 45%.

It is a typical example of extensive silvopastoral farming with a predominance of the first component. It lives all year round immersed in a wooded environment, without stables or shelters, in the open air, making long journeys to feed. This autochthonous bovine breed takes its name from the area in which it is farmed, the Sierra de la Albera, located on the eastern slopes of the Pyrenean Mountain Range overlooking the Mediterranean. In France it is called the Massanese breed, a toponym derived from the small Massane river that runs along the northern slope of the aforementioned mountain range.

It descends from the Cantabrian Stock, and over the years it has maintained its usefulness and endured as an important working animal, in addition to meat producer, until its breeding area was invaded by other cattle which penetrated the mountain from lowland areas.

#### **GEOGRAPHICAL DISTRIBUTION**

The breed was to be found exclusively in the Massif or Sierra de la Albera, in the province of Gerona (Ampurdán region), in Spain, and the Department of Roussillon, in France, in an area that stretches from the Coll del Perthús to the Mediterranean. Currently, and thanks to the creation of the Associació d'Amics de la Vaca de l'Albera, there are 13 herds on a transfer basis distributed throughout Catalonia, although the most important herd and where the purest animals are to be found is still in the Sierra de la Albera.



The herd spontaneously divides into groups of 10-12 heads linked by family ties, i.e. groups of breeding females with descendants of the same sex. From one year of age, the males forage independently over wide ranges, visiting the groups of females, with which they remain during the reproductive period.

# **ALISTANA-SANABRESA**



#### **GENERAL FEATURES**

The Alistana-Sanabresa breed consists of midline, eumetric with a concave profile, pronounced sexual dimorphism, high hardiness and a good temperament.

The racial prototype consists of brown coat animals with centrifugal darkening, pink internal mucous membranes and black external ones as well as a black tongue. The horns are of average proportions and white with black tips. The animals of this breed are also characterised by the presence of a fringe or quiff, hairy ears and a tuft at the end of the tail. They are also pale-snouted and have pale 'partridgeeye' eye contours.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

In reproductive terms, the Alistana-Sanabresa breed stands out for its continuous cyclic activity, easy calving and great maternal aptitudes. Servicing is mainly by natural mating, with minimal use of artificial insemination.

Standard products are yearling, from weaned calves fattened to a live weight of 480-500 kg, adult animals with carcass yields of 58-60% for bulls and 52% for cows.

It has its origin in the Cantabrian stock and has evolved from being a breed with a double work-meat aptitude to being focused exclusively on meat production.

Those responsible for the promotion and development of the breed, the genealogical book and the Plan for the Conservation and Improvement of the breed are the Spanish Association of Select Cattle Breeders of the Alistana-Sanabresa Breed (AECAS) and the Department of Agriculture of the Junta de Castilla y León, with the support of the CENS-YRA of León.

#### **GEOGRAPHICAL DISTRIBUTION**

Originally, it occupied the Aliste and Sanabria regions of Zamora, which are characterised by their cold climate and poor pastures. It is currently distributed throughout the province and beyond, mainly within the Region of Castilla y León. There are farms in Segovia, Burgos, León, Palencia and Guipúzcoa.



In its farming system, in certain areas, grazing and stabling are alternated according to climatic conditions. The majority of livestock are farmed extensively.

# ASTURIANA DE LA MONTAÑA



As its name indicates, this breed of cattle is autochthonous to the eastern part of the Principality of Asturias. Locally it is known as the Casina Breed because its geographical origin was the Caso District.

It is a typical mountain breed, located at high geographical altitudes, since it meets all the requirements of hardy breeds.

#### **GENERAL FEATURES**

The Asturiana de la Montaña Bovine Breed consists of animals with a straight profile, medium size and average proportion with a predisposition to short forms and good muscular development. They have a medium-sized head, with a straight subconcave profile (in males pronounced occipital protuberance), small ears with abundant hair and tufts called bedilles, hooked horns (in males not very open, and in females, turned upwards and outwards) and dewlaps in males. The back is lightly saddled and the rump wide and slightly inclined. The tail is short with an abundant tuft and a curved root. The coat is brown, with a greater or lesser gradient, and the mucous membranes black. It has a pale mouth and black eyes.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The Asturiana de la Montaña breed has been part of the Asturian landscape and ecosystem since time immemorial, playing an important role in the conservation of the environment and contributing greatly to the stability of the population in mountain areas.

They are very docile animals with great breeding capacity, which simplifies their handling. Considered as a "pasture breed", they are only stabled under extreme climatic conditions (such as snow), which is the only time they re-

#### **GEOGRAPHICAL DISTRIBUTION**

Throughout the mountainous areas of the Principality of Asturias, with a higher population in the foothills of the Picos de Europa, and also extending to other Regions such as Castilla y León, Cantabria and La Rioja, among others.



ceive rations of hay or meadow silage. Its triple function of the past having been discontinued, it is now used extensively for meat production, with its own brand "Carne de Casín" included in the Protected Geographical Indication "Ternera Asturiana". The standard products are newly weaned calves and heifers for life.

# ASTURIANA DE LOS VALLES



#### **GENERAL FEATURES**

They have a straight or slightly sub-convex profile and a balanced appearance. According to their muscular development, they are classified in two aptitudes: rump aptitude and normal aptitude.

The colour of the coat is brown with variations from straw yellow to reddish brown, with creamy degradations on the fringe of the snout, internal face of the limbs and crotch. The buccolingual and anovulvar mucous membranes are black. In addition, the animals of this breed have a black tail tuft, yellowish-white horns with black tips, and ears with pale hairs on the inside and dark at the edge

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Animals of this breed stand out for their hardiness, docility and good maternal instinct. Currently the breed is used primarily for meat production, despite its triple-aptitude origins.

Of a very docile nature, it is ideal for handling in semi-intensive conditions, surviving well in rough terrain and withstanding extreme temperatures with no difficulty. It is farmed by summer grazing in mountain passes, spring and autumn grazing in the valley meadows, and stabling during the winter. The cows of this breed wean well-formed high-weight calves. Its extraordinary breeding capacity is perhaps reminiscent of its former use as a dairy cow.

The bulls of the Asturiana de los Valles breed are widely used in industrial breeding with Friesian cows and other breeding cows, both by natural mating and artificial insemination. The cross-bred calf is born without difficulty and It belongs to the brown stock and its origin is European, possibly having been introduced with the Celtic invasions. It always had a notable presence throughout Asturias and Leon until the middle of the twentieth century when, with the massive introduction of foreign breeds, the population was reduced to almost zero. At the beginning of the 1980's, the recovery and improvement of the breed began and the Spanish Association of Select Cattle Breeders of the Asturiana de los Valles Breed (ASEAVA) was created, responsible for keeping the Herdbook, controlling meat yield and testing young studs. In the 1990's a great recovery of the population took place and its expansion into other Spanish regions began.

# 

#### **GEOGRAPHICAL DISTRIBUTION**

The main breeding area is the Cantabrian coast (Galicia, Asturias, Cantabria and the Basque Country), although it has a notable presence in Castilla y León and Extremadura. There are herds in practically all the Spanish autonomous regions.



very well-formed, since Asturian bulls provide muscle to the product and an increase in the sensory quality of the meat.

As a quality distinction, the breed has the "Xata Roxa" Brand included in the Protected Geographical Indication of "Ternera Asturiana". The standard products are veal, slaughtered at less than 12 months and the yearling, slaughtered between 12 and 18 months.

# AVILEÑA-NEGRA IBÉRICA



#### **GENERAL FEATURES**

The Avileña-Negra Ibérica breed gives wellproportioned animals, of medium size and with a straight to subconcave profile. The coat is uniform black. The adult weight in females is 550 kg and in males 900 kg.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Extensive farming system. In our days, transhumance is still practised to take advantage of mountain pastures and meadows. Part of the movement takes place on foot along cattle trails. Farms have a stocking density of 0.2 to 0.4 LU/Ha.

In terms of reproduction, the most important features are fertility, with an average of 90%, maternal aptitude and the absence of dystotic calving. Natural mating is practised and the proportion is 35-40 cows per breeding bull. The economic activity focuses on the sale of breeding cows and bulls and the rest on the production of meat, in the form of either veal or yearling beef. In this regard, the growth data are 1.5 kg /day with carcass yields of 57%.

Carne de Avileño was the first fresh meat indication approved in Spain, later called PGI Carne de Ávila, with Avileña-Negra Ibérica Breed animals and, since 1996, has the backing of the European Union. Currently the PGI covers the meat of thoroughbred animals and the first crossing of Avila cows with bulls of meat breeds. The direct origin of the breed is generally attributed to Bos taurus ibericus, or black bovine cattle from the centre of the Iberian Peninsula. From the second half of the 19th century onwards, the geographical area of the large black Iberian cow was reduced to the Central Plateau, giving rise to the group denomination Serrana, which received different names as a result of their geographical location. It is a very hardy breed, well adapted to the environment, which has occupied areas of difficult use. In addition, it has good production capacity and disease resistance and the cows are very good breeders with high fertility. Its Herd Book dates back to 1933 and the Spanish Association of Select Avila Black

Spanish Association of Select Avila Black Iberian Breeders was created in 1971. The first regulation of the herdbook took place in 1970, and it has subsequently been updated on various occasions until the current regulation was reached. The Association was recognised as a collaborating entity for the performance of functions related to the Herd Book, by Order of the then named Ministry of Agriculture in 1975.

#### **GEOGRAPHICAL DISTRIBUTION**

The breed is widely distributed throughout the Iberian Peninsula and can be found in Castilla y León, Extremadura, Madrid, Castilla-La Mancha, La Rioja, Aragon, Andalusia and Valencia in up to a total of 18 provinces. In general in mountain areas and grassland.



# AVILEÑA-NEGRA IBÉRICA (VARIEDAD BOCIBLANCA)



Like the Avileña-Negra Ibérica breed, it comes from the black Iberian stock and has its origin in the mountainous areas of the centre of the peninsula. This breed is characterised by a high degree of hardiness and fertility.

#### **GENERAL FEATURES**

The animals of the Bociblanca variety of the Avileña-Negra Ibérica breed are well proportioned, of medium size and with a straight to sub-concave profile. The colouring of the coat is uniform black, with brown gradients, and with a white or dark brown fringe around the mouth.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The characteristic farming system of the breed is extensive, supplemented with hay, straw or concentrates in the winter months and late summer.

High fertility, a good maternal aptitude of the females and the absence of dystocic calving are the most important factors, and natural mating is practised with a distribution of 35-40 cows per breeding bull. However, due to the sparse population on the farms, the future intention is to use AI to maintain the purity of the breed. Cows produce a calf in just over a year, 405 days. Given the population situation, the main objective is to maintain minimum populations to avoid an increase in inbreeding and establish nuclei in different farms to permit the transfer of breeders and AI.

#### **GEOGRAPHICAL DISTRIBUTION**

This Variety, unlike the Avileña-Negra Ibérica breed, is distributed across very few regions of the Iberian Peninsula, especially in Castilla y León, and with some specimens in Extremadura, Madrid and Castillala Mancha. They also have low populations.



The production data are lower than the average for the breed, with pre-weaning growth of 800 g/day and post-weaning growth of 1,100 g/day and a carcass yield of 54%.

# BERRENDA EN COLORADO



The name of the breed comes from the most outstanding feature of its phenotype: the color of the coat, consisting of red patches on a white background, which in our livestock terminology is called red berrenda. Of the different hypotheses regarding its phylogeny, the most widely accepted is that it is directly descended from Bos taurus desertorum, which is attributed the dominion of the Southwest Iberian Peninsula.

#### **GENERAL FEATURES**

These are medium to large, strong-boned animals with a straight to sub-convex profile, elongated proportions and low mass. Their coat, as their name suggests, is white with red patches. They have excellent motor skills, stamina for walking and speed when required. Likewise, it is a hardy and docile breed, with a lively temperament while maintaining its gentle and tame nature, as well as a good aptitude for haltering. The bulls have a live weight of 800 to 1,000 kg and an average height of 143 cm at the withers; while the females weigh from 500 to 600 kg and have an average height of 138 cm.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Its breeding is focused on the production of meat in difficult environments in order to use the renewable resources offered by grazing on an extensive farming basis, offering the market weaned calves from 7 to 8 months of age for completion in intensive farming systems, or completed on the farm of origin itself. It is important to emphasize the good acceptance that adult cattle of the breed has in the market. The contribution of the breed to bullock herds is its major benefit, being closely linked to the Lidia breed, as well as to its breeding systems and production systems, playing an important role . due to its unique aptitude as an auxiliary for the handling of these strong-charactered

#### **GEOGRAPHICAL DISTRIBUTION**

Although its geographical distribution is relatively high, given that it is present in Andalusia, Extremadura, Castilla y León, Castilla-La Mancha, Valencia, Aragón and Madrid, it is classified as a special protection breed. Individuals of this breed appear scattered over wide geographic areas and in those occupied by the Lidia breed.



cattle in extensive farms. The farming system of the breed is extensive. Their breeding and production have therefore been strongly influenced by the conditions of the environment in which they are kept, characterised by long winters, short springs, long summers and not always favourable autumns.

# BERRENDA EN NEGRO



#### **GENERAL FEATURES**

Morphologically, the breed consists of midline and large in size animals with an orthoid profile, discrete mass and plenty of bone. One of the most outstanding features of these animals is their coat, both because of its colour, as they are black patched, and because of its characteristic pattern, known as paired, where the black is only present on the head, neck, flanks and the four limbs. The weight of the adult animal ranges from 800 to 1,000 kg in the case of males and 550 to 600 kg in the case of females. Their average height at the withers is 143 cm and 138 cm respectively.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

It contributes to meat production in the form of grazing calves aged 5 to 7 months and with a live weight of 230-240 kg, which are either transferred to the market or retained on the farm itself for intensified completion to the yearling stage, with an average live weight of 420 kg. The adult cattle stand out for their heavy carcasses. Its contribution to bullock herds is certainly important, maintaining a strong link to both the breeding of the Lidia breed and the areas in which the latter is found. The full name of the breed, Berrenda en Negro Andaluza, comes from the patched colouration of its coat, which is one of its most distinguishing features, and from the territorial area of origin.

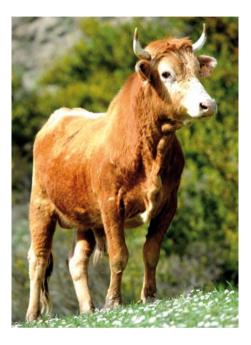
The most widely accepted hypothesis about its origin is that it is a patchy mutation of the Negra Andaluza breed, due to its similarity with the latter in many of its external features, as well as its geographical proximity, which would place it within the Iberian Stock. The secular history of the breed is to be found in the field of extensive breeding and extraction of specimens as work animals, having been extensively used over the centuries in agriculture in the case of females and transport in the case of males.

#### **GEOGRAPHICAL DISTRIBUTION**

Major population nuclei in the south of Extremadura and in the south of Castilla-La Mancha, Andalusia, Madrid, Castilla y León, Valencia and Aragón, both in number and quality.



# BETIZU



#### **GENERAL FEATURES**

This breed consists of sub-long-lined, ellipometric, light-boned individuals with an orthoid profile and low mass. Its coat is straw-coloured, varying from the palest to the most firy, depending on sex and season, with centrifugal discolouration in certain parts of the body. It has thick, detached and mobile skin.

These are surly, aloof, elusive animals with a characteristic tendency to hold their heads high, and which do not hesitate to attack when they are harassed. This fact has meant that occasionally some steers are used in popular festivals involving bulls.

#### **PRODUCTION CHARACTERISTICS**

Betizu cattle are used mainly for meat production. However, the circumstances affecting the breed mean that their meat yields cannot be adjusted to the general scale or be estimated with the conventional market weightings The name of the breed comes from the Basque language, in which Bahi means cow and izua elusive. This term seeks to distinguish it from conventional cattle, called Etxebe in Basque, which means farmhouse cow.

#### **GEOGRAPHICAL DISTRIBUTION**

The Betizu is scattered throughout Biscay, Guipúzcoa, Navarre and Aquitaine (France). Although ethnozootechnical literature did not deal with it until a few decades ago, due to its small number and to the fact that it was not officially recognised by the Ministry until 1997, its breeding is deeply rooted in the areas where it is present, with an infrastructure for the conservation, promotion and study of the breed, even before its official recognition.



#### **FARMING SYSTEM**

The farming system is exclusively extensive, the cattle having complete freedom of movement and wide territoriality. Their diet is based on plant resources, often of poor quality, with little nutritional value or appeal to other cattle. This circumstance shows their enormous hardiness and their capacity to take advantage of natural resources of difficult access and/or utility.

# BLANCA CACEREÑA



#### **GENERAL FEATURES**

The Blanca Cacereña breed follows the pattern of orthoid, eumetric, midline cattle with good mass and scarce bone. Uniform white coat, with pinkish shades in young individuals and cream in adults.

Hardy breedwith coarse body architecture, open lines and very clear skin development. They have a calm temperament and are easy to handle. The average live weight in the case of males is 650 kg which have an average height at the withers of 141 cm, while females have an average weight of 550 kg and an average height of 134 cm

# PRODUCTIVE CHARACTERISTICS AND FARMING SYSTEM

The parameters considered in comparison and monitoring protocols show that the breed, in terms of meat capacity, for the yearling type shows an average daily gain of 1.37 kg (from 243 to 499 kg) and an average weight at slaughter 500 kg (at 477 days of age). The gross carcass yield is 53%, highly conditioned by the development of the skin, whose average weight is 9% of the weight at slaughter. The breed is farmed under the purest extensive system, with a physiology adapted to extreme environmental conditions and a great digestive capacity to take advantage of coarse foods. The breed owes its name to the colouring of the coat and territory of origin, and its presence in Spain has been known since ancient times. It is undoubtedly of foreign origin although there is no agreement about its provenance.

However, the breed's population could never have been very high and has suffered a gradual decline over time.

Farmed on an extensive basis and valued in the past for its working capacity, it was kept with a small number of breeding stock and linked to a distinctive group of breeders. Today it is subject to a conservation programme that forces farmers to breed it to increase its population without great demands, addressing tasks that maintain its genetic diversity.

#### **GEOGRAPHICAL DISTRIBUTION**

The population is distributed in nuclei of 30-40 breeders. It is one of the most endangered Spanish breeds in terms of population. Most of the herds are distributed in the region of Cáceres, with a discrete expansion towards the neighbouring region of Badajoz.



# BLONDA DE AQUITANIA



Also known as Rubia de Aquitania, it is a modern breed, originating in the historic Aquitaine, a southwestern region of France, as the result of the breeding of three now extinct breeds, the Quercy, the Garonese and the Pyrenean Blond.

The Confederación Nacional de Blonda de Aquitania (CONABA) is responsible for the development of this breed, now considered autochthonous breed of Spain.

The docile character of this breed results in its feeding and metabolism being better than in other breeds, which also results in excellent yields and longevity, as it is not uncommon to see bulls and cows aged over 15 years.

#### **GENERAL FEATURES**

These animals are characterised by an excellent, long-lined, wide-profile, horizontal and rounded body form. They have a very expressive and light head with horns.

Their skin is brownish in colour, varying from dark to pale, with pale areas around the eyes and nose, the inner part of the legs, and the lower part of the abdomen.

# PRODUCTIVE CHARACTERISTICS AND FARMING SYSTEM

The males are very good walkers, while the females are very good mothers. Thanks to the morphological characteristics of the pelvis, and in particular its wide opening, the cow has no difficulties in calving. The long-line morphology of the calf makes its birth, with a live weight of 45-50 kg, very easy.

The calves are long-lined and thin at birth, with a remarkable growth rate, development and fattening speed, with average daily fattening of around 2,000 g/day, and very good meat formation, which is why this breed is used in industrial crossbreeding to achieve a different weight and form of the finished product. The breed has a high potential for the production of quality meat at any age and type of animal: calf, steer, cow and bull. The fineness of the body and bones, the low-fat layer and the thick layer of meat produce a very high carcass yield, ranging from 65 to 68%.

#### **GEOGRAPHICAL DISTRIBUTION**

It is mainly distributed along the Cantabrian coast, in the north of Navarre, the Basque Country, Cantabria and Galicia. Nowadays, there is an expansion to other regions, especially in the centre of the country (Castilla y León, Extremadura), both in terms of thoroughbred animals and industrial crosses.



The live weight of adult animals ranges from 1,100 to 1,600 kg in the case of bulls, while the cows weigh between 850 and 1,100 kg with a height at the withers of 145 to 155 cm.

# BRUNA DELS PIRINEUS



The origin of the Bruna dels Pirineus is located in the regions of Val d'Aran, Pallars Sobirà, Pallars Jussà and Alta Ribagorça, in the province of Lleida. It comes from an ancient cross between the autochthonous Catalan cow and Brown Alpine cattle from Switzerland. Belonging to the Alpine Stock, its morphology is very similar to the breed of origin. Its docile temperament and its good maternal aptitude in terms of milk production and care of the calf, makes it highly appreciated by breeders.

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#### **GENERAL FEATURES**

These animals are characterized by a brown coat and harmonious proportions, eumetric, with long-line tendencies. It is a hardy cow, with good grazing capacity and average precocity. It has good muscle mass and strong bones. The horns are low lyre-shaped with black tips. The brown coat has chromatic gradients at the eyes, nose, armpits, udders, underbelly, inside face of the limbs and perineum. The mucous membranes are pink and the snout is black.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The Bruna dels Pirineus breed is exploited in its natural habitat for meat in extensive production. The breeders value its intermediate birth weight, good growth until weaning, calving ease as well as fertility in females and meat morphology and muscle development in males. It is also used in industrial crossbreeding.

The farming system is extensive, typical of grassland breeds, with a valley-mountain pass system, where the cattle are taken up to mountain passes during the hot periods of the year. The typical product is the grazing calf, which is approximately six months old, although an increasing number of farmers fatten their calves up to 540-550 kg live weight for slaughter between 12-13 months of age. The fattening is done intensively, based on concentrates and straw ad libitum.

In the Bruna dels Pirineus breed, the meat capacity of the old Brown Swiss from the 1950s

#### **GEOGRAPHICAL DISTRIBUTION**

It is mainly distributed in the Pre-Pyrenees and Pyrenees of Catalonia, with other nuclei in the regions of Val d'Aran, Pallars Sobirà, Pallars Jussà, Alta Ribagorça, Alt Urgell, Cerdanya, Ripollès, Berguedà, Osona and Sol- sonès.



has been enhanced without reducing its important milk potential for suckling calves and its good maternal qualities. Industrial crossbreeding with bulls of specialised meat breeds is practised in some farms. Artificial insemination is a very minority practice.

# CACHENA



#### **GENERAL FEATURES**

Small-sized animals - it is the smallest Spanish breed -, with body harmony, large horns and an expressive face, with a calm look and, according to many observers of the breed, "female" eyes. Udders of great milk-producing conformation despite their small size.

Light brown, hazelnut coat, darker in the neck region. Black nasal and genital mucous membranes. Black hooves. Scrotum in males lightcoloured with distal dark spot (dome). Large, high lyre-shaped horns with a circular crosssection, amber-coloured with black tips.

Adult males weigh an average of 550 kg and females 350 kg with a height at the withers of 90-120 cm and 100-130 cm, respectively.

There has been specific official regulation of the Herd Book since 2000, which comes initially from the records existing in the CRZG-Zoogenetic Resource Centre of Galicia in the Pazo de Fontefiz (Ourense), a centre that carries out the "Ex Situ" conservation programme of the breed. There is a germplasm bank, with semen and embryos of the breed in the CRZG. The book has been managed by the Cachena Breeders Association - CACHEGA since 2005.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Its main aptitude is the production of a calf, weaned between six and nine months of age, with very low production costs and good meat quality characteristics. Big milk producer, with fast-growing offspring. Carcasses of 90-100 kg at 9 months, with suckling and low cereal intake. The name of the breed comes from the etymology, given that 'cacheno' means "piece of a thing" in Galician, indicating its small size. It originated in the southwest of Ourense, in the mountains of the Sierra do Xurés, Leboreiro and Montes del Quinxo, where it was found living in the parish of A Illa in the district of Entrimo, and more specifically in the town of Olelas.

The most precise definition can be found in the Official Geography of the Kingdom of Galicia (Risco, 1936), which describes it as "hardy Lilliputian cow, which lives in freedom constantly grazing in the mountains of the district of Entrimo and which, apart from its tiny size, can be distinguished by a strip along its face of a paler colour than its dark brown coat, and black lines around the eyes as if it were wearing thickframed glasses".

#### **GEOGRAPHICAL DISTRIBUTION**

Distributed throughout Galicia, being present in the four provinces, primarily in Lugo and Ourense, where most of the breeders are located. There are also herds in the Basque Country, Extremadura and Asturias.



The farming system is 100% extensive, taking advantage of herbaceous resources of low nutritional value, with loads of less than 1.1 LU/ha, with adaptation to all types of terrain, and altitudes. High longevity and fertility, two births in the same calendar year not being uncommon.

# CALDELÁ



#### **GENERAL FEATURES**

The breed consists of orthoid, midline and eumetric. It has different phaneroptic features from those of the other breeds in the region. Its coat is black, with a pale red strip along the back, with colour gradients in armpits and crotch.

The Caldelá breed has a placid, docile temperament resulting in its easy handling and consequent use for working purposes.

Adult males weigh an average of 650 kg and females 450 kg, with a height at the withers of 132 cm and 128 cm, respectively.

It has a semen and embryo bank in the Fontefiz Zoogenetic Resource Centre- CRZG, belonging to the Xunta de Galicia. The breeder's association manages the DNA bank.

There has been an official Herd Book since 2000, originating from the breeding records of the CRZG-Zoogenetic Resource Centre of Galicia in the Pazo de Fontefiz (Ourense) and since 2005 its official management is entrusted to the Caldelá Breeders Association-CALDEGA.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Its main utility is meat production, with good aptitude for motor activity. In the past it was considered the best working breed in Galicia, being in great demand for its dynamogenic capacity in areas of the provinces of Orense and Lugo, in Galicia, as well as in the region of Bierzo in León. From these areas, specimens of the breed were acquired at their point of origin in the form of tamed bullocks and less so as herds of cows. The breed takes its name from the region of Caldelas, located in the north-west of the province of Orense, which is the geographical centre of the breeding area

#### **GEOGRAPHICAL DISTRIBUTION**

The main town in its geographical area is Castro-Caldelas (Orense), which shares importance with other municipalities in the area of distribution. So, the internal composition of the breed's distribution is made up of an undefined moisaic of individual farms scattered throughout all these high mountain areas.

It extends through all the provinces of Galicia, with predominance in the provinces of Lugo, Orense and Pon- tevedra.



Agricultural mechanisation was a major blow to this market. However, the attachment and affection of some farmers for their own customs and traditions prevented its disappearance.

The breed is found in family farms using traditional husbandary methods. Mixed stabling and grazing systems predominate in the breeding techniques, the animals currently tending to be kept on the pasture on a continuous basis. Feeding, depending on the time of year, consists of grass, hay and some roots during the stabling period, as well as natural grazing when the cattle are being farmed extensively on a continuous basis.

# CANARIA



It is named after the archipelago where it is bred, although it is also called Creole, in accordance with the name applied to cattle born in the old Spanish colonies. In the local area, it is also known as the coarse breed, to distinguish it from the selected imported ones, which the locals call the fine breeds.

Cattle was introduced for the first time in the archipelago in the XIV century with the arrival of the Spaniards. When collating the canarian descendants with the peninsular ascendantsit appears to be mainly related to the Rubia Gallega beed and also to the Asturiana de los Valles.

#### **GENERAL FEATURES**

The breed consists of medium to large size animals with a straight profile, elongated proportions, low mass and plenty of bone. The coat of these animals is blond with variations that diverge from the norm towards a brown and occasionally fawn colouration.

It is physiologically considered to be a triple aptitude breed - work, milk and meat - with the capacity to consume coarse food and a high rate of processing of the latter. It is considered a hardy, docile, long-lived and easy-to-handle breed.

In terms of shape and general appearance, these are animals with good body development, the females having an average live weight of 600 kg and the males easily exceeding 1,000 kg. The average height at the withers is 147 to 152 cm for females and 150 to 160 cm for males.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The Canaria is one of the few remaining tripleaptitude breeds -work, milk and meat- typical of the traditional autochthonous breeds located in the north of the peninsula. As far as milk production is concerned, there are records that show yields of around 3,000 litres per lactation and a fat content of 4.2%.

The meat production has all the attributes of being a secondary use. However, carcass yields of 52% and 45% in males and females respectively have been recorded. The breed also shows growth rates up to 12 months of age of 533 grams/day in females and 694 grams/day in males.

#### **GEOGRAPHICAL DISTRIBUTION**

The breed is located in the central areas of the islands of Gran Canaria and Tenerife, characterised by rough terrain with a good climate with variable rainfall and mild temperatures.



The breed continues to be used for working purposes, since many of the farmers still think that tilling with pairs of cows on a yoke is much more efficient than with machines. Meanwhile, although limited, the importance of the breed's manure production has been repeatedly highlighted.

The breed represents a valuable component of farming with the double mission of providing the driving force for ploughing the land for crops and an instrument for recycling the byproducts they generate.

# CÁRDENA ANDALUZA



#### **GENERAL FEATURES**

The Cardena Andaluza breed consists of orthoid, eumetric, midline animals with good mass and plenty of bone. The colour of its coat, as its name suggests, is purplish, formed by the fine mixture of white and black hairs. There are light, dark and natural variants, depending on the proportion of white and black. This proportion is not usually uniform, since it is common to find a centrifugal darkening especially at the edge of the ears, snout, teats and distal part of the limbs.

In terms of weight, adult males reach 900-1,000 kg and females 500-600 kg. At present, their height at the withers is 140-150 cm in males and 130-140 cm in females, on average.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The breed has a strong maternal instinct, giving calves that reach 200 - 210 kg at weaning at around 6 - 7 months of age. The meat is of good quality, but slow-growing, with great skin development and low carcass yield. Calves at 50% are highly appreciated by butchers and consumers, being an ideal meat breed for crossing, the first mating being recommended with a cardena breeding bull. Sometimes, the castrated males are also used in the driving of Lidia bulls, a characteristic handling system in Spanish extensive farming known as bullock herding. The name of the breed comes from the colour of its coat and its specific location in Andalusia. As far as its origins are concerned, it is usually considered a branch of the Iberian Black stock

#### **GEOGRAPHICAL DISTRIBUTION**

The traditional location of the breed is Western Andalusia. At present, these animals can be seen on marginal lands in the provinces of Cordoba, Ciudad Real, Malaga and Cadiz, with ten important nuclei in the first two.



The constraints imposed by the breed's environment impose an extensive farming system, typical of the grazing area in the southwestern part of the Iberian Peninsula. The animals are reared in freedom, taking advantage of the scarce food resources that nature provides and enduring the adverse climate of the region where they are bred.

# CHAROLESA



This bovine breed is known throughout the world under the name of its place of origin, the Charolais region in the Department of Saöns-Loire in Bourgogne, France. Breeders distinguish two racial varieties, although legislation does not yet include them as such: the holding or breeding type (whose importance lies in the selective process) and the crossbreeding type (used as a meat production enhancer in other breeds, where it is highly valued for its precocity).

#### **GENERAL FEATURES**

The Charolesa breed consists of orthoid, hypermetric and long-lined animals. With a large body mass (females 700-900 kg and males 1,000 kg), their shape is compact and symmetrical, the upper and lower lines of the body being straight and parallel.

The horns are of circular cross-section, elongated and white in colour. Their coat is characteristic, uniform white with possible variants towards cream and even light brown, with pink mucous membranes.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The Charolesa breed is characterised by its robustness, good use of forage, high rate of transformation and for being an ideal paternal breed in genetic terms.

Considered a select breed of cattle, its husbandry is based on natural mating (artificial insemination only in the case of outstanding breeding bulls), collective herd management, remote supervision and selective calf feeders. The farming system is mixed, grazing of varied nature, depending on the habitat in which they are found, and complementary fodder in times of shortages.

Its morpho-physio-constitutional features make it the ideal archetype of meat-producing cattle, allowing it to produce very good meat yields, both in terms of quantity and quality.

#### **GEOGRAPHICAL DISTRIBUTION**

It is distributed throughout Spain, adapting perfectly to the different climates and terrains offered by the Pyrenees, the southern marshlands, the western meadows and even the peninsular plateau, where they live.



It is the breed with the best fattening performance, achieving excellent conversion rates and average daily gains.

Its products in the market include a wide range of weights and ages, the most popular being the male from 15 to 16 months completed with intensive feeding after weaning. The adult animals, at a secondary level, provide very highquality red meat.

# **FLECKVIEH**



With these two denominations, Fleckvieh, "Spotted Cattle" in German, and Simmental, for its origin in the Simmen Valley in Switzerland, this important bovine breed can be found on all continents, and for its significance and representation in the national livestock heritage it is recognized by the Ministry as an Integrated Breed in Spain. The breed has been reared and exploited for two distinct purposes: For the production of milk in family-type intensive systems located on the Cantabrian coast, or to produce calves in extensive farms in the rest of the country.

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#### **GENERAL FEATURES**

Orthoid, hypermetric, long-line profile, strong constitution and robust muscle structure. The variegated red and white coat, varies in the number and shape of the patches and intensity of colour. White areas predominate on the head, with pigmented patches generally found on the periphery of the eyes, lower stock area, distal parts of the limbs and tail tufts. The horns are of a uniform cream colour, as are the hooves, although it is common to find genetically polled animals.

The cows have a long productive life. It is not uncommon to find animals aged 17-18 years, and they provide around 12-14 births. The reproductive characteristics of the breed include precocity, good fertility, ease of calving and an extraordinary maternal instinct. The docile and calm nature of the animals allows easy handling on the farm.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Irrespective of the intensive dairy farms, the breed has been reared in Spain in very diverse production systems, generally aimed at the use of the pastures and resources of the farms distributed in the Pyrenees and the centre and south-west of the country.

The milk-producing females provide average productions of 7,000-8,000 litres/lactation, it being common to find producers of 10-11,000 l/l. Calves sold at three weeks of age are highly prized for rearing and subsequent fattening.

#### **GEOGRAPHICAL DISTRIBUTION**

Currently the breed is distributed throughout much of the national territory.



It is important to point out that, unlike other dairy breeds, Fleckvieh cows, once their productive life is over, are highly valued for providing carcasses with good butchering performance.

Meat-producing suckler cows are good milk producers in terms of quantity and quality, allowing the calf to develop its full meat potential with rapid growth and good conversion rates (2,000 g/ADG and 5, respectively). The carcasses are U-type (very good structure) with average yields of 60%.

The quality of the meat, due to its organoleptic properties, colour, tenderness and juiciness, typical of meats with a certain degree of fat infiltration in the muscle tissue (marbling), is highly appreciated by consumers.

# **FRIEIRESA**



The Frieiresa breed takes its name from the natural region of 'As Frieiras', a name equivalent to 'sabañón' (chilblain) in Castilian, which refers to its climate, and includes areas of the Orense municipalities of A Gudiña, A Mezquita, and in particular the villages of A Canda, Castromil, Santigoso, Cádavos, Manzalvos, Esculqueira and Chaguazoso, Mezquita, Tameirón and O Cañizo in A Gudiña.

Its geographical area of origin is densely populated by bovine breeds, such as the Mirandesa to the south, the Alistano-Sanabresa in Zamora to the east, the Vianesa to the north and the Limiá breed and formerly the Verinesa breed to the west.

#### **GENERAL FEATURES**

The breed prototype consists of subconcave to concave animals of medium to large size and long-line proportions with a tendency to convexity in muscle masses. The coat is brown, darker in males and lighter in young animals. Another characteristic to highlight in the breed is the long hair of the frontal region, "Guedella", more abundant in males. Very abundant hair in tail tuft. Adult males weigh an average of 860 kg and females 600 kg, with a height at the withers of 131-156 cm and 128-145 cm respectively.

It is the breed with the lowest population of the so-called Morenas Galegas, just behind the Limiá breed. The progress in the latter is important, raising the average number of animals per registered farm from less than 5 heads to about 24.3 in 2013.

It has an In Situ and Ex situ conservation programme, run by the Frieresa Breeders Association -FRIEIREGA, and the CRZG - Galician Zoogenetic Resources Centre at Pazo de Fontefiz (Ourense), with a semen and embryo bank. There is a DNA bank owned by the Breeders Association.

There has been official regulation of its Herdb ook since 2000, taken from the breed records of the CRZG. Since 2005, the management of the Herdbook has been entrusted to the breeders association-FRIEIREGA.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

It is currently used for meat production. There is no current use in agricultural activities as a draft and/or work animal. A hardy breed, per-

#### **GEOGRAPHICAL DISTRIBUTION**

Distributed throughout Galicia, particularly in the province of Orense, but with large herds in Lugo, and currently being introduced in the provinces of A Coruña and Pontevedra.



fectly adapted to extreme climates, in keeping with its area of origin, with very hot and dry summers and winters with extremely low temperatures. They are docile and easy-to-handle, a behaviour inherited from their former use as work animals in agriculture.

Total or semi-extensive farming system, with diurnal grazing and nights on the holding. Calves accompany their mothers from birth. The sale of calves takes place at weaning, at 9-10 months of age or after completion with cereal of no more than 2 months.

# FRISONA



Its name comes from the region of origin, Frisia (Holland), but it is considered a Spanish breed integrated in Spain, as it accounts for 40% of the total cattle population.

It is known by various names, such as Dutch breed, Holstein-Friesian breed, Holstein, etc. Recognised worldwide for its excellent milk aptitude, it is the subject of strict performance controls, selection processes, research into genetic indexes of production and type, etc.

#### **GENERAL FEATURES**

The Herdbook of the Frisona breed describes, long-lined, hypermetric animals, with concave profile and low mass and proportionate bone. With a slight sexual dimorphism in its structure and capacity, and a modern tendency to dehorn the animals.

Its milk producing condition provides the females with a balanced mammary system, with strong suspensory ligaments and wide-based udders of moderate depth.

Its coat is white with black or red patches.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The Frisona cattle holdings on the Cantabrian coast are typically family farms, while in the rest of Spain more intensified farms with larger numbers of cattle predominate. With a predilection for grass, they have adapted perfectly to an industrialised diet. Their high milk yields, 9,100 kg on average per lactation at 305 days, with 3.63% fat and 3.15% protein, are unlikely to be surpassed by other breeds.

The calves are also marketed, being sold when they are weaned.

#### **GEOGRAPHICAL DISTRIBUTION**

60% of the total population is concentrated on the Cantabrian coast and the other 40% distributed throughout the rest of the country.



The first breeding takes place at 17 months of age, with an average of 1.70 to 2 artificial inseminations per birth.

# LIDIA



#### **GENERAL FEATURES**

They are ellipometric, of great dynamogenic aptitude and pronounced sexual dimorphism, with significant morphological differences between herds and mating systems. They have short hooked horns with a great number of variants and all the possible types of coat.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

It is bred in extensive pastures where it develops the characteristic habits of the breed, contributing to its conservation. Its diet is based on the use of natural resources of the pasture, supplemented in periods of shortage and in the last year of preparation for bullfighting with feed prepared with prime vegetable raw

Bred and selected for more than 3 centuries. for one main purpose: bullfighting; and another secondary purpose: production of meat from slaughtered bullfighting animals. Bullfighting is a performance that was created in Spain and has been subject to continuous change since the beginning of the 18th century, when the specialisation of using the bullfighting cattle for this productive purpose began. The fighting breed is one of the oldest breeds of cattle in the world, characterised by an enormous genetic diversity between herds and mating systems, a pioneer in the implementation of complex selection criteria. The Spanish breeders created the fighting breed with the same zootechnical procedures applied to other breeds and individual functional tests in the field (provocation, felling and recall) or bullrings, from autochthonous Spanish cattle located in 5 breeding areas distributed throughout most of the country, from which the 7 main foundational castes come, making this breed the main Spanish contribution to world bovine zootechnics. These castes gave rise to a proliferation of lines or mating systems, many of which are in serious danger of extinction.

#### materials. Breeding conditions, handling (with an important traditional background), food and health are as important as genetics and selection for their productive purpose.

Reproduction is by controlled natural mating in breeding batches, the good maternal aptitude and longevity of the females, which calve for the first time at the age of 33-42 months, being an outstanding feature.



**GEOGRAPHICAL DISTRIBUTION** 

It is distributed practically all over the

Iberian Peninsula, with large populations in the grazing areas of the two plateaus,



# LIMIÁ



The Limiá breed takes its name from the region of "A Limia", a region of great agricultural wealth and grazing resources, prior to the channeling of the Laguna de Antela, which delimited the territory.

The fact of being located on good, fertile land has allowed it to develop high body mass and a certain productive superiority compared to other local breedsof the Autonomous Region of Galicia.

#### **GENERAL FEATURES**

This breed reaches the largest size of all the autochthonous Galician breeds, being considered the giant of the bovine species in the region. It is easy to find hybrid animals based on this large-sized breed in the municipalities of Baltar and Calvos de Randín.

The breed is part of the Cantabrian Stock. It was widely exported in the past to the markets of Madrid and the Basque Country.

Adult males weigh an average of 900 kg and females 650 kg, with a height at the withers of 148 cm and 140 cm, respectively.

There has been an Official Herdbook of Origins since 2000, from the breed records of the CRZG-Zoogenetic Resource Centre of Galicia in the Pazo de Fontefiz (Orense).

Since 2005, the Limiá Breeders Association-LIMIAGA has been the official manager of the book.

There is a semen and embryo bank owned by the Xunta de Galicia and a DNA bank owned by the Association.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Like all Galician Brown breeds, its current use is meat production, not being used for work purposes.

#### **GEOGRAPHICAL DISTRIBUTION**

Nowadays, it is distributed all over Galicia, mainly in Ourense, but also in Lugo, Pontevedra and A Coruña. In recent years there has been a very positive trend in its population growth.



It is farmed extensively, supplemented by semiextensive farming, with daytime grazing and overnight stabling.

Its meat production stands out from the other Galician Browns, with greater weight at birth and weaning.

# LIMUSINA



Although its name comes from its place of origin, the region of Limoges, in the Massif Central of France, due to its representation in the national cattle population, it is considered an integrated breed in Spain. Its official name is Limusina.

Its high capacity to adapt to the environment is the reason for its wide distribution in Spain in very different areas

#### **GENERAL FEATURES**

The Herdbook of the Limousine breed describes orthoid, sub-hypermetric, midline animals, with high mass and little bone; with a proportionate and muscular body shape. Pink horns whitish at the base and darker in the distal part. Its coat is red, slightly lighter in the lower belly, rear face of the buttocks, perineal and anal regions, teats and tip of the tail. Whitish discolouration around the muzzle and eyes, with white muzzle and partridge eye coat features.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The Limusina breed farms are characterised by following a semi-extensive system, with long periods of grazing, the nature of which depends on the geographical area where they are found, ranging from natural grasslands, cereal stubble, meadows and mountain pastures. Its positive features are its good disposition for walking long distances, the ease of calving of the females, their maternal nature and the practice of natural mating, although artificial insemination is also used. Its meat production is guaranteed by its high yields and its recognised quality, resulting in a wide range of products on the market (calves, steers and adults).

#### **GEOGRAPHICAL DISTRIBUTION**

Its distribution is generalised throughout the country, especially in the areas traditionally used for meat cattle grazing.



# MALLORQUINA



#### **GENERAL FEATURES**

These animals are almost ellipometric, subconvex, ranging from mesolinear to longilinear, with a low body mass and weak-bones. Brown coat. They form part of the group of unimproved hardy breeds, with a small population and absolute inbreeding which has enabled the existing foundational group to maintain their purity.

It includes small animals with a low live weight between 300-350 kg in cows and 450 kg in bulls.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The Mallorquina breed was originally farmed for three reasons (work, milk and meat), although the economic evolution of the island served as a destabilising factor for its survival. Today, it serves as an ecological factor and a tool for enhancing environmental diversity, especially in wetlands, with a somewhat unconventional level of use. In zootechnical terms, this bovine species is intended for meat production, conditioned by its singular extensive farming and the limitations of its body shape, in which the discrete returns may be compensated by the production of natural meat.

The breed can also be classified in the group of breeds with a maternal instinct, in view of its behaviour in crossbreeding for meat, although this production mode is not considered in current breeding plans. It takes the name of the Mediterranean island where it is found in the Balearic archipelago. The breed has been known since ancient times; however, its ancestors are unknown, although one of the strongest theories links it to the western Mediterranean bovine stock, which descends from the Bos taurus ibericus, also originating from neighbouring breeds such as the Albera or Corsa.

#### **GEOGRAPHICAL DISTRIBUTION**

The Mallorquina breed has two habitats within Majorca: the marshes and the dry mountains. The fundamental unit from which specimens are taken to form other units or strengthen third groups is located in the former. In any case, the geographical area is typically Mediterranean and therefore, sufficiently well-known



The livestock rearing system used is a sylvopastoral extensive farming type. The animal spends all year outside in the fields and does not have stables or refuges. The reproductive system in open woodland follows the divided pastoral model for genealogical monitoring and sorting of independent lineage. No problems are observed at birth and the breed is considered to have good maternal instincts. The handling is conventional with remote supervision and with only the minimum intervention necessary to keep the cattle under the expansive process.

# MARISMEÑA



#### **GENERAL FEATURES**

These are orthoid, eumetric to ellipometric, mesolinear to sublongilinear, with a low body mass and low bone density. Reddish coat, sometimes with white patches on the lower parts of the trunk and just above in the form of splashes. Periocular and border discolouration around the snout. The body shape takes the form of a primitive type with open lines and predominant front quarters. Significantly hardy and strong.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The contribution of the breed to the meat market is to provide a small and young (around four months old) weanling calf. It also offers adult bovine animals to the market, but of reduced size. The meat from the Marismeña species is fully entitled to be classified as natural meat given the farming system used.

The farming system is very similar to the regime of the ungulates with which it cohabits. In terms of quality, it plays an important role in the ecological and environmental order acting as a conservative agent in the Park. From a scientific point of view, it is of extraordinary interest as it has its own genetic pool for a breed which is thought to have never been domesticated. Organised spontaneously in units of cows, not more than twenty, linked by family bonds, it stays in a fixed settlement of varying size depending on the potential for forage. On the other hand, the bulls come and go freely, constantly visiting the groups of females, wheThe breed, in addition to the name Marismeña. it also known as Mostrenca. Palurda or Doñana. It is a very ancient species of autochthonous cattle, perfectly differentiated within the breeds of Spanish cattle and historically attached to Doñana National Park, which is located in the wetlands of the Guadalquivir in the south west of the Iberian Peninsula. With an unknown phylogenetic ancestry, although it is assumed to be related to the first forms derived from the Uro salvaje, diversifying in the Bos taurus primigenius and then the Bos taurus macroceros. The Bos taurus tartesus was formed from the last-named species and is the direct ancestor of the breed. The history of the Marismeña is that of a feral bovine breed for which there is no evidence of its domestication. For centuries it has been used as a source of beef obtained from biggame hunting, as with the Uro in Europe, until the present. Now it is found in Coto de Doñana for meat production.

#### **GEOGRAPHICAL DISTRIBUTION**

The Marismeña breed is settled, as in times gone by, in Doñana National Park (73,000 hectares) and the surrounding areas. This land was already recognised in the time of the Tartessians as excellent for hunting, including cattle among the cynegetic species to be found, and today represented by the Marismeña breed and its subspecies.



re they remain together for some time during the reproductive season. Reproduction takes place, for obvious reasons, by natural mating, where the strongest sire wins.

# MENORQUINA



This singular breed owes its name to the island in the Balearic archipelago from where it originates, Menorca, and is also know as Mahonesa.

The origin of the breed is unknown; however, it displays enough features to link it to the Peninsular Red Cattle (Bos taurus tardetanus), specialising in the past in the production of milk. At the start of the 19th century, the island received new inputs of foreign blood, including the importation of polled cattle possibly to strengthen their milk-producing capabilities.

#### **GENERAL FEATURES**

The Menorquina breed has singular features as it has no horns and it is noted for its milk production in a fairly inhospitable environment. It has a subconvex profile, is medium to large in size, of longilinear proportions, with a low body mass and reduced bone density.

It has a reddish coat of various shades which is always darker among the bulls; With periocular discolouration, and on the lower regions of the trunk, on the inside of the limbs, the mammary surface and the testicular sacks.

Its weight ranges between 400 and 450 kg for the cows and between 700 and 800 kg for the males, and has a height at withers of 130 and 144 centimetres respectively.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

This breed is suitable for dairy farming, with yields estimated at

3000 kg per lactation and 4.5 % fat, although cattle farmers calculate and quantify this in terms of weight in cheese.

The Menorquina breed follows a mixed regime of pasture and stabling, with predominance on natural pastures or wetlands, which, in addition to making it productive, has proven to be an

#### **GEOGRAPHICAL DISTRIBUTION**

For obvious reasons, the biggest population unit is found on the isle of Menorca, specifically in Mahón and Alaior. However, there is also a small unit on the isle of Majorca, and in the Natural Reserve of Les Ayunes in Aigüamols Park in Ampurdan (Gerona).



advocate of biodiversity and helps to maintain its phytological plurality.

Fodder is based on forage supplied fresh or as hay or silage.

# MONCHINA



The meaning of the name of the breed is "mountain dweller", which refers to the difficult semi-wild conditions and the topography of the lands where it is farmed.

There are a number of theories as to its origin, highlighting that it belongs to the Cantabrian Bovine Stock, in an environment where other bovine breeds do not have this phylogenetic setting. Historically it has figured as cattle produced for meat and for local bullfights.

#### **GENERAL FEATURES**

The Monchina breed is a faithful reflection of the typical features of its ethnic ancestral stock (Bos taurus cantabricus): straight or subconcave profile, mesomorphic and ellipometric, with a low body mass and reduced bone density; A brown coat with degradation from the top downwards and centrifugal shading, and a huge chromatic variety ranging from very light to very dark shades. The body size, in modern times, given improved food resources or fodder which is systematically supplemented with external inputs, is gradually moving away from being small in comparison to other breeds. The latest figures give a live weight of approximately 400 kg and a height at wither of 130 centimetres for bulls and 275 kg and 120 centimetres for the same measurement in cows.

They are very hardy individuals with a surly temperament who, when harassed, do not hesitate to charge. Hence their traditional use in bullfights, where they had certain advantages over the Lidia breed.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Nowadays, they are used exclusively for the production of meat. The weanling calf is born with a weight of 14 to 20 kg, weighing 80-90 kg when weaned (at 5 - 6 months), this is a process which may be finished in the feedlot. The adult bovine animal has a light carcass and good local marketing. Traditionally, it has been considered as premium quality meat, and today it is marketed as natural meat. The Monchina breed is subject to the purest and toughest extensive farming system, on mountainous land,

#### **GEOGRAPHICAL DISTRIBUTION**

The Monchina breed is found in the south west of Biscay, the south east of Cantabria and the north of Burgos. The importance of the breed today is of scientific, cultural, social and popular relevance. An instrument essential for managing the cattle is the canine breed, Villano de las Encartaciones, to such an extent that it could be said that one would not exist without the other.



with complex terrains, covered with forests and scrubland, and always at a distance from urban centres. With occasional supervision from a distance, the cattle farmers only come into contact with the animals to extract the annual production or, occasionally, to perform the obligatory administrative and health controls.

They are extremely territorial and feed on natural resources, which are only supplemented by hay in the harshest winters.

# MORUCHA



It is a Spanish autochthonous meat-producing bovine, which is farmed extensively and is an ancestor of the Black Iberian Cattle. Its most important traits are, its hardy nature and calving ease, to such a point that these have become systematic criteria for selection by the farmer.

The National Association of Select Morucha Breeders is responsible for the management of the Herdbook and the coordination of the Improvement Programme in collaboration with the Ministry of Agriculture, Fisheries and Food and the Department of Genetics of the Faculty of Veterinary Science of León.

#### **GENERAL FEATURES**

These animals are of intermediate proportions, and therefore very symmetrical, with a straight profile and average weight, their classification (also called trígamo sinaléptico in Spanish) obeys the OOO. The most abundant coat colouring today is blue-roan (a mixture of black and white hairs in varying proportions, ranging from very dark blue-roan with a predominance of black hairs to light blue-roan, or even white), and the other characteristic coat is the black coat which was originally more abundant.

The horns are a dirty-white colour from the root up and black at the tip. Expressive eyes and small moving ears.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

It is farmed under the extensive regime, mainly in meadow ecosystems, the breeding animals staying out in the field all their life. In winter, the animals eat acorns, scrub and grass, in spring they feed on wasteland and pastures, in summer on the riverbanks and riverbeds and at the end of the summer on stubble and thatch. Supplements are added when these resources are insufficient. The European Union has recognised the G. I. Carne de Morucha de Salamanca which includes these products.

#### **GEOGRAPHICAL DISTRIBUTION**

The distribution of the Morucha breed is mainly in the provinces of Salamanca and Cáceres, although it is also found in the south of Zamora, Valladolid, Ávila, Madrid, Toledo, Badajoz and south west France.



Reproduction is usually by natural mating. The animals of this breed reproduce until an advanced age and have a very high fertility index, producing up to one calf per year and breeding cow.

# MORUCHA (VARIEDAD NEGRA)



The Herdbook for the Morucha breed records two varieties differentiated by their coat, the "Cárdena" (roan-blue) variety and the "Negra" (Black) variety.

Traditionally, the Morucha breed was mainly black, until the 80s when the roan-blue variety became fashionable, and the black variety was relegated to a small number of farms which exclusively breed the black variety.

#### **GENERAL FEATURES**

The Black variety of the Morucha breed is formed by more lymphatic animals, closer to the ground, and smaller in shape and therefore more hardy.

They have uniform proportions, a straight profile with a tendency to be subconcave; they are average in size and mesomorphic, with a notable sexual dimorphism.

The coat is black, and only the inner legs are white, long-haired and black varieties being predominant. The mucous membranes have a dark pigmentation. The horns are white from the root up, and black at the tip. Their limbs are of medium-height, straight and muscular, with fine bones, and neat and precise articulations, a correct poise and good separation. Well-developed udders and symmetrically positioned teats with black pigmentation. Dark testicles.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The farming system is extensive, although the farms are smaller in size than the typical Campo Charro farms, permitting farming on foot.

The breeding females of the Black Morucha breed are more hardy and smaller than than the roan-blue variety, with greater development of their udders, and they usually give birth for the first time between 25 and 30 months in age.

During controls of the breed's feeding, conducted at the Department of Animal Production of the Faculty of Veterinary Science of the University of Leon, the following results were

#### **GEOGRAPHICAL DISTRIBUTION**

The black variety of the Morucha breed is mainly found in three areas: The Rebollar district. The Vitigudino district. The north of Cáceres.

The farms are located in the provinces of: Salamanca, and the areas adjacent to Zamora, Ávila and Cáceres. Characterised by the small size of the farms.



observed: weaning age around 7 months, with a live weight of 240-250 kg, reaching a live weight of 520-530 kg after fattening, with an average daily weight gain of 1,240 g.

The meat production is included in the Protected Geographical Indication of "Carne de Morucha", and differentiated by its guality.

# MURCIANA-LEVANTINA



#### **GENERAL FEATURES**

The females have good reproductive performance, are calm and docile and long-lived. The general morphology develops with varying intensity depending on the origin of the four varieties which existed, in the following parameters: profile from straight to convex, medium size, middle line proportions, good body mass and strong bones. Coat varies from light brown to chestnut, with the depth of colour varying betweensexes, dark on the neck and face in males, with discolouration around the snout and the interior of the limbs. Their placid, submissive temperament tends to recommend them as ideal for work and handling. The wheel-shaped horns on the side are very characteristic, and more evident in the females, becoming more apparent with age, or if they are derived from the Huertana or Cristiana varieties: in the Calasparreña. Lorguina and Almanzoreña varieties the horns face forward and upward. In all cases the horn cross-section is not round, but elliptical.

The live weight is around 650 Kg in the cows and 1,000 kg in the males, with a wither height of 135 and 140 centimetres respectively. The weight at birth is 30 kg. The overall picture is significantly different to other Spanish bovine animals, especially because of the expression of the head.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The Murciana-Levantina breed in the past was used for work and meat production, although the latter is nowadays merely residual. Nevertheless, it was much appreciated as a work aniIt takes its name from its Autonomous Community of origin, also assuming the synonym Levantina, as it is distributed across the geographical region to the border areas of the Levante peninsular (Alicante and Almería). The phylogenesis of this breed is not known, or easy to deduce, because of its morphological characterisation which is different to the other Spanish bovine animals and others from the Mediterranean region.

#### **GEOGRAPHICAL DISTRIBUTION**

Most of the population are found in Murcia, with some specimens in the provinces of Alicante, Almería, and Granada.



mal in the field thanks to the perfect adaptation of its dynamogenic capacity to agriculture. and its extreme docility. Today, it is kept and, to some extent, sustained, for popular folk festivals and sporting events, to take part in pulling competitions, and in Romerías, which are very popular in the Levantina area. It is no longer used for work on the farm. They are kept in pens next to the dwellings in pairs, and used to pull the traditional carts. They mainly feed on the by-products of the crops. The few surviving specimens are found around vegetable gardens, having disappeared from the poor areas of the arid uplands and cereal cultivation. They are not put out to graze as a herd, and are distributed as working teams. The calving ease, milk capacity and maternal qualities guarantee the calves are successfully raised. Nowadays, these calves are slaughtered at between six months and a year, and consumed in the owner's family environment. They are never sent to feedlots as they are slow to develop and because of the meat predominance of the front third over the rear third

# NEGRA ANDALUZA



**GENERAL FEATURES** 

Morphologically the breed includes animals with a straight profile and abundant variation towards the convex, medium proportions, with a hypermetric tendency, a low body mass and high bone density. Black coat. These are balanced, hardy and demure animals. Temperamentally these animals are calm and docile, making them much appreciated in environments where the local bovine animals stand out for being the opposite.

The live weight of the male adult ranges between 875 and 950 kg, and of the female between 600 and 650 kg. The height at withers is around 140 cm on average in the bulls and 135 cm in cows. Their hypermetric tendency often exceeds the above figures.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The Negra Andaluza breed is destined for meat production, both pure breeds and cross breeds, producing calves of excellent size and yield. 30% of the breeding animals are estimated to be mated purebred, coming on heat for the first time between 18 and 20 months of age, depending on their development and nutritional status. Mating takes place in freedom, and they show a magnificent capacity for reproduction. They reach 80% fecundity and 95% fertility, and have a 1.15% chance of twin births. Calves are born in the fields, and grow vigorously thanks to their sharp maternal instinct. They are separated from the mother at around 6 or 7 months with a live weight of between 190 and 220 kilos.

The geographical region where they live within Spain and the colour of their coat serve to justify their name as the Negra Andaluza. They are also known as Negra Campiñesa or Negra de las Campiñas.

Derived from the Iberian Stock, it arrived in the Andalusian countryside as an excellent work animal for agriculture, surpassing the other local breeds thanks to its hardiness, dynamogenic capacity and strength.

#### **GEOGRAPHICAL DISTRIBUTION**

The breed is found in two groups in Andalusia. On the one hand, in the area of Sierra Morena, in the foothills of the provinces of Cordoba and Huelva,and on the other hand, in the lowlands of the provinces of Seville, Cadiz and Huelva.



As with all extensive farming breeds, the Negra Andaluza is maintained with the resources provided by its environment, and backed up by supplementary food when these resources are insufficient. As regards the infrastructure, the holdings are not improved, in most cases they have only a perimeter fence, a basic gate, and eating troughs scattered around the holding. Their sobriety, capacity to adapt to the different weather conditions, and their maternal instincts make them a good prospect for meat production.

# PAJUNA



#### The term "pajuno", from a cattle point of view, is equivalent to not often selected, of poor quality, or mountain cattle, hence the name, Serrana breed, by which they were known many years ago.

There are several theories regarding the origin of the Pajuna breed, considered among the breeds called "Serranas". The strongest theory claims they come from the bovine animals of the African Cattle Stock from the Atlas Mountains, long after the arrival of the Red Cattle Stock.

Convex. Some researchers consider the breed descends from the Bos Taurus Primigenius; while others argue that it comes from the Iberian Cattle Stock.

#### **GENERAL FEATURES**

Their morphology is that of an environmental biotype from the mountain regions: straight profile, medium proportions, eumetric, low body mass and good bone density, with bulls weighing an average of 600 kg and cows around 375 kg. Dark brown coat, with peripheric darkening, so that the distal parts are significantly darker, with a characteristic silver border around the snout, and a strip or discolouration along the rachis.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Considered as a working-meat aptitude breed, with the following commercial types: On the one hand, the weanling calf, with a live weight of 150 to 170 kg at the age of 5-7 months, which is considered to be the typical product of the mountain herds, and on the other hand, in the coastal region production ranges from veal to the yearling, and even the heifer. Its use as a working animal is more and more reduced.

The system used is extensive farming, characterised by permanent grazing using only the resources provided by the field, except for the cattle in the coastal region. It takes place mostly in the arid uplands, with adverse weather conditions and vegetation with a low nutritional value. The extraordinary hardiness and sobriety of these animals is of note. Sometimes, they are forced to seek subsistence in neighbouring zones where the food is better, with the result that in winter many of species move to Sierra Morena (horizontal transhumance).

#### **GEOGRAPHICAL DISTRIBUTION**

The Pajuna breed is distributed across different mountain regions in Andalusia. Mainly in Sierra Nevada, the Serranía de Ronda, Sierra de Grazalema and Sierra de Cazorla. In addition, certain groups are found on the coast of the provinces of Almería, Granada and Málaga. About 10% of the total population of specimens of the breed are estimated to be pure bred.



As regards reproduction, their somewhat late sexual precocity is of note, with the first heat appearing at around 20-22 months of age. Mating takes place in freedom, always aiming to ensure that births do not take place in or around the transhumance season. The herds from extensive farming have a special market, for yokes as work animals.

# PALLARESA



#### **GENERAL FEATURES**

These animals are of symmetric proportions and eumetric with a longilinear tendency. Their coat is uniformly white, although slightly smoky tones are also accepted but not prioritised. Adult specimens have an average wither height of 136 cm, and an average weight of 625-650 kg in the case of the bulls and 575-625 kg in the case of the cows. The root of the horns is on the line of extension from the neck; normally in the form of a hook, although also often found in high and low lyre-shapes, with a round cross-section and whitish colour with black tips or cream-coloured. The head is well-proportioned and medium-sized, wide at the base of the horns and with very slight occipital protuberance with a slight quiff. The forehead is wide and flat, with a straight or slightly subconvex profile. Wide clean snout, with grevish-black muzzle in different tones and wide nostrils. Pigmented mucous membranes, straight neck, of average length and well-defined, with some dewlap although this is not exaggerated. Long, broad and muscular back, obligue and inserted into the thorax. Wide deep chest, with little dewlap. Wide, flat and well-arched ribs and a long, deep and well-developed belly.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Almost all the individuals are geographically located in the l'Alt Pirineu National Park, and work closely on the maintenance of the landscape and ecosystems. They are hardy and adapt easily to the environment, as they are a docile and easy-to-handle breed. They are farmed in extensive regime almost all year round The name is taken from the main distribution zone in the district of the Catalan Pyrenees, Pallars Sobirà (Lleida). They originate from the cattle stock of the Bos taurus brachyceros, and their presence is documented together with their expansion in the mid 18th century in the valley of Isil (Pallars Sobirà), as animals from France, and their subsequent expansion to the adjacent districts of the Valle de Arán, Pallars Jussà y AltUrgell.

#### **GEOGRAPHICAL DISTRIBUTION**

It is mainly distributed around the district of the Catalan Pyrenees, Pallars Sobirà (Lleida).



(from April to December). The only source of replacement lies in the calves born on the farm, where all the bulls are sent for fattening and then slaughter. The calves are weaned at the age of 6-7 months and then sent for fattening and slaughter. All the yearling calves are reared in a totally organic manner on the Pyrenean pastures, and are mostly marketed in the local butchers, under the commercial name of "Carn Roia".

Another specific and authentic product of interest, and also of significant added value, is the production and marketing of a typical cheese from Pallars made with milk from the Pallaresa cow –although not exclusively–, such as the so-called "Formatge de Tupí" (Tupi cheese). Previously the calves were sold under the quality seal of the PGI (Protected Geographic Indication) "Vedella dels Pirineus Catalans" (Beef from the Catalan Pyrenees).

# PALMERA



The name of the breed takes its name from the place name of the isle of San Miguel de la Palma in the archipelago of the Canary Islands. These animals come directly from the Rubia Gallega breed, which arrived on the island as a slaughter animal. Subsequently, it was established in the northern region, with a climate and foraging capacity very similar to that of the land from where the animal originated. It was subsequently distributed around the whole island.



#### **GENERAL FEATURES**

This is a symmetrical breed, of medium size and proportion, and eumetric, with a rectilinear profile and moderate sexual dimorphism with greater pomposity occurring among the males. The colour of the coat varies from light brown to dark brown, of uniform shading with varying degrees of intensity, and the so-called ruts may appear on the flank. The creamy-white colour is widespread. The horns take the shape of a short high hook on the bulls, while in the cows they bend outwards, upwards and backwards and are longer. The eye sockets protrude slightly, the eyes are small with pink eyelids and pale brown eyelashes, partridge eye.

The live weight of adults' ranges between 500 and 550 kg in cows, and between 850 and 900 kg in bulls while the wither height is 133 cm in cows and 140 cm in bulls.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The Palmera breed had a prosperous past as a triple-purpose breed used for work, milk and meat production.

Nowadays, the farms are family-run and most only have a few heads of cattle, usually 2-3 cows. Most are kept in a semi-intensive regime, combining stabling and grazing. Food is based on the resources of the island: mountain scrub, autochthonous forage, by-products from banana plantations and concentrates are added during the fattening period.

They are mainly used for meat production and very occasionally for work. It should be noted

#### **GEOGRAPHICAL DISTRIBUTION**

It is found on the isle of La Palma where it is distributed around most of the districts. Outside the island, isolated specimens are found on the islands of Tenerife and Fuerteventura.



that it is common to use mountain scrub and "pinillo" (pine needles) as bedding and the production of manure for the island's agriculture, especially for the banana production, is a major source of secondary income. It should be noted that a significant number of farmers keep the cows on their farms solely and exclusively for their beauty, to take the animals to agricultural fairs and to enjoy watching them on the farms. They are also used in the traditional sport of pulling. Nevertheless, there is still a serious problem of generational replacement and significant emigration from the rural areas towards the urban areas.

# PARDA



This breed takes it name from the colour of its coat. The introduction of the breed to Spain dates back to 1857, and it is now classified as an integrated breed of Spain. It is also known as Brown Swiss or Bruna. Since the 90s, it has been used solely for milk

production, and is the second highest milk producer on a global level. The National Association of Select Cattle Farmers of the Parda Breed is responsible for the management of the Herdbook.

#### **GENERAL FEATURES**

This is an orthoidbreed, eumetric, sublongilinear, of good size and well-proportioned bone density. Well-inserted udder; the front udder well-attached to the abdominal wall, and the rear udders high, broad and with a good median suspensory ligament. The horns are mostly in the form of a high lyre, although polled specimens are also common. The animal has fine smooth hair with a plentiful tuft on the tail. The coat is brown-coloured, darker on the bulls and ranging between light and dark brown on the cows. In addition, it has a dark snout with a silver border around the nose, blueish-black pigmentation on the eyes and dark hooves.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The Parda breed is distinguished for the quality of its products. Quality understood as the ideal ratio of the content with an adequate equilibrium between the quantity and quality of milk produced, particularly suitable for cheesemaking, with a high K-casein BB content, a significant protein content and a low number of somatic cells. Longevity, a typical characteristic of the Parda, is an important indicator of animal welfare, and is one of the principal objectives of selection. The Parda compensates the production of a higher quantity of milk per lactation of the specialised breeds with a higher number of total lactations. Its morphological characteristics determine a long produc-

#### **GEOGRAPHICAL DISTRIBUTION**

It is a universal breed. In Spain it is distributed around the Autonomous Communities of Castilla y León, Asturias, Cantabria, Castilla- La Mancha, Madrid, Valencia, Galicia and the Basque Country.



tive and reproductive life. The calving ease is of note. It has good fertility, thanks to body condition in the different physiological stages. Docile temperament. It has low somatic cells, therefore a good resistance to mastitis. It adapts to extreme climate situations. Predisposition to functional-metabolic equilibrium makes it perfect for businesses with a biological regime.

# PARDA DE MONTAÑA



This breed takes its name from the colour of its coat and its geographical location. The first details of the breed appear in Spain in the 19th century, when it is crossed with breeds already present at that time (Mantequera Leonesa, Asturiana, Pirenaica, examples of Tronco Serrano, etc.). The Spanish Federation of Association of Select Cattle Farmers of the Parda de Montaña breed, and the Association of Bovine Cattle Breeders Parda de Montaña (ARAPARDA) are responsible for the national Herdbook

#### **GENERAL FEATURES**

Medium size, tending to large, straight profile and longilinear proportions. Uniform brown coat, symmetrical appearance, broad, deep and well-developed muscular trunk. Morphology typical of meat-producing animals. At birth, the animals are a light brown or whitish colour.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The farming system used is semi-extensive, following a typical Valley-mountain system. Stabling in winter, tending to reduce this period. Fodder is mainly in the valley pastures, in spring, autumn and part of the winter. In summer, in the high mountain passes and during stabling they are fed with grass hay or forage or cereal silage, reinforced with feed.

Reproduction varies according to the time of year and the Autonomous Community, and is by both natural mating and artificial insemination, with the aim of improving meat production. It is used for meat production, and is highly appreciated in the market, also as a maternal line for obtaining industrial crossbreeds. There are guarantee trademarks on the market to support the quality of its meat. These include Valles del Esla, Ternera de León, Ternera de Liébana, Carne de Cervera, Ternera Valle de Broto, FRIBIN Selección, Pirinera, etc.

#### **GEOGRAPHICAL DISTRIBUTION**

The Parda de Montaña breed is distributed throughout all the provinces of Castilla y León, except for Valladolid. In Aragon, mainly, in the Pyrenees, with nuclei in the provinces of Saragossa and Teruel. In Navarra it is concentrated in the valleys close to Aragón. It is also found throughout the Community of Cantabria, mainly in the District of Liébana. In the Principality of Asturias, in the district of Onís. In the Community of Madrid, in Somosierra and Navacerrada, and throughout the Community of La Rioja. In recent years it has also been introduced into the Autonomous Communities of Extremadura, Andalusia, Castilla-La Mancha and the Basque Country.



# PASIEGA



#### **GENERAL FEATURES**

Pasiega females have a long well-supported thorax of medium depth. The rump is long, broad and flat from the root to the tail, which ends in a red tassel. The udders have proper capacity and depth, with strong suspensory ligaments and medium-sized, well-directed teats. The males have a broad, deep thorax and a broad-based chest. The testicles are proportionately developed, differentiated and covered with a fine scrotum. They have a straight or subconcave profile.

The weight ranges from 335 kg live weight in heifers of around 3 years, to 780 kg live weight in adult cows. Their height ranges from 125 cm to 148 cm. The coat is red, with shades ranging from cherry red to hazelnut red, passing through bright brown.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The data on production characteristics date from information received, in different documents, from the farming of the Pasiega breed at the end of the 19th century, where productions of 4 to 5 kg of lard per week, i.e. 600-700 g per day per animal, were recorded. Cows with an average daily production of 12-18 litres of milk and carcass weights of between 160 and 218 kg are recorded. The meat production of the Pasiega breed focused on the sale of calves, when they reached 100 kg live weight. The farming of the Pasiega breed was based on a semi-extensive management system: in Until 2008, when officially recognised by the then named Ministry of the Environment and Rural and Marine Affairs, there was no official recognition of this important autochthonous bovine population, with a clear milk aptitude, and which was considered extinct, the support and work carried out by the Department of Livestock, Fisheries and Rural Development of the Government of Cantabria being essential in this respect.

Traditionally, the origin of the Pasiega breed has been attributed to a mixture of primitive orthoid populations with other red-coated, subconvex and middleline breeds. The breeding and farming of the Pasiega breed is associated with the Pas Valley. The special characteristics of this territory, together with the influences exerted by the populations of the neighbouring areas on the Pasiega population, conform a production system for the farming of cattle for milk production.

#### **GEOGRAPHICAL DISTRIBUTION**

The Pasiega breed is distributed throughout Cantabria with very variable populations, located mainly in the Districts of Medio Cudeyo, Riotuerto, Saron, Selaya, Vega de Pas, Lierganes, Laredo, Solórzano, Voto and San Pedro del Romeral.



spring the cattle remained in the mountains during day and night, being milked in the mountains. During the summer they were taken to the stables during the day and at night they would be brought to the mountains again.

# PIRENAICA



#### **GENERAL FEATURES**

Animals of this breed are orthoid, mediumsized and with elongated proportions, a lot of muscle mass, a straight dorsolumbar line in the female and a pronounced hump in the male. The coat is brownish, with centrifugal discolouration. They have lyre-shaped and slightly spiral horns.

Other noteworthy features of this breed are their great hardiness, docility, easy calving and good suckling capacity.

# PRODUCTIVE CHARACTERISTICS AND FARMING SYSTEM

This breed is used for meat production. The typical product is a male bred at its mother's side, and finished in a feedlot. The most characteristic commercial types it produces are the yearling and adult bovine animal. It also participates in the Protected Geographical Indication: "Ternera de Navarra" and in the Basque Quality Label "Euskal Okela".

The Pirenaica breed is adapted to a mixed system: grazing and stabling with intense foraging. The farms are usually family or industrial type.

The farming system of the Pirenaica breed is characterised by its location in the mountains and by following an extensive model, with intensive finishing and collective or communal grazing lands. This ancient breed bears the name of the geographical area of its origin and current largest population. The phylogeny of this breed has different theories: monophyletic (all current bovine breeds are descended from 'Bos Taurus Namaricus') and diphyletic (current breeds are descended from 'Bos Primigenius' and 'Bos Brachicerus Europeus'). Aparicio Sánchez is inclined towards an ancestral mixed origin as a result of the crossing of "Bos Brachicerus Europeus" and "Bos Taurus Ibericus". Others speak of "Bos Primigenius Var", and others of "Bos Taurus Trudetanus".

It is a breed deeply rooted in the traditions and customs of the Basque people and the people of Navarre and Huesca.

The Confederation of Associations of Select Pyrenean Cattle Breeders (CONASPI) groups the breeders' associations of this breed, and is responsible for collaborating with the Ministry Of Agriculture, Fisheries And Food on issues related to the HerdBook, improvement plans and yield monitoring.

#### **GEOGRAPHICAL DISTRIBUTION**

The distribution of this breed covers Cantabria, the Basque Country, Navarre, Aragon, Catalonia and small towns in Burgos, La Rioja, Soria and Extremadura, although the largest census is in Navarre and the Basque Country.



# RETINTA



#### **GENERAL FEATURES**

Its coat is red, ranging from the darkest (retinta) to the lightest (colorada and rubia) shades, with gradients around the eyes (partridge eye). The horns emerge somewhat after the nape extension line, pointing sideways and forward, in the form of a high or low hook in males and forward and upward in females. They are yellowish-white in colour, with darker tips.

They are large, long, well-proportioned animals with a subconvex profile, and a broad and slightly subconvex forehead. Long face with the same profile and thin in females.

# PRODUCTIVE CHARACTERISTICS AND FARMING SYSTEM

It is characterised by a high degree of hardiness and a pronounced maternal nature. This allows it to take advantage of a difficult environment, with long periods of drought and famine. The herds have an average size of more than 40 heads raised in an extensive system, where they make use of the natural vegetation, sharing the land with other species and breeds typical of Mediterranean grassland, mainly Merino sheep and Iberian pigs. During the most critical periods in the Mediterranean region, the typical grassland diet is supplemented with straw, hay and fodder.

Mating is normally seasonal and by natural mating. In general, the bulls stay with the cows from December to June. Females are mated for the first time around the age of 2 years, the first calving taking place at around 34-36 months. Males are used for fattening and slaughter, except those to be used as future breeding bulls. Most females are sold as animals for life, given It comes from the Red Convex bovine stock (Bos taurus turdetanus) and is the main autochthonous bovine breed in the drv areas of Spain. It was distributed in the southern half of the Iberian Peninsula, where it gave rise to the different Retinta ecotypes (Colorada Extremeña, Rubia Andaluza y Retinta Andaluza), from whose interbreeding comes a modern and improved version of the breed, which has passed from its original double use for meat and work to its single use for meat production today. They are animals that are well suited to the pastures of the southwest peninsular, with good productive and reproductive yields and high resistance to parasitic diseases and the harshness of the environment.

#### **GEOGRAPHICAL DISTRIBUTION**

The breed is distributed mainly in Extremadura and Andalusia, although there are also specimens in the Balearic Islands, Castilla-La Mancha, Castilla- León and Madrid. Outside Spain, it is worth mentioning the presence of this breed in Portugal, Argentina, Colombia and Brazil.



their high value as breeders.

Their meat is red, tender, juicy, and has an exquisite flavour, with a low ratio of saturated/ total fatty acids. The carcasses and pieces are identified with the brand "Carne de Retinto", property of the National Association of Select Cattle Breeders of the Retinto Breed.

# **RUBIA GALLEGA**



The name of this breed combines the colour of its coat and the name of the autonomous region where it is bred. It occupies the northwest of the Peninsula and is a breed that stands out for its hardiness, maternal nature and good meat production.

The National Association of Select Cattle Breeders of the Rubia Gallega Breed (ACRU-GA) is responsible for keeping the HerdBook, monitoring yields, maintaining a continuous market for the animals and their genetic material and periodically publishing a catalogue of breeding bulls.

#### **GENERAL FEATURES**

Medium-sized, proportionate animals with a straight profile and the typical shape for meat aptitude.

The coat of the animals of this breed, as its name suggests, is uniform blond, with some centrifugal gradients being admitted. Variations between lighter and darker colours can be seen, being called marela and vermella respectively, but white spots and hairs of a different colour to the coat are not admitted.

They have pink mucous membranes and the horns of the animals must be pale in colour and may darken at the tips, but cannot be totally black or slate-coloured.

# PRODUCTIVE CHARACTERISTICS AND FARMING SYSTEM

The animals of the Rubia Gallega breed are used specifically for meat production and are characterised by their reproductive and productive parameters: sexual precocity, fertility, short interval between calvings, lactation capacity to cope with twin calvings, longevity (21 years), ease of calving (less than 2% dystocia) and good maternal qualities and docility.

The typical commercial products are veal, slaughtered at a maximum age of 10 months, yearling, slaughtered between 10 and 18 months of age, and fatling, slaughtered between 18 and 30 months of age. As a guarantee of quality, the

#### **GEOGRAPHICAL DISTRIBUTION**

The animals of the Rubia Gallega breed are distributed in the northwest of the Peninsula, and there is also a small population in Castilla y León, Castilla-La Mancha, Aragón, La Rioja and Madrid.



breed is included in the protected geographical indication Ternera Gallega'.

The Rubia Gallega breed is used in industrial crosses with animals of the Holstein, Morucha and Avileña-Negra Ibérica breeds and with crossbreeds in Spain and with zebu crosses in South America.

# SAYAGUESA

The Sayaguesa bovine breed takes its name from the Sayago region of Zamora, the region where it originated. Also known as Zamorana, it consists of specimens belonging to the Iberian Stock.

#### **GENERAL FEATURES**

These animals feature a slight concave shape, with pronounced sexual dimorphism, medium proportions, a tendency to hypermetry, good mass and plenty of bone.

Their skin is abundant and elastic, resulting in the presence of dewlaps in both sexes. Pearly horns, with darkening at the tips, short hookshaped in males and open, long, lyre-shaped in females.

The coat is black with gradients in the lower part of the trunk. Pale-mouthed and with hair discolouration in the inner part of the ears, as well as in the udders of the cows. The calves are born red, and as they get older their coat takes on its characteristic colour.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Its main use is for meat production. A former supplier of the "Ternera Blanca de Castilla" of renowned quality, it is currently marketed in the form of weaned calves and yearlings finished in the feedlot, but with a moderate yield.

It is an extremely resistant and hardy breed in environments with harsh climates and poor pastures. In addition, as an autochthonous breed, it is an excellent mother and with very easy calving even in industrial crosses of meatproducing breeds. The females have regular ovarian cycles, yielding one calf a year through natural mating.

It is worth mentioning the recognition that the breed is obtaining as a producer of bullocks.

#### **GEOGRAPHICAL DISTRIBUTION**

Its small population is found in the Sayago region of Zamora, although it is beginning to be farmed extensively in neighbouring provinces.



These bullocks are the origin of the famous "Chuletón de Buey", which has won awards at numerous gastronomic events, including the Club del Gourmet de Madrid award. Its content in oleic and other unsaturated fatty acids and its outstanding quality make it practically unique.

The breed was distributed in small family holdings on a mixed husbandry basis up to five years ago. Its farming varied between nocturnal stabling and diurnal grazing.

Over the last few years, the specimens have been regrouped in medium-sized extensive or semi-extensive farms.

# SERRANA DE TERUEL



The Serrana de Teruel breed comes from Bous Taurus Primigenius, with a straight or subconcave profile in the frontal and supranasal areas, being animals of small, brevilinear or shortened forms.

For centuries they have stood out for their hardiness, adapting to a difficult environment, taking advantage of scarce grazing resources in areas with harsh climates and playing a key role in farm work in the Aragonese countryside, mainly in the Teruel Mountains.

#### **GENERAL FEATURES**

The Serrana de Teruel breed has a black or brown coat, with a white border around the nose. Well-developed low lyre-shaped horns with black tips, and also black mucous membranes and hooves.

The breed is medium-sized, with live weights of 500-800 kg in males and 350-500 kg in females, depending on the environmental conditions in which they live. Their height at the withers is 132-133 cm.

In the first few months of life, calves have a reddish colour, which changes as they become adults.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Its high adaptability to mountainous areas with harsh and extreme climates, gives it a remarkable grazing capacity, making it the ideal producing breed. Due to the characteristics of the breed, it is a good calf rearer with a high maternal instinct and easy calving.

As far as its aptitudes are concerned, it is to mention its meat-producing capacity and its use as a working breed, thanks to its docility for handling purposes and its dynamogenic capacity.

In terms of high-quality meat production, in tests conducted in the Agrifood Transfer Centre of the Diputación General de Aragón, in Movera, average live weights of 37.75 kg at birth and 205 kg at 210 days were found in the cal-

#### **GEOGRAPHICAL DISTRIBUTION**

The Serrana de Teruel breed is mainly distributed in the region of Gúdar-Javalambre, although it was originally also found in the Maestrazgo (both Teruel and Castellón) and in the region of Teruel, where it is perfectly adapted to the harsh climate and rough terrain, reaching as far as the Maestrazgo.



ves born in the Centre, with an average daily gain of 0.5 kg. The management system is fully extensive, taking advantage of the pastures of the mountains in which it lives and develops.

# SERRANA NEGRA



#### **GENERAL FEATURES**

Medium-sized with a straight or subconcave profile, with some individuals tending towards positive variants closely linked to farming improvements. Black coat, although some specimens have a reddish strip (piñanas). The nose has a matt-white border around it (bociclaro). In the first few months, the calves have a reddish-brown coloured coat, which gradually takes on the typical adult colour. Hardy, sturdy breed, resistant to extreme climatic variations, periods of scarcity and frequent and intense impacts, including those risks of an infectious and parasitary nature. Strong temperament, undoubtedly surly but not aggressive, and sometimes friendly.

The live weight in bulls is 900-950 kg and in cows 500 to 550 kg, with a height at the withers of 142 cm in males and 138 cm in females.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

It is focused on meat production, no longer being used as a working animal. It yields calves, grazing calves and adult cattle.

An outstanding feature of the farming system of this breed is its contribution to clearing the undergrowth of the Mediterranean forests of the interior of the peninsula, so susceptible to the increasingly common forest fires.

Recent studies carried out on the breed reveal average daily gains of 1,350 kg in young individuals, introduced into the feedlot weighing 193 kg and coming out weighing 435 kg and with a 56% carcass yield. Serrana Negra or Serrana Soriana, among others, are the names given to this very ancient breed of cattle, the names originating from the areas where it lives (sierras) and the colour of its coat. It comes directly from the Stock known as Bos taurus ibericus, of which it was the main component and is today a faithful representative.

#### **GEOGRAPHICAL DISTRIBUTION**

The Serrana Negra breed has been identified with dry mountain regions, totally different from the humid mountains of the north of Spain and other European environments. In the province of Soria, its farming is closely associated with the use of the old meadows and forest and mountain pastures. It is mainly found in the eastern part of Castilla y León (province of Soria), an extensive territory that coincides with the geographical area where the Central System and the Iberian System meet.



It is farmed in an extensive grazing system all year round, with some periods of confinement to pens for food supplementation, when grazing is scarce. There are many communal herds kept under the protection of the historical right of the members of the mountain populations, to exploit the pastures of their respective municipalities.

Feeding consists of continuous grazing on grasslands and woods, which covers the requirements of the cattle with little need of rainfall.

# TERREÑA



The name of the breed refers to cattle of the land. In this case, the cattle of Álava, Biscay and Guipúzcoa, located in very limited areas of the three provinces.

The ancestors of this breed can be identified with the Iberian Stock, and within this with the branch derived from the ancestral Bos Taurus Ibéricus. The history of the breed is the same as that of other autochthonous breeds used primarily as working animals with meat production as a secondary function, which, no longer being used for work, underwent a drastic decrease in population until it found the necessary conditions to adapt and survive as a meat producer.

#### **GENERAL FEATURES**

The Terreña breed has an orthoid profile. There are middleline animals ranging from eumetric to ellipometric, with low mass and good bone. Brown coat. Great hardiness. They are strong animals and good walkers, with a lively temperament and a good predisposition for handling, stemming from their long history as draft animals. It is a typical mountain breed.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

No longer used as draft animals, the Terreña breed is used exclusively for meat production, which, within its limitations, focuses on the production of grazing calves as the main commercial type with adult cattle as a secondary type. As a reminder of its working past, it is worth mentioning the use of bullocks of the breed in the "Idiprobak" or stone-dragging, one of the rural sports of the Basque people.

Farmed on an extensive basis, these cattle graze in the mountains from April to November and spend the winter in the pastures of the nearby valleys. When they are gathered for the winter season, the calves are taken apart, branding those chosen for life and removing those to be replaced. The occasion is used to carry out administrative control and sanitary operations.

#### **GEOGRAPHICAL DISTRIBUTION**

The breed is located in the north of Álava and in the municipalities bordering Álava and Biscay, which are part of the Gorbeia Natural Park, and in scattered groups in Guipúzcoa. Likewise, the Terreña breed has two pilot herds (conservation and orientation) belonging to the Provincial Council of Biscay and the Valderejo Natural Park (Alava).



# 

# TUDANCA



The breed takes its name from its place of origin and expansion, the mountain valley of Tudanca in the Cantabrian Mountains. This bovine breed stands out for its important role in maintaining the biodiversity of the environment, as well as for the use of arazina resources under-utilized by other cattle breeds that coexist with it on these lands. With a strong temperament, its reactions are known as the "moods of the tudancas", inherited from its ancestors used as draft animals. It is worth mentioning their high level of participation in Livestock Events, Fairs and Competitions that are held throughout the region, particularly the Tudanco Fair in Cabezón de la Sal. Cantabria.

#### **GENERAL FEATURES**

These animals are characterised by their orthoid, middleline profile, eumetric to slightly ellipometric, low muscle mass and good bone. They have white circles under the eves, a sparse, dark-coloured guiff, and small, very mobile ears, trimmed with long, yellowish hairs. The horns have an oval cross-section and several twists, with upward-pointing tips in the females. Both sexes are born red, but their coat starts. changing to its characteristic colour at around three months of age, with a great sexual dimorphism, with gradients in different parts of the body. The adult males are black, with white hairs bordering the eyes and nose, and the females are classified in two different coat types that vary between black, greyish and white and can be "hosca" or "josca" (black hair from the base to near the tip, which is white) and "tasuga" (black hair from the base to the middle and the rest white, resulting in a bluish appearance).

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The farming system used is mixed, grazing and stabling, typical of mountain breeds, depending on the climate of the area. During the hot months its diet is centred on the grazing resources offered by the high mountain areas, while during the winter it is based on the supply of hay.

Likewise, breeding is scheduled so that calving takes place in winter and, later, mother and calf take advantage of the best new grazing of spring.

#### **GEOGRAPHICAL DISTRIBUTION**

It is mainly located in the southern and southwestern mountainous areas of Cantabria, as well as in the north of Castilla y León.



Over the years, its use has become centred exclusively on meat production. Currently, its most priced product is the grazing calf, aged 5-6 months and weaned at 120-130 kg live weight. While the adult specimen occupies a discrete second place as beef for slaughter.

# VIANESA



This breed takes its name from the "Terra do Bolo", a region located in the east of the province of Ourense, bordering Zamora, covering the mountainous areas of the municipalities of this region. The area is one of the most mountainous in the province, which hindered agricultural mechanisation and resulted in the large number of animals of the breed found at the beginning of the recovery programmes. This breed is very dear to the inhabitants of the region.

The breed is derived from the Cantabrian stock (BELDA, 1984), and the hump characteristic of this stock can be observed in all the breeding bulls of the breed.

#### **GENERAL FEATURES**

From the morphological point of view, the Vianesa breed consists of very well balanced, proportional, medium-sized animals, resulting in an overall harmonious appearance. They have a dynamogenic aptitude, which allows them to travel great distances in search of grazing land in large extensive farms. Brown coat with darker colouration in bulls and lighter or blond in calves.

Both the abundant hairy formation hanging over the forehead, called the "fringe", and the ones in the ears, called "earrings" are characteristic of the breed. There has been an official stud book since 2000, coming from the breed records of the Zoogenetic Resource Centre of Galicia in the Pazo de Fontefiz (Ourense) and since 2005 its official management has been entrusted to the Association of Breeders of the Vianesa Breed-VIANEGA.

It has a semen and embryo bank in the Fontefiz Zoogenetic Resource Centre- CRZG, property of the Xunta de Galicia. The breeder's association manages the DNA bank. Weights of 560Kg in females and 850Kg in males. Height at withers of 128-146 cm in females and 131-155 in males.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Apart from the qualities of all hardy breeds, perfectly adapted to the mountain environment and climatic conditions, it is necessary to mention their good maternal qualities, particularly milk production, being the largest milk

#### **GEOGRAPHICAL DISTRIBUTION**

Distributed throughout the four Galician provinces, with predominance in the province of Ourense, and a presence in the Basque Country in the form of breeding bulls used for dragging stones, much sought after for this purpose.



producer of the Galician Browns, which results in a high rate of growth in the calves and ensures a better carcass classification.

Their triple usage of the past no longer exists, their current use being for meat production under an extensive farming system.

It is a very long-lived breed, with records of animals aged over 25 years in the Herdbook. Meat production is in the form of suckling calves aged 8-9 months and post-weaning calves with 2 months fattening with cereals.

### OVINE

Merina de Grazalema **Ovella Eivissenca** Rubia del Molar

Canaria de Pelo Carranzana (Cara Rubia) Carranzana (Cara Negra) Castellana (variedad Negra) Churra Lebrijana Churra Tensina Fleischschaf Guirra Île de France Lacaune Landschaff



# ALCARREÑA



The breed, part of the Entrefino Stock, owes its name to Alcarria, a large natural region of the Autonomous Region of Castilla-La Mancha, where most flocks are to be found. There are several theories about its origin, some with more defenders than others, but none sufficiently substantiated, two of them suggesting that it stems from to the Manchega and the Castellana breeds.

#### **GENERAL FEATURES**

Its ethnological definition is that of the subconvex type, and it is also considered to be eumetric and sublongilinear. Animals of both sexes lack horns, although rudimentary forms are sometimes found in rams.

The colour of the fleece has two varieties, white and uniform black. However, bearing in mind that the flocks are mixed animals of both coat types, and that mating takes place without control, sometimes black animals with large white areas in other parts of the body such as the trunk appear.

It has a dense fleece, formed by rectangular strands and medium length fibres.

The harsh environment in which these sheep are reared limits their body development, the weight of adult animals varying widely. It is estimated that the weight of an adult female ranges from 40 to 55 kg and that of rams from 65 to 80 kg.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

In the past, the Alcarreña breed was used for three purposes: milk - meat - wool. Today, given the low value of wool and the high cost of milking, its main use is for meat production, the lambs frequently being kept until they reach a live weight of 12 to 15 kg, when they are purchased by third parties to be finished in large industrial feedlots, being sent for slaughter with live weights of around 25 kg.

#### **GEOGRAPHICAL DISTRIBUTION**

Over the last two decades the breed has undergone a significant decline in the number of specimens, due to both economic and labour reasons, as well as continuous crosses with other breeds, such as the Manchega, in pursuit of better milk yields.



The live weight of the lambs at birth is around 3 or 4 kg, while at 30 days the weight ranges from 9 to 11 kg, after which they are slaughtered at 90 days with weights ranging from 24 to 26 kg.

This sheep is farmed under a grazing system, going out to graze practically every day of the year. It is grouped into flocks of 250 to 300 sheep under a farming system closely linked to the land.

# ANSOTANA



The Ansotana breed, hardy, resistant and versatile, has been a basic feature of life in the valleys of northwest Huesca for centuries, being an important factor in the family and general economy of this region as a source of food and the maintenance of the ecosystem to the extent that overgrazing has even become a problem. The wool of this breed, included in the Entrefino Stock, was the most sought-after in the region.



#### **GENERAL FEATURES**

The breed includes white, subconvex, mesomorphic, eumetric animals included in the 'Entrefinos del Pirineo' group. They have a semidense fleece of medium-fine wool of special characteristics, differentiating it from the Rasa Aragonesa breed, with which it was traditionally linked. The presence of horns is observed in both sexes, more frequently in males. These are generally well developed and spiral in shape. Some of its most important qualities are its hardiness and its great capacity to adapt to the harsh environment in which it lives during the time it spends in high altitude pastures, with low temperatures and heavy rains. Although it can vary according to the management system, the estimated weight of adult animals ranges from 45 to 55 kg in females, and 70 to 80 kg in rams.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Classified as a triple-purpose breed in the past (meat, wool and milk), meat production is currently its main and almost sole purpose, generally from a "ternasco" type lamb, being included in the Ternasco de Aragón PGI (Protected Geographical Indication), reared in stables, fed with mother's milk and concentrated feed. These lambs are slaughtered at 70-90 days of age, with a live weight of 20-24 kg. It also produces a suckling lamb of excellent quality weighing 12 to 13 kg at 45 days of age.

In general, the breed has been subject to a very extensive farming system.

#### **GEOGRAPHICAL DISTRIBUTION**

It is located especially in the north-western part of the province of Huesca and mainly in the Valleys of Ansó and Hecho, from which it takes its name, extending along the east towards Canfranc, including other Aragonese Pyrenean valleys, and mixing with the Roncalesa breed to the west in the Roncal valley in Navarre.



In this regard, the farming system was centred on short transhumance, a practice aimed at making the most of the high-altitude pastures of the Huesca Pyrenees. Not so long ago, this type of transhumance was carried out with almost all the sheep of this breed. Since the sixties there has been a sharp decline in this practice and in the population of the Ansotana breed.

# ARANESA



The name of the breed comes from the Aran Valley, in the Catalan Pyrenees, the main farming area of the sheep of this breed. The closest ascendant of the Aranesa breed is the French Tarasconesa breed, which reached Spain via the Pyrenees. On the other hand, the origin of the Tarasconesa breed lies in the sheep of the Central Pyrenees, which were influenced, firstly, by the merinos coming from Spain, then by the English meat breeds, Leicester and Southdown, and, finally, by other merinos from France: Merino Precoz and Merino de Rambouillet.

#### **GENERAL FEATURES**

The breed consists of large-format sheep, with elongated proportions and a subconvex to convex profile, mainly in males. It has long limbs and medium-fine wool and is used primarily for meat production. Both sexes have horns, thin in females and well-developed, thick, strong and spiral-shaped in males. Not very extensive fleece that does not cover the head, belly, front tracheal edge of the neck, testicles and lower half of the limbs.

The coat of the breed is typically white, although farmers are making an effort to recover the most ancient varieties, so black, bereta, mascarda, oelhinera and capirroja coats are also accepted.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Aranesa sheep are used primarily for meat production. Traditionally, the sheep went up to the summer pastures together with their lambs, which were sold at a few months of age when they came down from the high pastures without having been fed any kind of concentrate. Today, due to changes in consumer tastes, production is geared towards lighter lambs, slaughtered at 25-28 kg live weight, reared in stalls with concentrated feed.

#### **GEOGRAPHICAL DISTRIBUTION**

The distribution of the breed is concentrated in the Aran Valley, located in the north of the province of Lleida, near the French border, and characterised by rugged terrain, reflected in the breadth of its U-shaped valleys, with a very pronounced Atlantic climate.

Members of the breed can also be found in the Lleida regions of Pallars Sobirà and Segrià.



Flock sizes are small, usually between 50 and 100 animals. In general, the farmers are nonprofessional breeders who keep their animals in order to contribute to the maintenance of the landscape and for reasons of nostalgia, being proud to contribute to the conservation of the breed typical of the region.

# ASSAF



#### **GENERAL FEATURES**

They are longilinear, hypermetric dairy biotype animals with a subconvex profile, and a weight of 60-70 kg in females and 80-100 kg in males.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

They have high milk production, with long average lactations of up to 210 days or more, and are well-adapted to mechanical milking. The average production standardised in official tests after 150 days of lactation is 330 litres (2,2 litres/day) with an average milk composition of 6.2 % fat, 5.3 % protein and 16.8 % dry extract. Its meat production is based on the slaughter of suckling lambs.

#### **GEOGRAPHICAL DISTRIBUTION**

The distribution is concentrated in Castilla y León. In addition, a significant number of animals can also be found in the municipalities of Madrid, Navarre, Castilla-La Mancha and Valencia.



It is considered to be a variant of the Assaf breed originating in Israel, and was formed mainly by successive crosses by mixing with the autochthonous Spanish breeds. The Assaf breed is a synthetic breed originating in Israel, created in 1955. It comes from the cross between Awassi breed sheep and Milschschaf breed males in the proportion 5/8 and 3/8 respectively.

Attempts are made to improve the Awassi breed by crossing with Milchschaf males, in order to improve its precocity, prolificacy and form. On the other hand, improved Awassi ewes are used for milk production so it is intended that the results of the crossing will be a synthetic breed with a double meat-milk production capacity

The first Assaf sheep flock was introduced in Spain by José Luis Moncada, a farmer located in Gordoncillo (León) between 1977 and 1980. Later, through Portugal (Sociedad Agrícola de Herdade do Martinho, in Castelo de Vide), imports of animals and semen arrived in Spain. In addition, semen and embryos from Israel have been introduced to overcome the health barrier.

Another genetic source, which has contributed to the Spanish Assaf breed, has been the introduction of F1 sheep among Milschschaf rams and Churra or Castellana ewes, which passed through the Assaf breed and also had the advantage of being white-coated, a phenotype preferred by many farmers.

Due to this, what we call Spanish Assaf has undergone a process of adaptation-selection that probably differentiates it genetically from the Assaf breed originating in Israel. In Spain, the Assaf breed is highly variable due to crossbreeding with autochthonous breeds and its large population compared with that of the Assaf breed in Israel.

Females have good sexual precocity, generally producing the first birth at 14-16 months of age. They have good fertility and average prolificacy of 1.6 offspring/lambing. It is farmed primarily in intensive systems where there is a tendency to manage reproduction at a rate of one lambing per year, but there are frequently farms that produce three lambings in two years.

# BERRICHON DU CHER



#### **GENERAL FEATURES**

The animals of this breed have a medium-sized head devoid of fleece. Both males and females are polled animals. Their trunk is voluminous and solid. Rounded and low-slung buttocks are characteristic of this breed of sheep. The estimated weight of adult animals is 100 -140 kg in males and 70 -100 kg in females.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The use of this breed purely for meat production as a result of its large size is also due to its high growth rate and the yields and form of the carcasses.

In terms of reproduction, the Berrichon du Cher breed has a prolificacy of 140 to 170%. The sheep have a large milk capacity, allowing two lambs to be reared with no difficulty.

The average lifespan of this breed is around 8 years.

Due to the aforementioned meat production qualities and the great reproductive capacity of the breeding rams, it is one of the breeds with the greatest demand in Spain for industrial cross-breeding, both with autochthonous breeds and with prolific breeds. It is a breed resulting from the mixing first of the Merina breed and later the Dishley breed with the local sheep of the Berry area. It was defined and selected with a special focus on meat production.

The Official Catalogue of Livestock Breeds includes the Berrichon du Cher breed of sheep in the Group of Integrated Breeds in Spain.

#### **GEOGRAPHICAL DISTRIBUTION**

Its geographical distribution is not related to environmental conditions, so they can be found in several autonomous regions: Navarre, Castilla León, Extremadura and Andalusia, among others.



### Average weight at 70 days and average daily weight gain between 30 and 70 days.

The figures shown are the average of the males and females in the Elite category of individual growth monitoring carried out on the farm.

SEX	AVERAGE WEIGHT AT 70 DAYS	A.V.G BETWEEN 30 TO 70 DAYS
MALES	34.2 kg	453 gr
FEMALES	30,7 kg	349 gr

#### Relative values of the different body regions, in percentages of carcass weight. According to Spanish cuts.

PIECES	CATEGORIES	PERCENTAGE
LEG	]a	35,49 %
CHOPS	]a	26,26 %
SHOULDER	2a	20,25 %
BREAST FLANK	Зa	11,12 %
NECK	Зa	6,32 %

# CANARIA



It owes its name to the Canary archipelago, cradle and farming area of the breed. Most authors agree that the breed is the result of the crossing of different populations of sheep, involving, on the one hand, breeds with long, coarse wool and, on the other, different ethnic groups that have arrived on the islands from Mediterranean countries and Africa.

#### **GENERAL FEATURES**

The breed consists of small-sized animals with a straight profile and average proportions. It has coat of variable colour, a fleece of long and coarse wool, and is used primarily for milk production, producing high yields despite the harsh environment in which it lives.

The size of the adult animals varies according to the farming areas and the management system used; however, they generally weigh from 45 to 55 kg in the case of rams and from 30 to 40 kg in the case of ewes.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The breed could be considered to be highly specialised in milk production in a hostile environment, with a diet that falls outside the established technical standards. The milk production capacity has been selected by farmers since ancient times, the estimated average milk production per ewe and lactation ranging from 150 to 200 litres. A characteristic of this breed is its long lactation period of around 200 days. As for the composition of the milk, its average percentage of fat is 6.7%, protein 5.6% and dry extract 17.6%. The meat production of the breed has always been downplayed; however, in recent years, meat production has revalued and acquired a high economic importance. The lambs, fed exclusively on mother's milk, are slaughtered at the age of 15-20 days with a carcass weight of 4-5 kg.

#### **GEOGRAPHICAL DISTRIBUTION**

The breed is present on the seven islands, 60% of its population being located in Gran Canaria.



This sheep has a high sexual precocity, usually lambing for the first time between 12 and 14 months of age. The prolificacy is high, but varies according to the level of nutrition, with rates of around 150 lambs per 100 lambings.

Their farming system is distinctive and variable, depending on the different islands and areas. Flocks are often made up of sheep and goats, a phenomenon that occurs most frequently on the island of Gran Canaria and in coastal areas. Their food source consists primarily of the scarce resources obtained in grazing, often of very low quality. In general they live on a continuous grazing basis throughout the year, free roaming, sometimes with no shepherd to control them. OVINE

# CANARIA DE PELO



**GENERAL FEATURES** 

The breed consists of eumetric, midline sheep with a subconvex or convex profile. They are very hardy and have a high capacity to adapt to tropical climates. They have thick skin without folds, devoid of wool, although long hair can appear vestigially on the back, covering the whole body. The coat can be of various shades of red. Although it varies according to the handling system used, their weight ranges from 45 to 55 kg in females and 60 to 80 kg in males.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The breed is used primarily for meat production, generally in close relationship with the intensive farms found on the Canary Islands, to which it provides the much-coveted manure as a fertiliser. The most representative type of lamb is that of 12-18 kg live weight. The average daily gain of the breed is 140 to 170 grams between birth and 90 days of age for single lambs, and 120 to 145 grams for twin lambs, within the same parameters.

The Canaria de Pelo sheep, perfectly adapted to the tropics, in the intensive farms located in the coastal areas of the Canary Islands, provides a magnificent though underexploited The name of the breed comes from the geographical area it occupies, the Canary archipelago, and the peculiarity of being devoid of wool and covered with hair. In the Canary Islands it is also known as Pelibuey.

It is considered to originate from the hairy sheep of West and Central-West Africa. There is evidence of its existence in the archipelago before the arrival of the first settlers from mainland Spain.

#### **GEOGRAPHICAL DISTRIBUTION**

Virtually all the farms of the breed located in the Canary archipelago are in coastal areas, around plantations and intensive crops. The island of Tenerife, where a large number of sheep imported from Venezuela has arrived, has the highest population of the breed in the Canary Islands. It also has the largest farm, with a total of 400 heads.



source of wealth for the future. Although they show good aptitude for grazing, the most widespread farming system is the use of agricultural by-products. The flocks vary greatly in size, ranging from 400 sheep to less than 10.

# CARRANZANA (CARA RUBIA)



#### **GENERAL FEATURES**

This breed consists of rather large-sized sheep with a convex profile, elongated proportions and long ears. Generally, of blond colouration of varying intensity, sometimes uniform and of a similar shade to the "chestnut" coat. Characteristic long, thick, white, coarse wool fleece, covering only neck and body. Horns are rare in females, while in males, when they appear, they become highly developed and take on a spiral shape.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

These are highly specialised specimens for milk production in mountain areas with high rainfall. They are reared by grazing on meadows according to the time of the year. As a result, on days with adverse weather conditions or when the needs of the animals are increased (gestation, lactation, etc.), their diet is supplemented by fodder and concentrates in sheepfolds.

The milk production of this breed is highly valued, since its main purpose is the manufacture of 'Idiazabal' cheese, obtained exclusively from Carranzana and Latxa sheep's milk. This cheese is protected by a Designation of Origin, thus ensuring its origin and quality. Coming from the regions of Carranza and Encartaciones in Biscay and mountainous areas of Cantabria and Asturias, it is a breed of sheep derived from the Churro Stock. The importance of this breed lies both in the economy itself, derived from its productions: milk, meat and wool, and from the role it plays in the field of ecology, taking advantage of the natural resources of sparsely vegetated and mountainous areas, and as a genetic reserve, being animals that are perfectly adapted to harsh environments and high rainfall.

#### **GEOGRAPHICAL DISTRIBUTION**

Mainly in mountainous areas of Asturias, Cantabria, León and Biscay. The largest population of animals is in the Encartaciones and the Carranza Valley from where it takes its name.



Flocks are mated between May and December to obtain one lamb per ewe per year. Fertility exceeds 90%, depending on the level of nutrition, management and time of year. Prolificacy exceeds 130 lambs per 100 lambings, depending on the weight of the sheep at the time of the mating.

# CARRANZANA (CARA NEGRA)



#### **GENERAL FEATURES**

This breed consists of rather large-sized sheep with a convex profile, elongated proportions and long ears, although slightly larger than the genuine Carranzana. Horns are not accepted in females, while in males, when they appear, they become highly developed and take on a spiral shape. They have black colouration on the head and legs. They have a sparse white fleece, formed by pointed strands of varying lengths with long, thick fibres. The weight of adult animals varies depending on the farming area and the handling system used. However, it can be estimated at 55 to 65 kg for ewes and 80 to 90 kg for rams. In general, they can be considered harmonious animals.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Highly specialised specimens for milk production in mountainous areas with high rainfall. The milk production of this breed is highly valued, as its main destination is the manufacture of Carranzana Cara Negra cheese which was the first cheese protected by the Slow Food movement that guarantees good, clean and fair products. The cheese is made exclusively from Carranzana Cara Negra sheep's milk. The average composition of the milk is as follows: 6.85% fat and 5.55% protein. The production is around 150 litres in 150 days of lactation. Although the main purpose of their breeding is to obtain milk, the meat production of the breed is noteworthy, with the lambs being removed at a very early age, around 25-30 days, slaughtered with a weight of about 10-12 kg. and marketed as "suckling lambs", usually in the

The Carranzana breed owes its name to the region of Carranza, in Biscay, where the largest population of sheep of this ethnic sheep group is located. It comes from the Churro Stock; whose ancestral representative is the Ovis aries celticus.

#### **GEOGRAPHICAL DISTRIBUTION**

Mainly in mountainous areas of Biscay. Specifically, the largest population of animals is to be found in the Carranza Valley.



area of production itself, where there is great demand and very high prices are paid.

It is grazed on grassland of different types, depending on the time of year; as a result, its diet on days with adverse weather conditions or when the animals' needs are increased (gestation, lactation, etc.), is supplemented by hay (grass, alfalfa), beet pulp and concentrates administered in sheepfolds.

The importance of this breed lies both in the economy itself, as a result of its production, and in the role, it plays in the field of ecology, taking advantage of the natural resources of sparsely vegetated and mountainous areas, and as a genetic reserve, being animals perfectly adapted to harsh environments and high rainfall. The size of farms is small, and the estimated average number of sheeps per herd is 30.

# CARTERA



The name of the Cartera breed comes from its creator, Bernabé Martín Vicente, known by the nickname "El Cartero" (The Postman). It is the result of an ancient crossing between Merina rams and Rasa Aragonesa ewes, included in the Entrefino stock.



#### **GENERAL FEATURES**

This breed consists of medium-sized to large animals of a uniform white colour, with a dense fleece of medium-fine wool, straight profile and elongated proportions. They are very hardy animals, adapting well to grazing in mountain areas and transhumance. The weight of Cartera breed animals, although varies according to the farming and handling system, is generally from 70 to 90 kg for rams and from 55 to 65 kg for ewes.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

These animals are very hardy and highly adapted to mountain areas, harsh environments and transhumance, and possess good reproductive and meat production capacities. The Cartera sheep is considered to be a dual-purpose breed (wool-meat), although currently it is used primarily for meat production. Today, a light ternasco-type lamb is obtained, subjected to an intensive rearing system without grazing, fed ad libitum in a sheepfold with concentrated feed, reaching a live weight of 25 kg at 80-90 days of age.

The production of wool, which in the past was the main purpose and reason for the creation of the breed, is now of little importance. It has a fleece of medium-fine wool. This dense fleece is formed by rectangular strands containing wavy fibres of similar length (6-8 cm) and a fineness of 24 to 26 microns. The weight of the fleece is 2.0 to 3.0 kg in ewes and 3.5 to 5.0 kg in rams.

#### **GEOGRAPHICAL DISTRIBUTION**

The area of occupation of the breed is in the mountainous areas of the southeast of the province of Teruel (regions of Gúdar-Javalambre, Maestrazgo and Teruel), and other areas reached by transhumance, in Castellón, Valencia and Tarragona, a practice carried out by almost half the heads registered in the herdbook.



The farming system used in the breed is widely extensive, with grazing in mountain areas. It is grouped into flocks of 300-400 sheep that go out to graze every day, under the direction and safekeeping of the owner (shepherd - owner), who remains with the flock all day. Only special circumstances, related to adverse weather conditions, prevent the cattle from going out to graze. The pastures used are located in mountain areas (generally higher than 1,200 metres).

# CASTELLANA



The Castellana ovine breed owes its name to the fact that it was bred and reared for centuries in Castilla y León, which, years ago, was called Castilla la Vieja. It is closely related to farms in general and cereal crops in particular. It has been one of the most popular breeds, but has suffered a decline in recent decades.

#### **GENERAL FEATURES**

This is a hardy, eumetric, sheep of mesomorphic proportions with a straight or attenuated subconvex profile. The two sexes are generally polled and have small or medium-sized, mobile and vivacious ears. They may have wattles. The tail is long although docking is performed. The hooves are hard and pale-coloured.

The animals of this breed have white skin and a dense, medium-fine type fleece that can contain dead hair.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Meat production: this practice is more common on large farms in the pastureland areas of Salamanca and Zamora. The most commonly marketed type of product is high-quality suckling lamb. Recental and pascual lambs are also produced, the difference being in their slaughter weights, which are generally finished in feedlots with concentrated feed. The suckling lamb from the Castellana, Churra and Ojalada breed has been included in the Protected Geographical Indication 'Lechazo de Castilla y León'. Milk production: this is a practice associated with family farms and those involved in cereal production. The milk obtained is intended for the manufacture of cheeses, such as the

#### **GEOGRAPHICAL DISTRIBUTION**

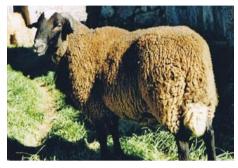
The main area of distribution of this sheep is Castilla y León, particularly the provinces of Zamora, Salamanca and Valladolid. Other areas of occupation include the south of Palencia and north of Soria and Segovia.



"Zamorano" Protected Designation of Origin cheese and the Castellano type, both of high quality. These types of farms always sell suckling lamb.

Their farming varies from extensive to semiintensive systems, with the respective technology.

# CASTELLANA (VARIEDAD NEGRA)



#### **GENERAL FEATURES**

This is a hardy, eumetric sheep with a straight or attenuated subconvex profile and mesomorphic proportions. Both sexes are generally polled with small or medium-sized, mobile and vivacious ears. They may have wattles. The tail is long although docking is performed. They are black-coloured animals in which the parts devoid of wool are of a jet black colour and the fleece has gradients ranging from black to reddish-brown. They also have a white patch at the tip of the tail (puntiblancos) and another at the nape of the neck (coronados). The fleece is dense and black with rectangular strands with an average length of about 8 cm.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Meat production: this practice is more common on large farms in the pasturelands of Salamanca and Zamora. The most commonly marketed product is the high-quality suckling lamb (9-12 kg live weight, slaughtered at the age of 25-30 days). Recental lambs (16-22 kg live weight) and paschal lambs (24-30 kg live weight) are also produced, the difference being in their slaughter weights, which are generally finished in feedlots with concentrated feed. The suckling lamb from the Castellana, Churra and Ojalada sheep has been included in the Protected Geographical Indication 'Lechazo de Castilla y León'. The Castellana breed of sheep owes its name to the fact that it was bred and reared for centuries in Castilla y León, which, years ago, was called Castilla la Vieja. Nowadays it is thought that the ancestry of this ethnic group of sheep is to be found in the Ovis aries celtibericus.

#### **GEOGRAPHICAL DISTRIBUTION**

The main distribution area of this sheep is Castilla y León, particularly in Zamora and to a lesser extent in Salamanca.



Milk production: this is a practice associated with family farms and those involved in cereal production. The milk obtained is used to make cheeses, such as the cheese with the "Zamorano" Protected Designation of Origin and the Castilian type, both of high quality. These types of farms always sell lechazo (suckling lamb).

It is subject to a supervised grazing programme. They are grouped into herds of variable size, according to production type. They go out to graze every day, generally with the permanent presence of the shepherd, who is usually the owner of the livestock. Except in special circumstances, the herd spends the night in the sheepfold. The diet of the animals is based mainly on grazing, supplemented with fodder in the sheepfold. In some areas, transtermitance is practiced.

# CHAMARITA

The term 'chamarito' means small and cute, referring to the small size and harmonious appearance of these animals. It is included in the Entrefino Stock.



#### **GENERAL FEATURES**

This breed consists of eumetric toelipometric animals of subconvex profile, their small size, more than to genetic factors, being due to environmental factors arising from the harsh environment in which they live and the management system used, mainly in terms of diet. It has white and black varieties, depending on the colour of the wool and the skin. The animals of the black variety usually have a white patch on the nape of the neck (coronada) and another at the tip of the tail (puntiblancos). Sometimes, the patch on the nape of the neck extends along the head, forehead and nose (caretos). It has medium-fine wool. The weight of adult animals, although it varies according to the handling conditions, is from 55 to 65 kg in the case of rams and from 35 to 40 kg in the case of ewes.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Some of the noteworthy qualities of this sheep are its great hardiness and its high capacity to adapt to such an extraordinarily harsh environment as the one in which it lives, both in terms of terrain and weather conditions and because of the scarcity and low quality of the pastureland. The main and almost sole purpose of the farming of this sheep is meat production, the time when its wool was a major economic asset now being long gone. Meat production focuses on two types of lambs, differentiated by slaughter weight: one of 12-14 kg live weight (little more than a suckling lamb), and another of

#### **GEOGRAPHICAL DISTRIBUTION**

The geographical area of occupation of the breed, at present, is limited almost completely to the Autonomous Region of La Rioja, the main centre being located in a very specific area in the south-east of the aforementioned region.



It is grazed, usually on communal pastures in the municipalities where the farms are located. The practice of transtermitance to the valleys of the Ebro river, so common in the past, has practically disappeared today. The flocks graze every day, except in cases of force majeure. The average size of farms is around 400 heads. Their diet is mainly based on what they obtain from grazing.

# CHARMOISE



Breed of French origin, result of the crossing of crossbred ewes with Merino blood with rams of the English Romney Marsh breed. It is a breed that is crossed industrially with other breeds to improve their meat production. It belongs to the precocious sheep group, along with five other breeds: Landschaff, Merino Precoz, Fleischschaf, Ile de France and Berrichon du Cher.



#### **GENERAL FEATURES**

They are small-sized sheep with a straight profile. The colour is uniform white, although sometimes they may have dark or blond patches, mainly on the ears, lips and around the eyes. The fleece is white and covers the trunk and neck. The wool is classified as Type V in the Spanish wool classification. Both sexes are polled.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Its hardiness and great adaptation to harsh environments, together with its good meat production capacity, make it an excellent breed for industrial cross-breeding with our autochthonous breeds, for the production of light and semi-heavy lambs. Lambing is not difficult, due to the fineness of the lambs' skeleton.

The breed is clearly specialised for meat production, one of its features being the quality of the carcass produced, with optimum characteristics in terms of form and fat layer. They are animals with a high growth rate. The only existing flock in Spain is raised on a semi-intensive basis, going out to graze every day except in adverse circumstances, and returning to spend the night in the sheepfold. The lambs are sub-

#### **GEOGRAPHICAL DISTRIBUTION**

Flocks of the pure Charmoise breed are located in the provinces of Cuenca and Ciudad Real.



ject to special handling, based on intensive feeding. The lambs that are selected as studs continue to be subject to a special intensive feeding programme.

# CHURRA



#### **GENERAL FEATURES**

This is a medium-sized, longilinear sheep with long coarse wool, marbling pigmentation and dairy traits. The sheep have a hardy appearance, with ragged fleece and distinctive dairy traits.

White, with peripheral black (or brown) colouring which affects the tips of the ears, around the eyes, lips and muzzle, distal parts of the limbs, umbilical region and other zones. The fleece covers the body and neck, and may sometimes reach the head and front area. The distal parts of the limbs are always without wool on the front limbs.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The Churra breed is a two-purpose breed (meat and milk), farmed for two commercial objectives "milk and suckling lamb production" or only for "suckling lamb" production. A lively temperament, tough and itinerant, it is able to search for food in adverse conditions; its hardiness and ease in adapting to its environment make it impossible to find another pure breed which, in identical farming conditions, is so profitable.

Fodder is based on the use of agricultural byproducts and spontaneous natural growth on uncultivated land, supplemented in winter during lactation with straw, hay and concentrates. The breed is highly specialised in the production of milk. Of note is its ease for milking. At present the lactation period tends to be reduced to 120 days, due to the intensification of the reproductive period. The average production of Churra sheep submitted to official milk The Churra ovine breed, a member of the Churro stock, is a hardy sheep from among the most primitive in the peninsula. It forms part of the most important autochthonous group of breeds in Spain, thanks to its high level of specialisation in milk production and the quality of its suckling lamb.

#### **GEOGRAPHICAL DISTRIBUTION**

The principal region coincides with the northern subplateau of the peninsular centre, and more specifically with the valley of the Duero river, largely coinciding with the Autonomous Community of Castilla v León.



control is 120 kg in 120 days of lactation (fat: 6.8 %, protein: 5.6 %, dry extract: 13.5 %). However, individuals have been recorded with 370 kg of milk in 180 days of lactation.

The milk is entirely destined to the manufacture of cheese, either local (Villalón, Burgos), or under the Protected Designation of Origin of Queso Zamorano. There are other types known under the name of Castellano, of high quality, similar to the Zamorano.

Meat production is characterised by the low weight of the lamb at slaughter and the high market price of lamb, or suckling lamb from the Churra sheep. This is a lamb fed exclusively on maternal milk, slaughtered at the age of around 30 days, with a live weight of 9-12 kg.

# CHURRA LEBRIJANA



The name of Churra Lebrijana, or Churra Marismeña, as it is also known, comes from the ovine stock from which it descends, the Churro, and the geographical areas considered at the time to be the main farming regions: the Sevillian district of Lebrija and the area of la Marisma.



#### **GENERAL FEATURES**

These are very hardy animals, able to adapt to wet and highly saline zones. It includes animals with a straight or subconvex profile, medium-sized and of middle line proportions. The weight of the adult animals varies according to the farming zone and the husbandry system used, and is estimated at 65-75 kg in rams and 40-50 kg in ewes. White, with the marbling pigmentation typical of the Churro Stock (periorbital region, tear ducts, muzzle, tips of ears and distal part of the limbs). In addition, it often has patches, usually large, around the udder, testicles, perineum, and umbilical region. It has a coarse wool open fleece.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

It is mainly reared for the production of meat, in particular for the light "pascual" type lamb, which stays with the mother until the moment of slaughter which takes place with a live weight of approximately 20 kg. In any case, this population currently has a low level of prolificacy (110-115%) and a moderate milk capacity inherited from the Churro stock, which allows it to raise offspring without problem.

In general, the Churra Lebrijana sheep is subject to a highly extensive farming regime.

It is put out to pasture every day, except in the case of force majeure, on saline terrain, to which it is adapted and from where it obtains the principal base of the daily food. Sometimes they feed on rice stubble, often grazing on wetlands covered with water. Except on very rare

#### **GEOGRAPHICAL DISTRIBUTION**

Formerly, the breed occupied large areas of the valley of the Guadalquivir river. In recent decades, the largest concentration of the breed was found in the swampy regions of la Marisma, usually in small units in the provinces of Huelva and Seville. Nevertheless, at present, the largest population of the breed is found in the meadows of the Northen Mountain Range of Seville.



occasions, they are not fed with supplementary fodder in the sheepfold, among other reasons because these usually do not exist or are very basic and rarely have feeding troughs.

# CHURRA TENSINA



The name comes from the Valley of Tena, in the Aragonese Pyrenees, from where it comes, and the main area where sheep of the Tensina breed are bred. They originate from the Churro stock, whose ancestors, during their expansion across the Iberian Peninsula reached the Aragonese Pyrenees, where they have remained in isolation for centuries.

### **GENERAL FEATURES**

These animals have a straight or subconvex profile, eumetric and of elongated proportions. They are white with the black or brown marbling of the Churro stock. The fleece is open with pointed streaks and coarse wool. These are very hardy animals, with a great capacity for adaptation to harsh environments such as the upper regions of the Pyrenees and resistance to sudden changes in the climate.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The principal objective of the Churra Tensina sheep is the production of meat, based on a light or suckling 'ternasco' type lamb, which is starting to be marketed directly by the Breeders' Association as 'Lechal Tensino'. The weight at birth is 3.54 kg in males and 3.19 kg in females, with average daily weight gains in the feedlot of 270 g in the former and 243 g in the latter between the first 30 and 90 days of their lives.

Traditionally, they have been subject to an extensive breeding system, directed at the use of the pastures and meadows of the Pyrenees, following the practice of transhumance, in the summer feeding on the abundant mountain meadows, and sometimes reaching heights of 2500 metres, where they endure rain and low temperatures. At present, several flocks are still transhumant and travel from the Banks

#### **GEOGRAPHICAL DISTRIBUTION**

The original area of distribution of the breed is in the central valleys of the Pyrenees of Huesca (districts of Alto Gallego and Sobrarbe), although at present there are flocks in other districts of Huesca and even Saragossa.



of the Ebro to the Pyrenees. The flocks belonging to the Herdbook for the breed have an an average of 290 heads, under the figure of the shepherd-owner, who personally tends the herd. However, some pure breed flocks may be very large (800 to 2000 heads).

# COLMENAREÑA



**GENERAL FEATURES** 

The breed includes animals with a straight or subconvex profile, mesomorphs and small in size, bordering elipometry, partly as a result of the hard environment they live in. Neither sex has horns. White, with characteristic pigmentation on the head and limbs. The fleece is semiopen made of low-quality wool, which goes across the body and neck, as far as the head, and in the front region forms the so-called Moña (Bow). The live weight varies according to the zone and the husbandry system used, and ranges between 45 and 50 kg in ewes, and between 50 and 60 kg in rams. The high level of hardiness and great capacity to adapt to extraordinarily harsh environments is of note. For this reason, it has adopted a smaller size in order to reduce its nutritional requirements.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The breed is farmed for both its meat- and milk-producing aptitudes. At present, the main objective for rearing this breed is for the production of meat, although the milk production is not to be dismissed. The meat production focusses on the suckling lamb, with a live weight of 10-11 kg (5.0 to 5.5 kg carcass), slaughtered at the age of 30-35 days and fed exclusively on mother's milk. The breed has been used mainly for milk production, with very good yields. However, these yields have not reached the levels achieved by other specialised breeds, hence the focus on the use of the breed for meat production. Ewes that have given birth twice or more produce an average of 151 litres per lactation, with a fat content of 6.9%, protein content The name of the breed comes from the district of Colmenar Viejo in Madrid, traditionally the home of the largest population of the breed. On the basis of its morphology, principally relating to the characteristics of the fleece of wool and the pigmentation, the breed is classified under the Churro Stock.

#### **GEOGRAPHICAL DISTRIBUTION**

The breed is generally found in a very small area in the north of the Autonomous Community of Madrid. On the whole, it lives in an area of notable altitude with a very dry climate and extremely low temperatures in winter.



of 5.1% and dry extract content of 18.9%.

The Colmenareña sheep is farmed extensively, and left out to graze almost every day of the year. Flocks range in size from between 150 and 250 breeding animals, except for one flock of 2000 heads, driven by the shepherd who remains with them all day. The main source of food is obtained from grazing. In this respect, it should be noted that the meadows in the farming area are generally limited and of low quality, and supplementary feeding is given during lactation or the rearing of the lambs. Milking is, for the most part, by hand.

# **FLEISCHSCHAF**

Also called the German Merino, it is a breed with pure Merino lineage, maintaining the ethnic features of the original stock and significantly improving in terms of suitability for meat production, by increasing its live weight and significantly improving its conformation.



#### **GENERAL FEATURES**

The specimens of this breed have a medium-sized head and short face, and are generally polled, although sometimes the rams have horns. The trunk is broad and deep, with well-developed chest. The horizontal rump is wide, with broad, deep and well-rounded hind quarters. Adult animals reach an estimated weight of 130 kg for the rams and 60 -80 kg for the ewes.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Although highly suitable for wool production, as a result of its size and conformation and its rapid rate of growth it is best suited to meat production, as can be seen from the attached figures.

## Average weight at 70 days and average daily weight gain between 30 and 70 days in age.

The figures shown are for the average males and females in the Elite category from the individual growth monitoring carried out on the Farm.

SEX	AVERAGE WEIGHT AT 70 DAYS	A.W.G. BETWEEN 30 AND 70 DAYS	
MALE	32,0 kg	404 gr	
FEMALE	29,9 kg	347 gr	

In addition to these qualities, it has a stronglyperforming carcass with a low level of fat cover. From a reproduction perspective, the Fleischschaf has an ovaric cycle similar to that of the Merino, with low seasonal fluctuations in the spring.

## **DISTRIBUCIÓN GEOGRÁFICA**

It can be found in the provinces of Cáceres, Badajoz, Seville, Córdoba, Saragossa and Salamanca.



The average prolificacy in Spain is more than 130%, with farms close to 160%, and it also has a good milk capacity. The average life span of the breed is around 9 years.

As a breed from the Merino stock, it has a great capacity for adaptation to different environments and is extremely hardy. This characteristic, combined with the above, make the Fleischschaf the most sought-after breed for industrial cross-breeding with autochthonous breeds.

# GUIRRA



It owes its name to the colour of its skin and hair cover. It is also known as the "Roja Levantina, due to the colour of its skin and its location in the Spanish Levant. It is included in the Entrefino stock, and considered to be independent from an ethnic perspective, whose immediate ancestor would be the African ovine breed, Bení Ahsen, from the Atlantic coast of Morocco, whose arrival in Spain was enhanced by the good trade relations between the two areas: The Spanish Levant and the North African coast.

#### **GENERAL FEATURES**

This includes animals with a convex front-nasal profile, elongated shapes and of medium size. Red in colour with varying shades, it has a semiclosed fleece of medium-fine wool. Both sexes are polled. The adult ewes have an average weight between 45 and 60 kg, while the male adults range between 70 and 90 kg. The high level of hardiness is of note. This allows the animals to survive in harsh environments, with a capacity to survive on poor vegetation with low digestibility.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

It is highly suited to meat production, and this is the main reason for breeding the Guirra. The lamb produced is mainly the 'pascual' type, slaughtered at 3-4 months of age, with a live weight of 25-30 kg, and a carcass performance close to 50%. The lambs do not go outside to graze, but are fed in a sheepfold with feed. The average daily weight gain from 30 days of age until slaughter is around 300 g in the rams and 260 g in the ewes.

It is bred in a generally difficult environment shaped by high temperatures and limited rainfall, resulting in poor vegetation that is highly seasonal and based on plants with low digestibility, and have little nutritional value. This

#### **GEOGRAPHICAL DISTRIBUTION**

The population, apart from a few flocks in the mountainous regions, is limited to the orchard-producing area of Valencia.



sheep also eats the products and by-products of agricultural crops in the production area (vine leaves, almond shells, olive branches, citrus fruit, etc.). 12% of the farms have 200 or more sheep, and 36% of the flocks have fewer than 50 sheep.

# ÎLE DE FRANCE



#### **GENERAL FEATURES**

Ovines of the Île de France breed have a strong and pyramidal head, and both sexes are polled. The body is broad, long and deep and it has low, round and well-developed hind quarters. The average weight of the adult animal is 110-130 kg for the rams and 65-85 kg for the ewes.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The true vocation of this breed is to produce meat, for which it is highly suited. Its body shape permits the production of animals of a good conformation, an excellent yield of high-quality cuts (leg, cutlets), and a low level of fat cover. The high rate of growth is undoubtedly the highest among the so-called precocious breeds as can be seen from the following table:

From the reproductive perspective, the breed

Average weight at 70 days and average daily weight gain between 30 and 70 days in age.

The figures shown are for the average males and females in the Elite category from the individual growth monitoring carried out on the Farm.

SEX	AVERAGE WEIGHT AT 70 DAYS	A.W.G. BETWEEN 30 AND 70 DAYS	
MALE	35,2 kg	428 gr	
FEMALE	32,4 kg	378 gr	

has an average prolificacy of 140%, with farms that may exceed 160%.

The average life span of the breed is around 7 or 8 years. The females have a strong maternal instinct and a good milk-producing capacity, allowing them to rear two lambs without problem. The Île de France breed has a high fertility rate, It is a two-aptitude breed, meat-wool, although it is far more focussed on meat production. Derived from Merino stock, from where it gets its ability to adapt to different environments, it was crossed with British meat-producing breeds, giving it its large size (butcher's biotype) and fast growth rate.

#### **GEOGRAPHICAL DISTRIBUTION**

As it is farmed intensively, it is found in a number of provinces with very different geo-climatic features, including Cáceres, Badajoz, Seville, Ciudad Real, Murcia, Majorca, León, Segovia, Salamanca, Soria, La Rioja, Asturias, Cantabria, La Coruña; the largest populations being found in the communities of Extremadura, Andalusia and Castilla León.



which, when combined with its exceptional suitability for meat production, makes it produce, when crossed with our autochthonous ovine breeds, one of the best quality lambs, both in terms of its high yield of top-quality cuts and the quality of its meat, due to the perfect fat infiltration. In addition, and as a result of its low transformation index, the crossbred lambs from the Île de France breed have lower production costs due to their lower consumption of feed. These qualities have made the stud of this breed become the most sought-after for industrial cross-breeding in Spain, France and Portugal.

LACAUNE



#### **GENERAL FEATURES**

Noted for its hardiness and high milk production. It is also highly adaptable to machine milking, having a good mammary system formation and 80% of the animals have two milk let-down response peaks during milking, permitting the extraction of 80% of the milk as machine milk, without any handling of the udder. The meat production is of recognised quality, obtaining lamb with a high transformation index in feedlots, of excellent carcass quality. It is highly suited to the Spanish climate and production systems.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

As regards the milk production, lactations are obtained on average of 175 days with mean milk productions of 405 litres per lactation.

In standardised lactations at 150 days, productions of 350 litres are obtained. These productions are higher than those recorded in the typical systems used for this breed in their area of origin which are 275 litres marketed after weaning of 165 days of lactation. Nevertheless, there is huge variability among the animals, indicating a clear need to work towards standardising these productions and establishing a suitable programme for improvement. The quality of the milk records average figures of 7.04 % fat and 5.56 % protein, parameters that are highly suited to the production of quality cheese.

As regards the reproductive performance, the age at first mounting is around 8-9 months, with an average weight of 35-40 kg and an average observed prolificacy of 1.65.

Originally from France, the presence of the Lacaune breed in Spain dates back to the 80s, and was introduced due to the need to increase the production per animal of sheep milk farms.

### **GEOGRAPHICAL DISTRIBUTION**

At present there are large populations of this breed in Andalusia, Castilla-La Mancha, Navarr, Castilla & León, Extremadura, etc. While in some areas, such as Castilla-La Mancha and Extremadura, the Lacaune coexists with autochthonous breeds associated with certain quality labels, in other regions with little tradition in dairy sheep farming, as is the case in Valle de los Pedroches (Córdoba), a new type of farm with this breed with systems similar to dairy cattle farming is being introduced as an alterautochthonous to this type of farming.



The average live weight of the lamb at birth is 2.5-3 kg. The age and weight at slaughter may be either as a suckling lamb, at under a month and weighing around 11 kg or as an older lamb weighing 23-25 kg at 75-85 days old.

Most farms breed the Lacaune in open stables, managed by young owners, with good infrastructure and advanced technology. These are large operations, the average number of breeding animals per farm is around 850 females, they have mechanical milking systems (100% of the farms) and most of them feed the lambs artificially.

# LANDSCHAFF



A breed noted for its large size, and consequently its suitability for meat production. It is the product of the crossing of sheep from southern Germany, which give it its size, and male merino sheep, from which it inherited its reproductive characteristics, hardiness and quality wool.

### **GENERAL FEATURES**

Specimens of the Landschaff have a fairly elongated head, and large, floppy ears. Both ewes and rams are polled. The body is very long, with a voluminous thorax and broad chest. It has a large rump, with dropped hind quarters and good muscular development. The adult animals have an estimated weight of 100-130 kg for the rams, and 70-90 kg for the ewes.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

A breed that is large is size with a rapid growth rate, they are principally suited to meat production.

The growth rate can be seen in the following figures:

## Average weight at 70 days and average daily weight gain.

The figures shown are for the average males and females in the Elite category from the individual growth monitoring carried out on the Farm.

SEX	AVERAGE WEIGHT AT 70 DAYS	G.M.D. ENTRE 30 Y 70 DÍAS	
MALE	32,9 kg	431 gr	
FEMALE	30,0 kg	362 gr	

The breed also has a low level of fat cover, making it perfect for the production of mediumheavy and heavy carcasses.

From the reproductive perspective, it does not have a significant sexual seasonality. In Spain, more than 40% of the births take place in the last four months of the year.

Prolificacy is around 120 and 160%, and in France and Germany it is above 140%. In Spain it

#### **GEOGRAPHICAL DISTRIBUTION**

Due to the production system used, its geographical distribution is not determined by the environment in which it is farmed, but by the proximity to areas where studs are used for cross-breeding. The few populations of this breed that exist are found in Córdoba and Segovia.



around 123%, with farms that exceed 150%. In addition to these qualities, it has a strong maternal instinct and good milk-producing capacity.

The average life span in Spain is from 8 to 10 years.

Another of the qualities of the Landschaff breed is its huge capacity to adapt which, when combined with the meat-producing qualities described above, make it the perfect breed for industrial cross-breeding in difficult environments.

# LATXA



#### **GENERAL FEATURES**

Included in the Churro Stock, the Latxa breed are a group of sheep with straight profiles, medium in size and with large proportions. It has a white open fleece of coarse wool; both sexes may have horns. There are two varieties, differentiated by the shape and colour of the face and limbs:

- Latxa de Cara Negra: characterised by the dark head and limbs. In areas of Navarre, the ewes and the rams have characteristic horns. The colour of the skin appendages is darker. In the Basque Country, the ewes do not have horns and the males may or may not have horns.

- Latxa de Cara Rubia: The color of the head and limbs varies among red and whithe with slightly blond shades. Ewes are polled and rams may or may not.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The Latxa sheep goes out to graze almost every day of the year in the most temperate areas. Short transhumance or trasterminance (valley-mountain) is common. Here, the herd remains in low areas while in production, and later goes up to the mountain pastures in the warmer months of the year.

It plays a very important environmental role, feeding on fodder that would otherwise be lost and, in doing so, keeping the mountains clean. It feeds mostly on pasture, although in times of need, its diet also contains fodder and feed. The word "Latxa", is Basque for coarse, and is used for this breed of sheep due to its coarse wool. In France, it is known as the "Manech". It is generally considered that the Latxa is one of the most primitive Spanish ovine breeds. It is characterised by its ability to adapt to an environment that is extremely difficult for sheep due to the orographic characteristics and heavy rainfall of the areas where it lives.

#### **GEOGRAPHICAL DISTRIBUTION**

It occupies very specific areas, namely the north-west of Navarre, Guipúzcoa, the east of Biscay and north-east Álava.



It is suited to milk production without a doubt. It is milked at between five and six months. As is the case with milk produced by Carranzana sheep, the milk obtained is used in the production of Idiazabal denomination of origin cheese in the Basque Country and Navarra and Roncal denomination of origin cheese in Navarra. Artisan production of cheeses and their direct sale is typical, and the farms are equipped with modern cheese-making facilities for this purpose. The flocks are mounted between May and December in order to obtain one birth per sheep and year. The fertility rate is above 90%, always depending on the level of nutrition, husbandry and the time of year. Prolificacy, in general, is above 130 lambs born per 100 births, depending on the condition of the sheep meat at the time of mating.

# LOJEÑA



The Lojeña sheep owes its name to the name of the municipality of Loja in Granada, in the mountains of which this resistant breed of sheep has developed over the years. It is also known as the "Rabada" of the Sierra de Loja, due to the fact that it has kept its tail.

#### **GENERAL FEATURES**

The Loieña Ovine breed from the entrefino stock, is characterised by animals with small pyramidal heads and a straight front-nasal profile, small, horizontal ears and expressive face. Pointed snout and fine lips. Broad, deep body with straight dorso-lumbar line and short dropped rump, and long straight tail. Short thin legs, the result of adaptation to the limestone terrain of the Sierra de Loja where it lives. The rams have well-developed horns in an open spiral shape and the horns of the ewes (when they exist) are atrophic or scacerly developed. One of the most noted qualities of the breed is its rich colouring with a fine and not very thick fleece. The weight of the rams ranges between 55 and 65 kg, and of the ewes from 40 to 50 kg.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

A breed suited to meat production, whose typical and most marketed product is the suckling lamb, with a live weight of 12-14 kg and the unweaned older lamb weighing 20-24 kg. This lamb is popular among restaurants in the area. This breed is farmed extensively, and for the most part using organic farming systems. It has an excellent reproductive capacity, and its high fertility index and strong maternal instinct are of note. It feeds on communal pastures in the mountains of the region, whose limestone and difficult orographic conditions have made the

#### **GEOGRAPHICAL DISTRIBUTION**

The breed is found in the hills of Western Granada, mainly in the mountains of Loja and Sierra Gorda and in the districts of Loja, Alhama de Granada, Zafarraya, Salar and Illora.



Lojeña sheep exceptionally hardy and welladapted to its environment. It grazes freely, sleeping out on the mountain for a large part of the year. The scarce pastures have a high nutritional value and a wide diversity of autochthonous flora. The average size of the flocks is 500 animals.

# MAELLANA



The breed takes its name from its cradle, the municipality of Maella, located in the province of Saragossa, where it has traditionally been farmed. For many years the Maellana sheep has been considered a variety or ecotype of the Rasa Aragonesa. However, although the ancestral origin is common to both breeds, they have evolved in different directions, displaying very distinct ethnic characteristics.

# 

#### **GENERAL FEATURES**

This breed consists of cream-coloured, mesomorphic, medium-weight sheep with long, thin extremities and a convex or ultra-convex profile. Long neck, with wattles. They have a fleece of medium-fine wool of exceptionally small extension, this being one of the characteristics that most define the Maellana breed. Animals of both sexes are polled. On average, ewes weigh from 45 to 55 kg and rams from 60 to 80 kg

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The main and almost sole purpose is meat production. In this regard, the most representative type of lamb obtained today is the 'ternasco' (light) type (20-25 kg live weight). However, the Maellana sheep is capable of producing heavier lambs without the risk of fat accumulation. The birth weight of these lambs varies from 3 to 4.5 kg, weighing from 9.30 to 10.30 kg at 30 days of age and from 24 to 26 kg at 90 days of age.

In general, the farming system used for the Maellana breed is the region's traditional grazing system, individuals being grouped into flocks ranging in number from 400 to 1,300.

### **GEOGRAPHICAL DISTRIBUTION**

The distribution area of the breed is located in the region of Caspe, in Saragossa, in Lower Aragon and in Arnes, Tarragona.



The breeding area of the breed is characterised by its cereal crops and an abundance of olive and almond trees in poor soils, with an extreme continental climate and very low temperatures in winter. These sheep, in addition to the use of grazing resources, receive supplements in the form of a fold ration during the winter and at their times of greatest need: gestation and lactation.

# MANCHEGA



#### **GENERAL FEATURES**

This is a fairly large-sized breed with a pronounced sexual dimorphism, convex profile and elongated proportions. The trunk is long with a straight dorsolumbar line. Both sexes are polled. They may have wattles on the neck. The hooves are white. The mammary gland is well implanted (and selected for adaptation to mechanical milking), with well-proportioned and well-placed teats. The fleece is uniform white, with some slight pigmentation in females. The wool is medium-fine, with a variable quantity of medulated fibres. It also stands out for its longevity, precocity and prolificacy, with not very pronounced seasonal anoestrus, in addition to its ease of lambing and maternal instinct.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The Manchega breed has been traditionally catalogued as dual-purpose (milk-meat), although almost half the existing population is now specialised in milk production without having lost the quality of the lambs and their meat. It adapts perfectly to hot dry climates, with a strong gregarious instinct and great hardiness (extensification), taking advantage of sparse grazing, pastures, agricultural by-products and the natural resources of the countryside, as well as more intensive systems.

Milk production: the amount of milk produced per ewe per year has increased considerably over the last ten years (genetic improvement, management, diet, etc.) reaching levels of around 300 litres/ewe/year. The milk has a very rich physical-chemical composition, with, average Cheese Extract (fat and protein) contents The Manchega sheep owes its name to the Region of La Mancha, because that is the area of origin and where the breed is primarily farmed. It is one of the most important sheep breeds in Spain, in terms of population and production characteristics and its exclusive link to quality products (Manchego cheese and Manchego lamb).

#### **GEOGRAPHICAL DISTRIBUTION**

This breed is distributed throughout most of the Spanish provinces but has its highest concentration in Castilla-La Mancha



of over 13.5%, obtaining a very high cheese yield (with 4 or 4.5 litres, 1 kg of fresh cheese is obtained), making it the ideal product for transformation into Manchego Cheese (protected by the Protected Designation of Origin, PDO, since 1985).

Meat production: large meat producer in number, growth rate and development of lambs, and carcass yield and quality. The type of lamb that is marketed primarily is the pascual type (22-28 kg/live weight), although currently the production of suckling lamb, with a live weight of 8-14 kg, has increased considerably. Both are protected by the Protected Geographical Indication of Manchego Lamb (1996). The carcasses are of low to medium-fat type, with very tender and juicy meat, with the beginnings of infiltration, and intramuscular fat, providing a very pleasant characteristic bouquet.

## MANCHEGA (VARIEDAD NEGRA)



#### **GENERAL FEATURES**

The Black Variety of the Manchego breed, like the White Variety, consists of sheep with a pronounced sexual dimorphism, convex profile, elongated proportions, and of a fairly large size. although this is determined by the environment in which they live and the management system implemented. Both sexes are polled. They may have wattles on the neck. The mammary gland is well implanted (and selected for adaptation to mechanical milking), with well-proportioned and well-placed teats. It has deep black skin all over the body, although it may have a white patch at the nape of the neck and another at the tip of the tail. The fleece is of medium-fine wool and black in colour, with a brown external appearance. The estimated weight is 55 to 70 kg in ewes and 80 to 100 kg in rams.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Traditionally the Manchega sheep has been considered dual-purpose, although in recent years, due to the sharp increase in the value of milk, it has been directed towards milk production. The average production of this variety is less than the White Variety, with just under 140 litres of milk in 128 days of lactation. The milk has a fat content of 7 to 8%, protein content of 5.7% to 6.3%, and a dry extract content of around 20%. Its milk is destined for the production of Manchego cheese, the most representative of Spain and most well-known outside our borders. The contribution of meat to the farm's economy has sometimes reached similar levels, even higher than those of milk production. The Manchega sheep owes its name to the Region of La Mancha, because that is the area of origin and where the breed is primarily farmed. It is one of the most important sheep breeds in Spain, in terms of population and production characteristics.

#### **GEOGRAPHICAL DISTRIBUTION**

The somewhat less than four thousand members of this breed (variety) are distributed exclusively in the Autonomous Community of Castilla-La Mancha.



It also has great potential for the production of lambs, in terms of quantity and meat quality. It is used for grazing throughout the year, except for the limitations imposed by adverse weather conditions, or in certain special situations relating mainly to handling during the lambing and lactation period, when it is sometimes kept in stables. It is grouped into farms of variable size, although those of 200-300 milk producers, normally under a shared farming system with the White Variety, and 300-400 meat producers predominate. The main basis of the diet are the resources obtained in pasture areas, supplemented with by-products from agricultural crops (mainly stubble and straw). Both milk and lamb are protected by the Manchego Cheese Protected Designation of Origin and the Manchego Lamb Protected Geographical Indication.

OVINE

# MERINA



The Merino sheep breed is autochthonous, but its hardiness has resulted in its spreading to all the continents and becoming one of the most populous breeds in the world. Other outstanding qualities are its gregarious instinct, resistance and ability to travel long distances. The history of the Merino breed is closely linked to the history and economy of Spain due to its high degree of specialisation in wool production.

It was farmed exclusively in Spain until the end of the 18th century when the export of animals of this breed was permitted.

#### **GENERAL FEATURES**

This is an eumetric, longilinear sheep with a straight profile and average proportions. When they appear, the horns are strong, mother-ofpearl colour, spiral and with a grooved surface with transverse furrows in males, whereas in females, the presence of horns is very rare and when they appear, they are generally rudimentary.

There are 2 varieties: white and black. The colour is uniform white in the white variety and brownish black in the black variety. The fleece is covering the whole body surface and has a uniform structure and special characteristics in terms of fineness, curl, elasticity and extension. The density of the fleece is higher than that of other breeds

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

This breed was mainly used for wool production but the low costs of such production in other countries and the introduction of synthetic fabrics have resulted in it being reoriented towards meat and milk production.

Wool production: highly specialized due to its fleece, characterised by its great extension, density, fineness, uniformity, curl, resistance, and absence of dead hair and matting. Meat production: produces high quality lambs with carcass weights of 12 to 17 kg, slaughtered at a very early age. Milk production: the milk obtained is intended for the manufacture of highquality cheeses, such as Serena cheese, Torta del Casar and Pedroches.

#### **GEOGRAPHICAL DISTRIBUTION**

This breed is widely distributed and is present in more than 70% of the Spanish provinces. The main populations occupy the grazing areas of Extremadura and Andalusia, and to a lesser extent, Castilla y León and Castilla-La Mancha.



The farming of this breed has traditionally been extensive and based on transhumance to take advantage of the seasonality of the different pastures, thanks to the characteristics of the breed (adaptability to the environment, ease of handling, gregarious instinct, hardiness, etc.). Nowadays, the breed is farmed in meadows.

## MERINA (VARIEDAD DE LOS MONTES UNIVERSALES)



### **GENERAL FEATURES**

The specimens of this breed are eumetric with a straight profile and average proportions. The fleece is uniform white or black (dark brown or chocolate). Males may or may not have horns. When present, they are strong and well-developed, mother-of-pearl colour, with a triangular cross-section and finely grooved surface, with obvious transverse furrows and in the shape of a spiral with two turns. In females, the presence of horns is very rare and when they appear, they are generally rudimentary. Relatively small, wide and short head. In males the profile may be subconvex, especially in the supranasal area. Neck of medium length, not very muscular, with few or no skin folds (ties) and no "ruff". There may sometimes be wattles on the neck. Deep. medium length and, in some cases, slightly elongated trunk. Low-slung rump. Medium-length, straight legs. Strong hooves.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Historically it has been farmed on a transhumance basis, forming the foundation of close social and cultural relations that have united the province of Teruel with distant regions. Nowadays, the farming system is extensive, although transhumance still takes place. It is very well-adapted to the harsh environment in which it has developed, in terms of the extreme continental climate, the rough terrain and the low rainfall. This breed comes from the Merino stock and takes its name from the region where it is primarily farmed, the Montes Universales mountain range.

## GEOGRAPHICAL DISTRIBUTION

It is mainly distributed throughout the Montes Universales mountain range, located at the southeast edge of the Sistema Ibérico, which occupies a large part of the Sierra de Albarracín (Teruel) region of Aragon.



They have a pronounced reproductive seasonality, closely linked to their extensive farming system, which leaves relatively short periods of fertility that are easy for farmers to control with the implementation of minimal management measures.

Its main use is for meat production, and they produce a tender, succulent meat with a special bouquet and an ideal fat content for carcasses weighing 11 kg and more.

It also stands out for the production of milk and wool. Its milk has a high fat concentration with respect to other breeds, which makes it ideal for the production of high-quality cheeses. As for its wool, its fineness, resistance and curls make it unique. OVINE

## MERINA (VARIEDAD NEGRA)



#### **GENERAL FEATURES**

This is an eumetric sheep with a straight profile and average proportions. When they appear, the horns are strong, with a triangular crosssection and a grooved surface with transverse furrows in males, whereas in females, the presence of horns is very rare and when they appear, they are generally rudimentary.

The colour is uniform black. The fleece is the feature that is most characteristic of the Merino breed and serves to differentiate it from other sheep breeds. It covers most of the body surface, is very dense, formed by square strands, and has a uniform structure and special characteristics in terms of fineness, curl, elasticity and extension. It is much denser than in sheep of other breeds. Nowadays, the estimated weight of Merino sheep is 50 to 70 kg in ewes and 75 to 100 kg in rams.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Although the wool production of this Merino variety was not as highly valued as that of the white variety, since it did not allow the use of most dyes, its use was limited to certain products aforementioned and to the differentiation and handling of livestock. Today, as in the white variety, it produces lambs, fed with natural feed slaughtered at the age of 70-80 days with a live weight of 22-28 kg, which produce pink carcasses with tender, not very fatty, highquality meat. The characteristics of this variety are the same as those of the white variety and, if anything, they are even hardier. The origin and meaning of the word "Merino" has been the subject of many and varied hypotheses, although none of them are unanimously accepted. Spanish in origin, and universal as a result of its distribution throughout all the continents. The history of the Merino breed is closely linked to the history and economy of Spain due to its high degree of specialisation in wool production, which is why the black Merino variety was subject to gradual elimination, remaining only at the whim of certain breeders or for the differentiation of flocks and their management. It has been farmed exclusively in Spain and Portugal. Nevertheless, its very fine, dense and resistant wool is and was used for the production of cloaks, blankets, carpets, etc., in which the brownish black colour of the wool of these animals was acceptable.

## **GEOGRAPHICAL DISTRIBUTION**

The populations of the black variety of the Merino breed occupy the grazing areas of Extremadura, Andalusia and Castilla y León.



Nowadays, the practice of transhumance has been replaced by farming in pastures, due to labour problems, management difficulties and economic reasons in general. The estimated average flock size is between 10 and 200.

# MERINA DE GRAZALEMA



The name Merina de Grazalema comes from its immediate predecessor, the Merino, and its particular location in the municipality of Grazalema in Cadiz, closely linked to the breed in terms of breeding and the textile industry based on its wool. As for its origin, there is no unanimity in this regard. However, it seems that the most widely accepted hypothesis is that this breed is a product of a cross between the Merino and Churra breeds. In this regard, the Churra breed would be responsible for the coarsening of its wool and the increase in its milk yield.

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#### **GENERAL FEATURES**

The individuals of the breed are characterised by having a straight or convex profile, and being eumetric and sublongilinear, adapted for life in areas of high altitude (over 1,000 metres above sea level), with annual rainfall of more than 1,200 mm. Males have well-developed horns in an open spiral, whereas females are mostly polled. The colour of these animals is variable, they have a uniform, medium-fine wool fleece. These animals generally have welldeveloped bodies with weights ranging from 75 and 85 kg in rams and 40 and 50 kg in ewes.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Nowadays, the farming of the Merina de Grazalema breed is centred on milk production for the production of the renowned Grazalema cheese, included in the Spanish Cheese Catalogue, and the production of light lambs to supplement the primarily milk-based economy of the farms. This reconversion towards cheese production has led to a revitalisation of the farms, and is helping to improve the situation of the breed. In this regard, it should be noted that administrative steps are currently being taken to establish the Protected Designation of Origin (PDO) to sheep's cheese from the Sierra de Grazalema region produced with the milk of this breed. The milk yield is estimated by the Fleischman method at 120,31 kg in 159 days, with average fat percentages of 6.7% and

#### **GEOGRAPHICAL DISTRIBUTION**

The area of occupation of the main population of the breed is in the "Sierra de Grazalema Natural Park" between Cadiz and Malaga, although there are currently also small flocks in the southern Sierra of Seville and the Sierra de Huelva.



a high percentage of protein with averages of 6.8%. Under a semi-extensive farming system, the flocks usually contain an average of about 150 heads, which usually graze in the mountains together with other species such as goats. Meat-oriented farms produce a light lamb, in most cases linked to organic production.

# MERINO PRECOZ



#### **GENERAL FEATURES**

These are well-formed animals, with long, deep trunks, a wide horizontal and square rump, and well-developed buttocks. The fleece is uniform white, with long, square strands, and fine, curly fibres. The average weight of adult animals is 100-120 kg for males, and 65-85 kg for females.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

It is a dual-purpose, meat-wool breed and although superbly endowed for wool production, given its current low value, farming is currently centred on its meat production qualities. These qualities are based on its high growth rate and the commercial quality of the carcass produced, as can be seen in the following data:

## Average weight at 70 days and average daily weight gain between 30 and 70 days.

The figures shown are the average of the males and females in the Elite category of individual growth monitoring carried out on the farm.

SEX	AVERAGE WEIGHT AT 70 DAYS	A.V.G. BETWEEN 30 AND 70 DAYS	
MALE	30,6 kg	380 gr	
FEMALE	28,1 kg	336 gr	

One of its main reproductive characteristics is the continuous ovarian cycle, with high fertility in spring. The average prolificacy is 130%. It is a breed of pure Merino ancestry, in which the ethnic characteristics of the original stock are maintained, giving it such important qualities as its continuous ovarian cycle and its high adaptability to harsh weather conditions and variable farming methods, and whose meat aptitude has improved considerably, with a larger size and better morphological features.

#### **GEOGRAPHICAL DISTRIBUTION**

The distribution of this breed is not related to the occupation zone of the autochthonous Merino. Virtually the entire population is distributed between Extremadura and Andalusia. To a lesser extent, it is also present in Castilla y León, Castilla-La Mancha and Madrid.



Relative values of the different body parts, in percentages of carcass weight. PERCENTAGES. According to Spanish cuts.

	• .			
PIECES	CATEGORIES	BOCCART Y DUMONT	′ LAGUNA CALHEIRO	COLS.Y NEVES
LEGS	lst	37,16 %	37,80 %	37,10 %
CHOPS	lst	25,99 %	25,06 %	25,10 %
SHOUL- DERS	2nd	19,61 %	22,20 %	18,70 %
BREAST BRISKET	3rd	10,17 %	7,40 %	14,40 %
NECK	3rd	7,12 %	6,80 %	8,10 %
No. lam	bs observed	17	6	36

It is an ideal breed for industrial cross-breeding with autochthonous breeds, to which it contributes its higher growth speed and a substantial improvement in the formation of crossed lambs, which makes it one of the most widely used breeds in Spain.

# MONTESINA



The name 'Montesina' or 'Mountain Sheep' responds to the nature of the area in which the breed is farmed, often in mountain areas. It comes from the Iberian Stock; whose ancestral representative is the Ovis aries ibericus.



#### **GENERAL FEATURES**

The sheep of this breed are medium-sized, exceptionally hardy, with a sub-convex or convex profile and elongated proportions. Both sexes are usually polled, although some individuals, both male and female, may appear with horns. Selection is leading to their complete disappearance. They have the pigmentation of the Iberian Stock: black patches around the eyes, at the tip of the ears, on the snout and, generally, on the distal part of the limbs. In general, these animals are harmonious in terms of form, with weights of around 65-70 kg in rams and 40-50 kg in ewes.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

It is noteworthy that the ewes of this breed can become pregnant at any time of year. The main purpose of the farming of the breed is meat production. Nowadays, it has become a virtually universal practice for lambs to be finished in feedlots and slaughtered at the age of 90 days and a weight of around 25 kg. Another noteworthy feature is their high milk yield, which allows them to successfully raise their young in the early stages of life.

They are subjected to a highly extensive farming system in high-altitude areas, often above 1,000 metres, and extreme weather conditions with annual rainfall of around 400 mm, poorly distributed throughout the year. The diet of the livestock is mainly based on the resources

## **GEOGRAPHICAL DISTRIBUTION**

The geographical area of farming has traditionally been large, with two distinct areas, one called the main area, with the highest concentration of animals of the breed, in which they are reared pure and which covers the northwest of the province of Granada and south of the province of Jaén. The other area, the area of influence, occupying various areas of the province of Albacete and Murcia, arose as a result of the displacement of the breed from the main area, with flocks characterised by some degree of crossing with other ethnic groups.



obtained from grazing. The Montesina breed is grouped into flocks of 200-300 sheep.

# NAVARRA



#### **GENERAL FEATURES**

Eumetric, white, mesomorph sheep with a subconvex profile. Semi-dense, medium-fine wool fleece covering the trunk and neck, formed by trapezoidal strands, sometimes "paintbrushstyle", giving the impression of a sparse fleece. They are tough, hardy animals with little limbs as befits their specialisation in meat production.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The qualities to be highlighted in this breed are its capacity to adapt to harsh environments with high rainfall and snow, its resistance to sudden changes in temperature and to the practice of transhumance (which has now declined sharply).

Sheep of the Navarra breed are kept on family farms, whose sole activity is sheep farming, with a flock size of around 700 heads, or mixed cereal and sheep farms. Traditionally classified as triple-purpose (meat, milk and wool), nowadays it is farmed primarily for meat production. The main product is lamb of up to 14 kg live weight, fed exclusively on mother's milk, which offers meat to suit the taste of the most discerning palates.

On the other hand, in terms of reproduction, the Navarra sheep has a continuous ovarian cycle, a factor that allows it to speed up the reproductive process and reduce the interval between births. Nowadays, a frequency of three lambings in two years without the use of hormonal treatments is very widespread. It takes its name from the Autonomous Region of Navarre, where it was first classified and computerised genealogical records of flocks and their production began to be kept in the early 1980s

In the past it was included within the Rasa Aragonesa breed, as part of the group of mediumfine Pyrenean breeds, more specifically as the ecotypes of the former, Roncalés and Salacenco, although there is no reference to animals registered in the Aragonese Herdbook, so its affiliation was more theoretical than based on concrete evidence.

Due to the transhumance of the sheep from the Pyrenean valleys to other areas of Navarre and bordering provinces, where it has remained in homogeneous flocks and with little influence from other breeds due to its hardiness, it has colonised the land to the extent that it has become practically the only existing meat production breed.

With the passage of time it has become differentiated from the group where it was originally included and it was recognised as a breed in November 1997, receiving the name of Navarre, this being the Region containing the highest number of specimens of the breed and where the first animals were registered in the Herdbook.

#### **GEOGRAPHICAL DISTRIBUTION**

In Navarre, it is limited to the mid-western and southern parts of the province, coinciding with the area not occupied by the Latxa breed, and is also found in the bordering provinces of Álava, Soria, La Rioja, Huesca and, to a lesser extent, Saragossa.



# OJALADA



The Ojalada breed owes its name to the pigmentation around the eye. It belongs to the Iberian Stock, whose ancestral representative is the Ovis aries ibericus, which in Spain, in addition to this breed, has given rise to others such as the Ojinegra, the Xisqueta and the Montesina.



#### **GENERAL FEATURES**

This ethnic group is characterised by slightly subconvex profiles, elongated proportions, variable size ranging from eumetric to elipometric, depending on the farming area and the management system applied. The animals are generally polled, although the males sometimes have well-developed spiral-shaped horns. White in colour, it has the characteristic pigmentation of the Iberian Stock (centrifugal: black colour around the eyes, tip of the ears, snout and distal part of the limbs). Semi-dense fleece wool. The weight of rams ranges from 70 to 90 kg, and that of ewes from 35 to 50 kg.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

In recent years, farms have switched to producing mostly suckling lamb to the detriment of the ternasco-type (light) lambs that were the norm a few years ago. Its meat is included in the Protected Geographical Indication (PGI), "Lechazo de Castilla y León". It also has an outstanding capacity for milk production, which, together with its strong maternal instinct and hardiness allows it to raise its lambs without difficulty, despite the harsh environment in which they are farmed.

The breed is subject to a highly extensive farming system, being put out to graze virtually every day of the year. The diet of the animals is mainly based on what they obtain from gra-

## **GEOGRAPHICAL DISTRIBUTION**

The area of distribution of the breed is located in the southwest and south of the province of Soria, extending from here to the north of Guadalajara and with some flocks in the area of Segovia bordering the province of Soria.



zing, which in the past was their only source of sustenance, although today their diet has been greatly improved through the provision of sheepfold rations to increase productivity. This sheep population is grouped into flocks of 500 to 750 heads on average, belonging to one or more owners.

# OJINEGRA DE TERUEL

It owes its name to the black pigmentation the sheep of this breed have around their eyes, and the fact that it is located primarily in the province of Teruel.



## **GENERAL FEATURES**

This breed consists of medium-sized white sheep with a subconvex profile and elongated proportions, although they may sometimes be smaller in size as a result of the harsh environment in which they live.

They have a fleece of medium-fine wool on the trunk and neck and the pigmentation of the Iberian Stock, black around the eyes, tip of the ears, nose and distal part of the limbs. They often have pigmentation at the base of the tail, perineum, udders, testicles and umbilical region.

The animals are perfectly adapted to the adverse conditions of the area: very low temperatures in winter and low and irregular rainfall throughout the year.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The flocks are farmed on an extensive basis. The diet of these animals is based primarily on grazing, supplemented at times of shortage or periods of increased energy needs with sheepfold rations, consisting of hay, straw, cereals or commercial feed.

They can become pregnant at any time of year and the farmers set up several farrowing areas on the farm throughout the year. The first mating takes place when the animal is aged 10-14 months.

## **GEOGRAPHICAL DISTRIBUTION**

The main population of this breed is located in the northeast of the province of Teruel. It can also be found in the vineyards of Castellón (where it is known as "Fardosca") and Tarragona (known as "Serranet").



It is farmed for meat production. The type of lamb obtained is the "ternasco" (light), fed in a sheepfold with concentrated feed without going out to graze and slaughtered with a live weight of 20 to 26 kg; and a suckling lamb with a live weight of 9-12 kg.

Ojinegro lamb is included in the Protected Geographical Indication 'Ternasco de Aragón', together with lambs of the 'Rasa Aragonesa' and 'Roya Bilbilitana' breeds.

# OVELLA EIVISSENCA



### **GENERAL FEATURES**

The breed is characterised for having a convex profile, of medium size and elongated proportions. White or black, depending on the variety, it has an open fleece of coarse wool. Both sexes are polled. The live weight of the adult animals is between 45 and 60 kg in the ewes and between 70 and 80 kg in the rams.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Traditionally, it has been used for three different purposes: meat, milk and wool. However, the main and almost only objective is now meat production. Nowadays, there is a trend towards the production of a 'ternasco' lamb (20-25 kg live weight). The meat produced is eartagged for consumption on the island of Ibiza, where demand exceeds supply.

The sheep is farmed under a grazing system, sometimes in small enclosures, usually made of stone, and occasionally in larger areas or even in full freedom. This means that the farming system restricts the grazing time of the sheep to the daylight hours, bringing them in to the folds at night. An important aspect to note is the huge division of land in this area, meaning that the average size of the flocks is very small, It is named after the island in the Balearic archipelago where for the most part it is found. It is also known as the Pitiüsa. This breed of sheep appears to have its origins in the arrival of the Carthaginians and which later, as occurs with other breeds on the archipelago, was influenced by sheep from islands in the Western Mediterranean, enhanced by the active trade between the islands.

#### **GEOGRAPHICAL DISTRIBUTION**

The population can be found on the islands of Ibiza and Formentera.



of around 20 heads. This is a very hardy breed, whose diet is essentially based on the pastures of Ibiza, known for being scraggy, scarce, very seasonal and of low quality.

# OVELLA GALEGA



**GENERAL FEATURES** 

This breed consists of small animals with balanced proportions and white or black fleeces farmed for meat production. Its most identifying morphological characteristics are a straight or subconcave fronto-nasal profile, an elongated and narrow face, a fringe, double spiral horns in males, a medium-fine or coarse type fleece, very fine limbs and a long tail.

Two ecotypes are described according to height and weight. The values for the mountain ecotype are 44-58 cm in height at the withers and 20-35 kg in females and 55-65 cm in height and 30-40 kg in males, rising in the mariñá ecotype to 59-70 cm and 35-50 kg in females and 66-80 cm and 40-70 kg in males.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The main and almost exclusive use of the breed is the production of high-quality meat, obtaining lambs of small size but with a meat of special organoleptic characteristics, since it combines the high quality of the meat the breed possesses with its extensive-semi-extensive farming system.

The Ovella Gallega has outstanding production characteristics due to its high fertility and prolificacy; double births are normal and multiple births very common. These characteristics, added to their excellent maternal nature and high milk yield, mean that the females are able to raise their lambs with virtually no extra support from the farmer. It has an In situ and Ex situ conservation programme, developed by the Galician Sheep Breeders Association (ASOVEGA) and the Centre of Zoogenetic Resources of Galicia (CRZG), with a semen and DNA bank. Its phylogenetic origin comes from the ancestor Ovis aries celtibéricus.

### **GEOGRAPHICAL DISTRIBUTION**

Originally the breed was scattered throughout Galicia, although there was a greater concentration in the central area and the province of Ourense. It is currently in a phase of expansion, the livestock farms being concentrated primarily in the mountain areas of Lugo, Ourense, Pontevedra and A Coruña.



This breed is linked to extensive or semi-extensive farming systems, as its hardiness makes it perfectly adapted to the environment, the animals being true specialists in exploiting Galicia's natural resources, which are sufficient to develop its full genetic potential. This gives its farming an added value, since it keeps the areas where it lives in a perfect state of cleanliness, collaborating actively in the conservation of the environment. Moreover, the livestock holdings help to maintain the population in the countryside since that is where the specimens of the breed are located.

# OVELLA MALLORQUINA



The breed owes its name to the island of Majorca, in the Balearic archipelago, the place where it was reared and where it is currently farmed. This sheep group is a product of the ancient and established crossing between different sheep populations of the Mediterranean islands (Corsica, Sardinia, Menorca, etc.). This process was encouraged by the intense trade that existed in this area of the Mediterranean.



#### **GENERAL FEATURES**

This breed consists of white sheep, with a straight or slightly subconvex profile and elongated and medium-sized proportions, although smaller-sized animals sometimes appear as a consequence of the harsh environment in which they live and the husbandry system used. They have a medium-dense fleece of coarse wool. Two varieties have been identified. The 'Plains' sheep and the "Mountain" sheep. There are pronounced differences between the two varieties. The "Mountain" sheep is smaller and more homogeneous and racially pure, presumably because of the breeding system and because in the higher areas there has been less crossbreeding due to the isolation of the animals. In this regard, in the mountain animals' adult males weigh from 50 to 60 kg and ewes from 30 to 40 kg. The plains sheep weigh from 65 to 90 kg in the case of rams and from 40 to 60 kg in the case of ewes.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The breed is traditionally regarded as triplepurpose, although meat production is currently its primary and almost sole purpose. Approximately 20% of the production is sold as suckling lamb, with a live weight of 9-12 kg, and the rest as 'pascual' lamb, 22 to 30 kg live weight, obtained at 90 days of age. They are fed with mother's milk, the resources obtained in grazing (they stay with the mother in the pastures), and, sometimes, they receive a ration of concentrates in sheepfolds.

#### **GEOGRAPHICAL DISTRIBUTION**

The area of occupation of the Majorcan breed coincides, generally, with the island that gives it its name, and there is a greater concentration of these animals in the southeast of the island



The farming system varies according to the variety. In this regard, the "Mountain" sheep is farmed on a more extensive basis, living in total freedom, while the "Plains" sheep lives permanently on grazing land, except in special circumstances. In any event, this animal lives in a harsh environment, determined by a Mediterranean climate, generally characterised by drought and high temperatures in summer. The trees (almond tree, fig tree, olive tree, carob tree, etc.) are essential for the development of these animals. They are grouped into small flocks (75-85 heads).

# OVELLA MENORQUINA



## **GENERAL FEATURES**

Animals of the Ovella Menorquina breed are typically medium-sized with a straight profile and elongated proportions. They have a sparse, white fleece with pointed strands formed by thick uneven fibres. It is characteristic for the forehead to be invaded by the fleece forming the so-called "moña" (fringe). Animals of both sexes are considered polled; although, sometimes, the males have well-developed horns and these often have atrophic forms. The weight of adult animals is currently 45 to 55 kg for ewes and 70 to 80 kg for rams, these being animals with harmonious characteristics.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Catalogued in the past as triple-purpose; meat. milk and wool, today its primary and almost sole purpose is meat production, obtaining a grass-fed pascual (light) lamb, which goes out to graze with the mother and is slaughtered at 4-5 months of age at a weight of 28-30 kg. Other noteworthy features of the breed are its high prolificacy, around 194%, and its high sexual precocity, which places it at the top of the list in Spain, the ewes giving birth at the age of 11-12 months after mating at 6-7 months of age. The sheep live outdoors all year round, always in enclosed fields surrounded by low stone walls, given the strong sense of land ownership on this island. Almost all sheep farming takes place on farms where there are dairy cows. which are the primary purpose of the farm, the sheep being considered as complementary. It is normal for the sheep to be put out to graIt is named after the Balearic island where it was bred, and where it is currently farmed, Menorca. The breed is included in the ovine stock that has spread over the islands of the Western Mediterranean since ancient times. The heavy trade within the area has facilitated the arrival to Menorca of sheep populations from Corsica, Sardinia, etc., which have left their mark on the Ovella Menorguina breed.

#### **GEOGRAPHICAL DISTRIBUTION**

The population is spread virtually all over the island of Menorca, although there is a greater concentration of animals of the breed in the south, near the coast. The geoclimatic conditions of the area of occupation are adverse: mostly stony, not very fertile and with low rainfall.



ze in the enclosed fields after the cattle have done so, in order to take advantage of the plants rejected by the cattle, given the selective nature of the cows. Menorcan sheep are grouped into small but variable flocks (4-5 to 200 heads), whose diet consists mainly of the resources obtained from grazing.

# OVELLA ROJA MALLORQUINA



The name of this breed combines the colour of the fleece and the name of the geographical area it occupies. As far as its origin is concerned, there is a great deal of agreement that it is the product of an ancient cross between sheep autochthonous to the island of Majorca and others from North Africa, whose arrival was the result of the trade existing between the two areas, thus relating it to the Berber sheep, to which it owes, among other things, the red fleece and the wide tail.

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#### **GENERAL FEATURES**

Individuals of this breed are characterised by having a subconvex profile, relatively large size and being mesomorphic, with a tendency to elongation. They have a broad shout with thick lips. Animals of both sexes lack horns, although males sometimes have atrophic forms. They have a wide, triangular-shaped tail, which is more evident when the animals are well fed, as a result of the large accumulation of fat. They have fine, red skin without folds. The fleece is semi-dense, of medium-fine wool, and white in adult animals, but with some red fibres. In the past the wool formed a characteristic "fringe" on the forehead of the animal, which has now disappeared as a result of selection and only appears in residual form. The breed consists of animals of a fairly large form, with males weighing 75 to 90 kg and females 55 to 70 kg.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The purpose of breeding these animals, considered good breeders with high prolificacy, is the production of meat, represented mainly by pascual lambs weighing 25 to 30 kg and aged 4-5 months. In this case, the lamb goes out to pasture with the mother and generally does not receive any other help in the fold. The carcass of these lambs has a higher fat content than other Spanish breeds.

It lives in permanent grazing, in fields enclosed by walls, generally of stone, and often popu-

#### **GEOGRAPHICAL DISTRIBUTION**

The area of occupation of the breed is limited to a small area located in the south of the island of Majorca, characterised by low rainfall and being one of the harshest environments on the island.



lated with trees. The breed is grouped into small flocks (about 70 specimens on average). The diet of the animals is limited almost exclusively to what they obtain by grazing, although on certain occasions it is supplemented with a sheepfold ration.

# PALMERA



The breed is named after the island of La Palma in the Canary archipelago, from which it originates and where it is farmed. With regard to its origin, some authors maintain that the sheep of this island are descended from animals from the north of the Iberian Peninsula, possibly from Galicia. In any event, due to their morphological and phaneroptical features, they are included in the Churro stock, whose ancestral representative is Ovis aries celticus.

#### **GENERAL FEATURES**

Ethnologically speaking, it fulfils the following parameters: straight or slightly subconvex profile, eunetric and of average proportions. Males tend to have well-developed, spiral horns, open at the tips, while females are polled. It is of a uniform white colour with no patches, with a sparse fleece of coarse wool. The weight of adult animals is 40 to 45 kg in ewes, and 65 to 70 kg in rams. These are very harmonious animals.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Meat production is the main purpose of their farming. In this regard, lambs are slaughtered with a live weight of 20-24 kg at an age of around 100 days. Also noteworthy is the production of manure for the island's crops, especially banana plantations. With regard to milk production, although currently not milked, there is evidence that it was done in the past. Also, in the past, wool production was the main purpose of their breeding, this material forming the basis of a craft industry in the area. Nowadays, there is no interest in farming this sheep for its wool because of the low price of the material and the disappearance of the textile industry.

#### **GEOGRAPHICAL DISTRIBUTION**

In the past, the geographical distribution of the breed extended throughout the island of La Palma. At present, it is concentrated in small farms in the north of the island.



This species is capable of feeding on grass and forage that goats do not eat, which makes it possible to optimise the resources of the environment in which it develops, and it can also be fed in stables with agricultural by-products. It is farmed on a semi-extensive basis.

# RASA ARAGONESA



### **GENERAL FEATURES**

Polled animals with a subconvex profile, no pigmentation and average body length and average weight, although this can vary according to the areas where it lives. Pronounced sexual dimorphism. Used for meat production. Some outstanding features are its hardiness, gregarious instinct, good maternal instinct, sufficient milk yield, grazing capacity and adaptability to the harsh environment in which it is farmed.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

This is the only animal that can use the resources of the arid areas of the region in a totally sustainable way, being the main source of income for many rural families. It is farmed on a semi-extensive (or semi-intensive) basis, based on guided grazing but with the provision of food supplements at times of greatest need, often with feed produced on the farm itself, the sheep generally being stabled during lactation until weaning (about 45 days). The lamb is finished with commercial feed (in 75-90 days). Reproduction has also intensified. Continuous mating has been completely ruled out and has been replaced by more intensive systems with three, four and even five lambing periods per year, supported by hormone treatments in the periods of greatest seasonal anoestrus.

This is a breed for meat production, which produces a type of lamb typical of the region known as Ternasco (light). Some animals possess a natural genetic variant that gives the animals that have it in heterozygosis an increase in prolificacy with respect to the average for the population. It owes its name Rasa (level/flat) to its characteristic short fleece in comparison with that of other breeds in the region (Churra, Latxa), and is called Aragonesa because Aragon is the autonomous region where it is primarily farmed. The origin of the Rasa Aragonesa breed is to be found in the Ovis Aries Ligeriensis, a primitive type of sheep originating in Central Europe, which extended into the Loire Basin, the French and Swiss Alps, etc. This sheep breed descended through France and crossed the Pyrenees accompanying the trans-Pyrenean migrations of Indo-Europeans in the 1st century BC, and on its journey to the south of the peninsula, spread through the Ebro Basin, where it evolved according to the environment of the different zones to give rise to the Rasa Aragonesa with its different ecotypes.

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#### **GEOGRAPHICAL DISTRIBUTION**

The Rasa Aragonesa has a wide area of occupation. It comprises almost all of the three provinces of Aragon (Saragossa, Huesca and Teruel); it reaches the south of Alava, east of Logroño, Soria and Guadalajara and occupies the west of Lerida, a large part of the province of Tarragona and the northwest of Castellón. In short, it covers most of the Ebro Basin.



# **RIPOLLESA**



It owes its name to "Ripolles", a region in the province of Girona where one of the largest populations of the breed is located. It is also known as "Berguedana" and "Solsones", among other names, in reference to the regions where it is farmed. As for its origins, it is included in the Entrefino stock. It is interesting to note that the breed has been considered an old and well-established product resulting from the crossing of the sheep that populated the Central Pyrenees and rams of the Merina breed that came to the area by means of transhumance.

#### **GENERAL FEATURES**

This breed consists of animals with a convex profile, elongated proportions and of variable size, ranging from medium to large, according to the farming areas and the management system applied. Both sexes may have horns. In adult males, these become highly developed and adopt the shape of a spiral with two turns, with the tips pointing outwards. In females, when present, they are poorly developed. It may sometimes have wattles. White, with typical pigmentations on the head and legs, in the form of numerous black or brown spots that sometimes fuse to form large patches. Dense fleece of medium-fine wool. In areas of poorer grazing the weight of ewes is around 40 kg, and rams 65 kg. On the other hand, in the more fertile areas the ewes reach weights of 55 to 60 kg and the rams can weigh up to 90 kg.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The breed has a very good aptitude for meat production, which makes this the main purpose of its farming. The lamb obtained is of the "ternasco" (light) type, with a live weight of 22 to 25 kg at the age of 80-90 days, which provides a high-quality carcass weighing 10-12 kg. The performance of the lambs in the feedlot is satisfactory, with average daily gains of 250 to 280 g for weights of 15 to 30 kg. The carcass

#### **GEOGRAPHICAL DISTRIBUTION**

It is mainly located in the provinces of Barcelona and Girona.



yield, after a 24-hour fast, is from 48 to 50%. In recent years, the practice of transhumance, closely linked to the Ripollesa breed in the past, has fallen into disuse. The farming system currently followed is semi-extensive, with flocks of around 500 breeding animals.

# ROYA BILBILITANA



The name of the breed comes from the reddish or reddish-brown colour (Roya) of the fleece in adult animals. The nickname of Bilbilitana is due to geographical criteria related to the zone where it is best represented, Calatayud, formerly Bilbilis Ibérica. As regards its origins, the breed is included in the Entrefino Stock. However, there is no clear coincidence about its possible origins, and a number of different theories are put forward.

# 

#### **GENERAL FEATURES**

These are black animals with subconvex profile, medium-sized and elongated proportions. Both sexesmay have horns which are well-developed. They have a tight fleece of medium-fine wool, reddish-brown in colour in the adults. The animals usually have a white patch on the neck (coronados) and another on the distal part of the tail (puntiblancos). The patch on the neck quite often extends along the front and nasal part of the head, leading to the so-called "caretos" specimens. Some animals also have the white patch on the distal part of one or more limbs, known as "calzados". The weight of the adult ewes is between 40 and 50 kg; while the rams range between 60 and 80 kg.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

These hardy animals with a strong herd instinct are mainly bred for meat production. In this respect, the type of lamb obtained is the "ternasco", with a slaughter weight of between 21 and 25 kg (10-12 kg carcass weight), obtained at the age of 80-90 days, fed intensively, without going out to graze. This lamb is included in the Protected Geographical Indication of 'Ternasco de Aragón'.

The sheep is subject to a fairly extensive farming system, in a harsh environment, where the low quality of the land and the extreme continental climate are the common denominator.

#### **GEOGRAPHICAL DISTRIBUTION**

The principal population is found in the south-west area of the province of Saragossa, in the south-east of the province of Soria, and in the north-east of Guadalajara. In general, the Roya Bilbilitana breed subsists in very harsh environments, where the introduction of other breeds has encountered great difficulty.



It is grouped in flocks of around 300 sheep, managed by the shepherd who is usually the owner of the farm.

# RUBIA DEL MOLAR



The name of the breedcomes from the light brown colouring of the specimens on the head and limbs, and from the Madrid town of El Molar, whose municipality is home to the largest population of this breed of sheep, classified under the Churro Stock. In this respect, the most direct ancestor may be the Latxa breed with a light-brown face, with whom it shares many features.

## **GENERAL CHARACTERISTICS**

The Rubia del Molar breed adjusts to the typical pattern of sheep with a subconvex profile, eumetric and sublongilinear. It has a flat forehead, often covered with wool in the form of a "bow". Although both sexesmay have horns, they are not often found (more frequently among the rams). The covering hair is blond in different shades with pigmentation on the mucous membranes. An open fleece, white with long conical locks, formed of thick, rooted fibres, without waves and varying in length. On the whole, the average weigh of the ewes is estimated at between 40 and 50 kg, and between 65 and 75 kg for the rams.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

This ovine population, which is characterised by its hardiness and status as an excellent breeder, has good milk yields and a long lactation period and, as a result, is mainly used for milk production. First-birth sheep produce an average of 109 litres in lactation of 150 days, and sheep of second or more births produce 143 litres in lactation of 150 days. The milk composition is 6.4 % fat, 5.3 % protein and 18.5 % dry extract. At present, meat production accounts for a large proportion of the economic value of this breed of sheep, which in general is used to produce suckling type lambs, slaughtered at around 30 days with a live weight of 10-12 kg (5-6 kg carcass), and fed exclusively on maternal milk.

#### **GEOGRAPHICAL DISTRIBUTION**

It can be found in the north-east of the Autonomous Community of Madrid. This is an area where grass cover is scarce and of poor quality as a result of its unfavourable climate and poor soil.



It grazes, generally in meadows, pastures and scrubland. In the summer, it feeds on stubble from the farming area. It is found in herds of 150-200 sheep, herded by the owner of the farm who acts as the shepherd. Food in the field is supplemented with feeding in the sheepfold.

# SALZ



It was created between 1973 and 1980 using crosses of Rasa Aragonesa sheep and Romanov studs, programmed by Dr Isidro Sierra, to produce animals that have a high reproductive output (in terms of sexual precocity, non-seasonal nature and prolificacy), a great ability to adapt to sheep farms in the region and a carcass and meat that meet the requirements of the traditional market for 'ternasco' in Aragón.



#### **GENERAL FEATURES**

Polled sheep with rectilinear or subconvexilinear profile, eumetric or sub-hypermetric (rams: 70-80 kg; ewes: 50-55 kg) and with sublongilinear proportions. The fleece, of medium-fine wool, is white and semi-closed, and the head and distal radii of the limbs are uncovered. Mouflon wool is frequently found along the tracheal edge of the neck, especially in the rams.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

In response to the reasons that gave rise to its creation, the Salz is characterised by its strong sexual precociousness (first birth at 12-13 months of age); the non-seasonal nature of its reproductive capabilities (3 to 5 mating periods each year); high rates of fertility (77-86%) and prolificacy (1,9-2,1); high milk production, excellent maternal instincts, enabling the direct breeding of the lambs, and strong herd instincts and a hardiness that make it easy to manage.

Bred for meat production, it is farmed mostly in semi-intensive conditions, with permanent stabling of the mothers until weaning (≈45 days) and the lambs until slaughter (75-90 days), providing 'ternasco' type carcasses.

#### **GEOGRAPHICAL DISTRIBUTION**

The breed currently has around 7000 heads, on around 30 farms located in various municipalities of Saragossa in the Ebro river Valley and in irrigated areas in the provinces of Huesca and Teruel.



# **SASI ARDI**



The name of the breed is taken from two words in the Basque language: "Sasi", which means briers, and "Ardi", which means sheep, referring to the environment in which these animals live (areas of woodland between briers and scrubland). Due to itsmorphological qualities, it is included in the Churro Stock, represented by the Ovis aries célticus.

## **GENERAL FEATURES**

This includes exceptionally hardy sheep, who live in total freedom on mountainous areas, with a straight profile, small in size and slightly elongated proportions. Both sexes have horns which are well-developed on the ram, with a spiral form. There is light-brown or reddish pigmentation on a white background with uniform patches on the head and limbs. These patches merge together giving the overall even lightbrown colouring. In addition, they have a coarse wool white open fleece. The weight of the adult animals is between 30 and 35 kg in the ewes and between 40 and 50 kg in the rams.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The Sasi Ardi are mainly bred for meat production. In this respect, current production is based on obtaining very young suckling lambs (30-40 days), with a live weight of 10-12 kg. The revaluation of natural food in recent years, has led to a significant increase in the demand for these lambs, to the point where the farmers often sell them on demand.

An extensive farming system, in the broadest sense of the word, is adopted. They live in total freedom on the mountain (wild), for at least 8-9 months per year. They are frequently scattered as they do not have a strong herd instinct. The environment is extraordinarily difficult due to the orography of the terrain, with significant slopes, and the lush nature of the woods which makes it difficult for the sheep to see and move around. Traditionally these sheep remained on the mountain all year round, with no source of food other than pasture. They were collected

#### **GEOGRAPHICAL DISTRIBUTION**

The geographical region of the breed is very localised, where Guipuzkoa and Navarra meet and in the valleys of Leizarán, Regata de Escurra, Regata de Urunea, Maldaerraka and Cinco Villas. It is also found in communities in the Duranguesado in Biscay.



only for shearing, and high lost rates in lambs were frequent. Nowadays, many farmers, for 3-4 months of the year (January to March) move their sheep from the mountains to the winter meadows, where they are given feed where appropriate. Farm sizes are small, with an average of 50-60 sheep per herd.

# SEGUREÑA



#### **GENERAL FEATURES**

Sheep with strong sexual dimorphism, subconvex profile, polled in bothsexes, of medium size and slightly elongated proportions. The fleece is semi-closed of medium-fine wool and is short and uniformly white.

Different varieties have been established according to the colour of the coat. In addition to the Blanca (White), the most common, there is also the Rubisca, characterised by the presence of light brown pigmentation in the form of patches of varying sizes, usually on the head and limbs. There is also the Mora with uniform colouring all over the body in different shades, mainly dark, with a characteristic small white patch on the neck and the distal top of the tail; however, it is not recognised in the Herdbook.

## FARMING SYSTEM AND PRODUCTION CHARACTERISTICS

The most usual farming system are family herds that are consistent with extensive - semi-extensive farming, bred using a variety of methods: Transhumance, trasterminance and resident, and grazing all year round. They live in areas with little pasture and limestone soil that for the most part have no cover, resulting in extremely hardy animals, and favouring the conservation of the breed purity.

The main objective of the breed is meat production. Producing lambs which are renowned for their excellent quality. The lambs, aged between 70 and 90 days, are fed ad libitum in feedlots with concentrates. And slaughtered at a weight of around 22 and 25 kg providing carcasses of 9-12 kg with slight fat infiltration, which are very tender and hardly smell or taste of fat. The name is derived from the geographical region where it originated and its main centre of production today, the mountains around the Segura River. Its large population makes it one of the most important breeds of sheep in Spain. Thanks to its hardiness and perfect adaptation to its environment, it is the source of livelihood for a large number of farmers, and shepherd-owners.

#### **GEOGRAPHICAL DISTRIBUTION**

It is found in the provinces of Granada, Jaén, Almería, Murcia and Albacete, an area that corresponds to the mountains of Segura and las Villas, Cazorla, la Sagra, Orce and María, mainly and las Sierras de Baza, de los Filabres and de Castril.



Characterised by its high prolificacy, the tendency is to obtain three births in two years, which is helped by the weaning of the lambs at an early age of around forty-five days.

The Segureña is a good sexually precocious animal. They are usually mated for the first time at the age of ten-twelve months; however, it has been observed that in a very well-fed flock, the first birth takes place at the age of twelvefourteen months in almost 80% of the cases.

## **TALAVERANA**



This breed owes its name to the Toledo district of Talavera de la Reina, which was once the main centre for the sale of this breed of sheep and its wool. It is the product of old cross-breeding between two large breeds: the Merino and the Manchego, resulting in the development of a mixed-breed group which, without a pre-established programme, reproduced among themselves.

### **GENERAL FEATURES**

This breed includes animals which are uniformly white, with a straight or subconvex profile, of medium size and proportions bordering eumetry. Both sexesare polled. They have a tight fleece of medium-fine to fine wool, formed of rectangular wavy locks with equal-sized fibres, of average length.

Sometimes the fleece reaches the upper front of the face, forming the so-called "moña". An average weight of between 40 and 50 kg is estimated for ewes and between 70 and 80 kg for rams. They are very symmetrical animals.

### PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Although in the past, it was bred mainly for wool production, it is now bred for meat production, in particular lambs feed in the sheepfold on concentrates, without going out to graze, and are slaughtered at a weight of about 25-26 kg and at an age of around 90 days. Sometimes the Talaverana lambs are removed from the farm with a live weight of 12-14 kg, destined in some cases for slaughter as suckling lambs, and in other (more frequent) cases, for sale to the large industrial feedlots. The lambs produce high-quality carcasses with clear tones and a level of fat cover that is well-suited to the Spanish palate. The breed also produces large volumes of milk, a trait inherited from the Manchega breed. As a result, some herds are milked for short spells during favourable periods.

#### **GEOGRAPHICAL DISTRIBUTION**

The breed has traditionally been farmed in the area where the provinces of Toledo, Cáceres and Ávila meet. In recent years in these provinces, the breeding area of the Talaverana has been confined to the most difficult and most spread-out areas, with the most fertile areas being reserved for milk-producing sheep. For this reason, it is curious to note that in the municipality where it had its origins (Talavera de la Reina) the breeding of the Tavalerana has virtually ceased.



Traditionally the sheep has been farmed under a very extensive system, mainly on meadows, although frequently combined with other crops. The sheep go out to graze every day of the year, in flocks, whose size ranges between 400 and 500 sheep, which is currently supplemented with a sheepfold ration in certain situations.

# XALDA



The word 'xalda' means 'coarse' in Asturian, referring to the nature of the breed's wool. The breed belongs to the Celta Stock, whose ancestors would be the Ovis aries celticus, one of the oldest and least evolved Spanish ethnic groups of sheep.



#### **GENERAL FEATURES**

These are animals of exceptional hardiness and great agility, with a straight or subconcave profile, significantly elipometric and mediolinear proportions. The rams are often found with highly developed horns in the form of an open spiral, light or dark brown in colour depending on the colour of the coat. The ewes are polled although they sometimes have basic or atrophic horn shapes. The short tail is of note and docking is not practised as the tail does not exceed the hocks. In general, the coat is of a uniform black or white colour. Two varieties are distinguished by the colour of the coat: Black and White, although sometimes due to crossbreeding between the two it is possible to find 'manchados' (speckled) animals. The animals of the Black variety sometimes have a white patch on the neck and usually on the distal tip of the tail. In addition, there is a third variety, known as the 'cardín' or cárdena, characterised by the presence of black and white hair. It has an open fleece which covers the front of the face, forming the characteristic 'moña'. The weight of the adult animals is between 35 and 40 kg in the rams and between 20 and 25 kg in the ewes.

### PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The Xalda are mainly bred for meat production. In this respect, a 'pascual' lamb is obtained fed on maternal milk and nutrients obtained from grazing, and slaughtered at the age of 5-6 months with a carcass weight of 9-12 kg.

#### **GEOGRAPHICAL DISTRIBUTION**

Herds of Xalda sheep can be found throughout Asturias and today, there are some breeders belonging to the Association in Galicia and León.



The sheep is farmed under a grazing regime. On the whole there are no sheeplots, as the sheep are permanently out to graze, without any shelter from the rain or harsh weather conditions. They are grouped in small flocks of approximately 20 heads.

# XISQUETA



Ovine breed originally from the Central Pyrenees (Lleida and Huesca) it is derived from the Ibérico Stock, whose ancestor is the Ovis aries ibericus.

Resistant, active and with great ability to graze and highly-developed maternal aptitudes that enable it to raise high-quality ternasco lambs in the best way possible.

#### **GENERAL FEATURES**

These are eumetric animals, longilinear to mediolinear proportions and subconvex front-nasal profile, which is more noticeable in the ram. Both sexes are polled. The coat is of a uniform white colour, with the marbling typical of the lbérico Stock, with black or dark brown degradations around the eyes, ears, snout and distal part of the limbs. The wool is medium-fine and white in colour.

### PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The production of "ternasco" lambs with a live weight of between 23 and 25 kg at the age of 85-90 days, is the main economic activity of the farmers. The good conformation and excellent quality of these lambs mean that they are highly sought-after in the Catalan market.

The Xisqueta breed is reared using an extensive farming approach, either transterminant or via transhumance, extra feed in the winter for resident herds and/or breeding sheep. In the summer, most herds engage in transhumance towards the pastures of the high mountains. However, and unlike in the past, only some farms in the Alta Ribagorça in Lerida and in the Ribagorza of Huesca roam towards regions with a more benign climate and more abundant pasture, located in the Ebro river Valley (provinces of Lleida and Huesca).

#### **GEOGRAPHICAL DISTRIBUTION**

The Xisqueta breed is found for the most part in the Lerida regions of El Pallars Jussà, Pallars Sobirà and Alta Ribagorça and in the Ribargoza of Huesca. It can also be found in the Huesca regions of Monegros, Sobrarbe and Hoya de Huesca and in the regions that comprise La Plana de Lleida, in mainly due to the traditional transhumance-based handling of the breed.



Most of the Xisqueta farmers are professionals, with medium to large herds usually of more than 600 specimens.

### CAPRINE

Bermeya Blanca Andaluza o Serrana Blanca Celtibérica Cabra de las Mesetas Cabra Galega Del Guadarrama Malagueña Moncaína Murciana-Granadina Negra Serrana Palmera Pirenaica



# **AZPI GORRI**



#### **GENERAL FEATURES**

This includes very hardy animals with a straight or subconcave profile, eumetric and with medium or sublongilinear proportions. Bow-shaped horns (aegagrus) on the does, well-developed and longer and stronger on the bucks (prisca). Body parallel, elongated with strong, horizontal and straight dorso-lumbar line. Deep thorax. Fairly arched ribs. Medium-developed symmetrical udders, with medium sized teats, vertical, parallel and well-differentiated. The coat is black with degradations to red which affect the limbs (below the knees and hocks). axilla, inner limbs, hind guarters and lower side of the tail. Two lines of the same colour (carrilera en rojo) cross the face from the base of the ear to the snout, and may go across these two regions. Hair is relatively short and fine in does and somewhat longer and coarser in bucks. The weight of the males ranges between 60 and 65 kg, and of the female between 40 and 45kg.

### PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The breed is considered as dual-purpose (milkmeat); although the main objective of their farming has alternated between both production types over time. At present, they are almost exclusively farmed for meat; although in the past they were milked, given their excellent milkproduction abilities, the practice was abandoned as a consequence of the mainly extensive farming regime to which they are subject, which limits the production of milk from this goat. Nevertheless, recently this seems to be changing, and milk production would appear The name of Azpi Gorri comes from the Basque words, meaning: "with a reddish underbelly". The breed originates from the Pirenaico stock, whose ancestor is the Capra aegagrus.

#### **GEOGRAPHICAL DISTRIBUTION**

The Azpi Gorri is found in the south of Biscay and the north of Álava, with some flocks also found in the Autonomous Community of Navarre.



to be once again assuming an important position in the farming of the Azpi Gorri breed. Meat production is represented by the commercial types: 'cabrito' (suckling kid) (animal fed mainly with maternal milk, slaughtered at the age of 40-50 days with a live weight of 12 kg) and 'caprino mayor' (from cull does, usually eaten in rural populations, and formerly used for the production of tinned food). Milk production is estimated at 1.5 litres per goat and day, for 3-4 months of milking.

The goats of the Azpi Gorri breed follow a highly extensive farming regime. After April the flock is sent to the mountains, where the animals live in total freedom for 5-6 months. These are usually small family herds (20-30 goats). Farms with more than 50 goats are rare and farms with over 100 goats are exceptional.

# BERMEYA



### **GENERAL FEATURES**

The breed includes animals with a straight profile, mesomorphs and eumetric. The does predominantly have aegregus bow-shaped horns facing backwards. The horns on the bucks are open at the tips. Compact body. Deep chest. Arched ribs. Bulging stomach. In general, the weight of the bucks is estimated at 70-75 kg and the does at 45-55 kg. They have a reddish coat, of different shades from very light brown to dark brown. The female body is covered with short fine hair which is longer and coarser on the males. Sometimes the hair grows very long on the rear third of the body, leading to formation of the so-called "Calzones"(breeches). This is an exceptionally hardy and docile breed, which plays a major role in the cleaning of the mountain and helping with the prevention of forest fires.

### PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Although the breed has been traditionally classified as dual purpose (meat-milk), the main objective in the breeding of the Bermeya is the production of meat, represented by commercial types: "cabrito", referring to the kid of less than one year in age and the "caprino mayor". At present, meat production in this breed focusses on a larger and older kid, aged approximately five months and weighing 18-20 kg, fed with maternal milk and nutrients obtained from grazing (equivalent to the "chivo"). Goat's meat is much appreciated and highly sought after by consumers in Asturias. Traditionally, the breed was milked and the milk used to manufacture typical cheeses from the region, mainly the "Cabrales" The name Bermeya refers to the reddish colour of its coat, and it is also known among farmers as "Cabra Rubia". No phylogenetic records are available for this population. Nevertheless, certain signs, such as the type of horns, indicate that the ancestors of the Bermeya may be the Capra aegagrus.

### **GEOGRAPHICAL DISTRIBUTION**

It is farmed in the mountainous regions of the south of Asturias, characterised for its steep slopes, cold climate, with annual temperatures of less than 10  $^{\circ}$ C and rainfall of around 1300 mm.



cheese. On the whole, the Bermeya breed is found on family farms where it is often joined by other livestock species: cows, sheep and mares, and is mainly reared under an extensive farming system, in harsh mountainous regions, both due to the climate, with heavy rain, snow and low temperatures in winter, and to the terrain: high sheer mountains with steep slopes, where it grazes on scraggy, woody, hard pastures of limited nutritional value. Traditionally, short trasterminance is used. Grazing, for most of the year, is in total freedom, except in the case of dairy herds where the shepherd remains close to the herd in order to milk the animals and make the cheese. The size of the farm is very variable. Nevertheless, although there are certainly some farms with more than 600 heads, in general, the average size is around 50 breeding animals.

# BLANCA ANDALUZA O SERRANA



#### **GENERAL FEATURES**

This includes animals with marked sexual dimorphism, a convex profile, hypermetric and longilinear. They have prisca type horns (curly), which are highly developed in the bucks. 'Zarcillos' (tendrils) are often found. Elongated deep body. Well-developed chest. Long strong limbs, with large articulations. The coat is a uniform white colour and sometimes has a waxen hue, called a "cereña" coat. The body is covered with strong hair. The bucks have beards. A small number of does have a goatee beard. The weight ranges between 85 and 100 kg in bucks and between 60 and 70 kg in the does.

### PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The principal farming objective is the production of meat in difficult environments. Their large size, the rapid growth rate of the kids, good yields in the slaughter house, the high quality of the meat and the suitability for milk production of the does contributes to this. At present, although the "chivo" (animal which grazes with the mother, slaughtered at five months of age with a live weight of 25-30 kg) continues to be produced on some farms, mainly in zones where the consumption of goat meat is traditional, the most frequent commercial type is the 'cabrito lechal', suckling kid (animals mainly fed with maternal milk, slaughtered at the age of 40-50 days with a live weight of 10-12 kg), enhanced by high market prices. Traditionally this goat was milked. However, the farming system used, mainly extensive, does not favour the production of milk or milking.

The name of the Blanca Andaluza (Andalusian White) comes from the uniform white colour of its coat and the geographical area where it is farmed, mainly in the Autonomous Community of Andalucia.

It is also known as the "Blanca Serrana", due to the sierra regions where it is found. This is a very ancient breed with very representative signs of the Capra Prisca, on the one hand, and of the Nubiana goat (African group), on the other, which gave the breed its convex profile.

#### **GEOGRAPHICAL DISTRIBUTION**

The Blanca Andaluza is mainly found in the eastern region of the Autonomous Community of Andalusia, although in practice it is found in a large part of the region. But always in mountainous areas with difficult terrains, poor soil and dry warm climates. In this respect, it is found in Sierra Morena, Sierra Segura, Cazorla and Sierra Norte de Sevilla, reaching as far as the province of Huelva.



On the whole, a comprehensive extensive farming system is used, in steep areas with difficult terrain, a harsh climate and which are often inaccessible. Although there are a small number of fairly large farms (400-600 goats), the size of the farms tends to be small (less than 100 breeding animals) and this goat often forms part of mixed goat and sheep herds.

# BLANCA CELTIBÉRICA



The name of the breed comes from the uniform white colour of its coat and the area in which it is traditionally found, corresponding to the former Celtiberian (territory occupied by the Celtiberian tribes), which covered the eastern region of the Spanish Meseta and the Ebro river basin. The most popular theory about the origin relates this Caprine species to the Capra prisca, which, apart from in the Blanca Celtibérica, has not had much influence on other Spanish caprine breeds. This is why the breed has reached our days conserving many of the qualities of this important stock with a high degree of purity.

#### **GENERAL FEATURES**

This is a very ancient breed of animals with a straight profile, eumetric and medium proportions. Attractive-looking, they are extremely hardy and have significant sexual dimorphism. They have prisca type horns (in the form of corkscrew), very open, developed and with a triangular cross-section. They often have wattles. Males have a 'barba'(beard) and sometimes, a 'Tupé'(quiff) and long hair on the back 'raspil'(mane), and on the front third of the body 'pelliza'(ruff). The does often have a 'perilla'(goatee). In spite of their medium size, the compact, broad and deep trunk with bowed ribs is of note. The coat is of a uniform white colour. The weight of the adult animals is between 75 and 85 kg in the bucks and between 50 and 60 kg in the does.

### PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The breed is mainly farmed for the production of meat, given its excellent qualities as a meat producer. Traditionally, the most representative type of meat was the "chivo", slaughtered at the age of 4-5 months, with a live weight of 25-30 kg, which grazes with the mother. However, the 'cabrito de leche(suckling kid) is now becoming popular, slaughtered at the age of 35-45 days with a live weight of 8-10 kg and a carcass performance of almost 50%, and is widely accepted in the market.

#### **GEOGRAPHICAL DISTRIBUTION**

The Blanca Celtibérica is found in inhospitable mountain regions in the east of the Cordillera Ibérica, in areas of the Community of Castilla-La Mancha (Albacete, Guadalajara and Cuenca), the Levantina (southern region of Aragon and Catalonia and north of Valencia) and the south of Spain (north-eastern district of Murcia and some mountains of Almería in Andalusia).



It is farmed under an extensive regime, in poor mountains regions, with extreme temperatures. Food is limited to that obtained from grazing, as it only receives supplementary food from the goatherd on very rare occasions. Sometimes, the goats of this breed are transhumant. They collect in herds of approximately 125 heads.

# BLANCA DE RASQUERA



### **GENERAL FEATURES**

The individuals are of medium proportion with a sublongilineal tendency, an eumetric format and straight to subconvex front-nasal profile. Presence of horns on bothsexes, with great variety in the shape, although the corkscrew (prisca), sabre (aegagrus) and coiled (open spiral with one or two turns, horizontal at earheight) are the most typical. The polychromatic coat of black on a white background is the most common, followed by the totally white coat. Occasionally, the polychromatic coat on cream is found and the tricolour coat of black and cream on a white background are also found. The pigmented zones may appear as well-defined patches or degradations on the white coat

### PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Mainly bred for the production of meat, breeding focusses on obtaining suckling kids, with a live weight of approximately 7 to 9 kg, which is usually reached at the age of 30 to 45 days of life.

The production system is totally extensive, individual or family-run, mainly using the forest pastures of the hills, with an average stocking density of 0.39 LU/ha (Carné et al., 2007a); the animals graze freely in the hills in summer and, in some cases, for almost the whole year. Normally the grazing land only meets the maintenance requirements of these animals, in terms of energy and protein. Therefore, it is necessary The Rasquera White Goat, due to its morphology and similarity to the Celtiberian White and the Andalusian White, is included in the group of descendants of the Capra prisca stock, all of which form the so-called White Celtiberian Stock.

#### **GEOGRAPHICAL DISTRIBUTION**

It is mainly found in the five most meridional districts of Catalonia, generally known as the Tierras del Ebro (80% of the population), with a very unequal distribution. However, the area of influence has been increasing, and it is now possible to find herds in other districts of Catalonia; specifically, the districts of Alt Empordà, Alt Urgell, Baix Llobregat, Berguedà, Garrotxa, Maresme, Priorat, Tarragonés, Vallès Occidental and Vallès Oriental.



to supplement the food from the fifth month of gestation on, and throughout lactation.

The average size of the farms is around 400 specimens (390 does and 18 bucks). 75% of the herds concentrate the birthing season in September to October to sell the kids for Christmas, and the same percentage only obtain one birth per year. The predominant mating system is discontinuous and free, with separation of the bucks. The annual replacement rate of does is 15% and of bucks 21%. The doe/buck ratio is 21 per herd. The breed is extremely hardy and the does have a great maternal capacity for the adoption of kids.

# CABRA DE LAS MESETAS



### **GENERAL FEATURES**

These are very hardy heterozygous animals, with a straight or slightly subconcave profile, mesomorph and eumetric. They have aegagrus type horns, curving backwards. The prisca type horn is also found, more frequently among the bucks. A large number of the animals have waffles. Deep stock and flat ribs. The males usually have a 'beard', and a significantly lower number of does have a 'goatee'. The coat has major variations, predominantly light brown. The udder is tucked up, not very developed and is well-established. Thin limbs with scrawny joints. The weight varies according to the farming and husbandry system, although it can be estimated at an average weight of 65-70 kg in the bucks and 50-55 kg in the does.

### PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Traditionally this goat, classified as in permanent polyoestrous, that is, it may have multiple gestations at any time of the year, was considered dual purpose: milk-meat. However, at present, as the animals from this group are found in extremely difficult environments, subject to a purely extensive farming regime, a large proportion of the population has been polarised towards the production of meat as the principal objective, for which it is highly suited. The animal continues to be used for both purposes in the lowland and cereal-producing regions of Zamora and Salamanca. With respect to the meat production, the most representative commercial type is the 'suckling kid', which is highly sought-after at present.

There is no clear agreement so far as regards the name and definition of this racial group. The names of the 'de las Mesetas' and 'de Serrana' are the most frequently used. With respect to its possible origins, it would appear to be a heterogeneous product, which some authors consider to be the result of the influence of the principal stock: Aegagrus and Prisca.

#### **GEOGRAPHICAL DISTRIBUTION**

Although in times gone by, this population was found in a large part of Castilla y León and Castilla-La Mancha, even reaching as far as parts of Aragón, Extremadura and Andalusia, at present the area of occupation is limited to the harsh mountain regions of the Autonomous Community of Castilla y León, in the Duero River Basin. The principal populations of the animal are found in the provinces of León, Salamanca and Zamora.



The fame and quality of its meat has extended beyond the production areas. It is fed on maternal milk and slaughtered at the age of 40-50 days, with a live weight of between 10 and 12 kg, with a carcass performance of almost 51%. The 'chivo' is reared by grazing with the mother and slaughtered at approximately 4 months with a live weight of 20-25 kg.

The size of the herds ranges between 100 and 200 goats, organised in family-type farms, where mechanical milking systems are rarely found.

## **CABRA GALEGA**



The name of the breed comes from the Autonomous Community of Galicia, where it was formed and where it is farmed. Its ancestor is the Capra aegagrus, whose secondary form, the Pirenaico Stock, gave rise to a large number of caprine breeds in Spain. Nevertheless, certain ethnic characteristics of the same, such as the predominantly backward-curving horns (aegagrus type) in the does and prisca type in the bucks, indicate that it is an ancient heterozygous product which some authors consider to be the result of the two main stocks: Aegagrus and Prisca.

### **GENERAL FEATURES**

With a straight or subconcave profile, eumetric and sublonglinear. Horns are curved backwards, aegagrus type in the females and the prisca type is often found on the bucks. Wattles are often present. Deep and compact body with bowed ribs. Chestnut or reddish coat of different shades. Sometimes the animal has long thick hair on different parts of the front and rear third, or all over the body. Thick 'beard' on the bucks and 'goatee' sometimes found on the does. Bucks may also have a 'quiff'. The average weight of the adult goats is around 50-60 kg in the does and 70-80 kg in the bucks.

### PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The main and almost sole purpose of rearing this breed from Galicia is the production of meat. In this respect, there are two commercial types. On the one hand the 'suckling kid', fed mainly on maternal milk and slaughtered with a weight of approximately 12 kg. Kid meat is highly sought-after in Galicia; it is the musthave dish at any important celebration. On the other hand, the 'caprino mayor', which refers to adult animals, usually cull does, is mainly eaten in rural environments. In the past, they were used to prepare canned meat. In former times, the hide of adult goats was used, among other things, for the preparation of the popular 'pellejos' or 'odres' (wineskins) used to carry wine, spirits, oil, etc. The hide used for this purpose underwent a particular curing process.

#### **GEOGRAPHICAL DISTRIBUTION**

The populations of the Cabra Galega breed are usually found in the mountain regions of Lugo and Ourense.



It is classified under the environmental biotype, as the animals are extremely hardy, perfectly adapted to the harsh terrain and climate of the mountain regions of Galicia, where it is farmed extensively. It is found on small family farms which use the communal pastures of the scrubland, normally in herds of less than 100 heads.

# DEL GUADARRAMA



The breed takes its name from the district of Guadarrama, a geographical region of the Community of Madrid and Castilla y León, where the main populations of this breed are farmed. It is also known as the Guadarrameña and 'del Centro de España'. Traditionally, it was considered as a variety of the Pirenaica goat, and this is the reason it is thought to be a descendant of the Capra aegagrus.

#### **GENERAL FEATURES**

The breed includes animals with a notable sexual dimorphism, a straight profile, eumetric and mesomorphic or sublongilinear. The does have horns which are usually curved backwards, while the bucks' horns are open at the tips. Wattles are frequently found. Long flat body in the does; deeper and more compact in the bucks. Broad, tucked up and 'bag-shaped' udder, with clearly differentiated teats. The coat comes in various colours, although dark shades tend to be more predominant (black, chestnut, brown, olive-coloured, etc.), with degradation on certain areas of the body (inner limbs, axilla, distal part of the limbs, underbelly, neck and head), the colours varying with the variety. Its body is covered with long thick hair. Most bucks have a 'beard' and most does have a 'goatee'. The breed reaches a live weight of almost 72 kg in the bucks and 54 kg in the does.

### PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

These goats are dual purpose: milk-meat. Meat production is essentially based on the production of the 'suckling kid', consisting of animals with a live weight of 8 to 10 kg, fed with maternal milk and slaughtered at the age of 30-35 days. The principal objective of their farming is the production of milk, with average results, according to the official milk controls, in normal lactation at 210 days, of 245.2 litres for first lactation goats and 324.7 litres in the second lactation or more.

### **GEOGRAPHICAL DISTRIBUTION**

For the most part, the Guadarrama goat is found in the harsh mountain regions of the Sistema Central, in the north-west of the Autonomous Community of Madrid, often on steep mountain slopes and all over the mountains of Segovia and Ávila.



In natural lactation, the average production of second-birth or successive-birth does is 392.8 litres in 258 days. On an individual level, productions of 800 and more litres have been observed in one single lactation. The chemical composition of the goat's milk is: Fat = 4.6%; Protein = 3.5%; Lactose= 4.6%; Dry Extract = 13.8%. Almost all the milk is used for making cheese. A mixed farming system is used. The flock spends the night in the goat pen, where it receives supplementary food, based on concentrates and hay, as required. The farms are usually family-run with herds of between 100 and 300 goats.

## EIVISSENCA



#### **GENERAL FEATURES**

It groups animals with a straight profile, medium size and elongated proportions. The presence of horns in both sexes is limited to a small number of animals. In general polled animals predominate. When the horns appear, they are generally aegagrus type, in backward arc shape. Males have well developed 'beards'. Females, on the other hand, can present a 'goatee'. The presence of wattles is frequent. Long and deep trunk. Arched ribs. High, strong and well poised limbs. The coat is very varied, with colors that go from white to black through the 'colorado' (red), with mottled animals being frequent, with large white spots on a uniform layer of different color. Their weight is between 50 and 60 kg in does and between 70 and 80 kg in bucks.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The Evissenca goat, from a productive point of view, is classified as dual aptitude: meat-milk. Within meat production, there are two main commercial types of products: young kid and adult goat. The first, more representative, is an animal fed with the mother's milk and the resources obtained in grazing, accompanying it. It is slaughted at the age of 2.5 to 3 months, with a live weight close to 18 Kgs, and with a carcass yield of about 52%. Likewise, the main objective of the Evissenca goat holdings is dairy production, intended for family consumption, either directly or transformed into cheese. Their production is very variable due, on the one hand, to the great heterogeneity of the animals of the breed from the genetic point of view, given their heterozygous origin and the It is named after the island in the Balearic archipelago where it is mostly farmed.Traditionally, until the en of the first half of the XX century, the breed was known as 'Cabra de Formentera' since it was originally and mainly farmed in the Island of Formentera, where it is still kept in purity. It is also known as the 'Cabra de las Pitiusas', named after the ancient and hystorical toponymy of the islands of Ibiza and Formentera. This singular ethnic group has a polyphyletic origin, in whose formation different stocks have intervened.

#### **GEOGRAPHICAL DISTRIBUTION**

Its geographical distribution is limited to the islands of Ibiza and Formentera.



absence of an in-depth selection of the breed and, on the other, to the different management system, depending on the type of husbandry, to which they are subject, mainly with regard to feed.

In general terms, the Evissenca goat is grouped into small family farms, often less than 20 breeders. Sometimes as part of mixed herds: sheep and goats. On the island of Formentera, these are also small farms, with the particularity of presenting a certain degree of crossbreeding, mainly, due to the crossing with studs of the Murciano-Granadina breed, in search of increasing milk production. The farming system is mixed; that is to say, the goats go out to graze every day, being helped at the goat pen with a complementary ration based on cereals, in the moments of shortage of pastures or when the needs of the does increase.

# **FLORIDA**



### **GENERAL FEATURES**

This includes animals with a subconvex profile, hypermetric and longilinear proportions, with backward-curving aegagrus type horns. Long deep body. Long bowed ribs. Broad deep chest, with prominent advanced sternal breastbone. Highly developed globular udder, with broad anterior and posterior insertion base. Distinct uniform teats, of a good size and length and well-positioned. Strong and wellshaped limbs. The coat is usually mottled white on a red background, or mottled red on a white background, in varying shades of red. Sometimes, the same shape and distribution is found by in black and white. The bucks weigh 80-120 kg and the does 60-80 kg.

### PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The main objective of the farming of this breed is the production of milk with high yields and persistence in the lactations, with average productions of 700 kg in natural lactations and 290 days in multiparous. The milk composition is characterised by its high content of fat and protein in relation to the production (Fat = 5.06%; Protein = 3.35%). It is also suited for the production of meat, which is enhanced by its large size, good shape and the high growth potential of the kids. Production is based on the 'Suckling kid' (slaughtered at 20-30 days and with a live weight of 8-10 kg). The average weight at birth is 3.5 kg, and the average daily weight gain is 180 grams/day. Its name is taken from the special nature of its mottled coat which looks like a meadow of flowers. It originates from

the occasional input of the Nubian type breed to the autochthonous Alpino-Pirenaica population in the Guadalquivir Valley in the first half of the 20th century. This input was maintained locally by the farmers together with a selection based on milk yields and on their special floral coat. In the 80s, this population was very limited in numbers and heterogeneous; based on this, and several agreements with the Regional Councils of Seville and Cordoba and the University of Cordoba, a herd was created under the direction of the veterinary practitioner José A. Sánchez Romero, who played a decisive role in the establishment. selection and consolidation of the breed as it is currently known, an extremely hardy goat with high milk yields.

### **GEOGRAPHICAL DISTRIBUTION**

Initially, it was limited to the central region of the Guadalquivir Valley in the province of Seville; however, in the past 25 years, and due to its exceptional qualities, it has spread across all the provinces of the Autonomous Community of Andalusia and Extremadura, and there are also several herds in the autonomous communities of Castilla-La Mancha and Castilla y León, and in other countries such as Portugal.



Traditionally, it was farmed in small familiar herds which fed on the communal pastures, stubble and crop residue. But in recent years, due to its high production capacity, there is a tendency towards free stabling systems with less grazing and larger herds.

## MAJORERA



The Majorera goat takes its name from the island of Fuerteventura (Maxorata in pre-Hispanic times), in the Canary Islands, where it was formed and where the largest population of this breed can be found. It is agreed that when the Spanish arrived in the Canary Islands at the end of the 15th century, there was already a population of goats adapted to the environment which had been genetically isolated from the rest of the world. This population is considered to be the origin of the breed. Subsequently, as a result of the arrival of new ethnic groups on the island, it is possible to find features among the current island goats that are reminiscent of the Spanish Pirenaico or African Nubian stock.

#### **GENERAL FEATURES**

The Majorera breed is formed of longilinear animals, sub-hypermetric, straight or subconvex profile.

Their coats are multi-coloured with pigmented mucous membranes, they have short hair and the bucks often have manes. The head of these animals is large, with big ears, and the bucks have a beard and curved horns. The mammary glands are well-developed with black or slate pigmentation.

Disqualifiable defects include blue eyes, superior or inferior prognathism, defective general or regional structure, anomalies in the genital organs or mammary glands, loss of pigmentation on the coat or mucous membranes, long coarse hair, polled bucks and very small ears.

### PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

This breed from the Canary Islands Caprine Group has the highest level of milk production, reaching 2.6 litres per day of top-quality milk. The milk is used for the production of Majorero cheese.

In the Official Milk Controls, the average production recorded, in the population of Majorera goats controlled in Fuerteventura, was 551.32 kg of milk in 210 days. Individuals have been observed to produce as much as 1200 kg over 300 days.

#### **GEOGRAPHICAL DISTRIBUTION**

The animals of the Majorera breed are distributed all over the Canary Islands.



The average composition of the milk from the Majorera goat is: Fat = 3.94%; Protein - 3.90%; Casein - 3.10%; Lactose - 4.55%; Dry Extract - 13.19%.

The milk control population in Gran Canary had average productions, in 210 days of lactation, of: in a first birth doe - 352 kg; in secondbirth does - 497 kg; in third birth and more -530 kg.

Farms are formed of groups of approximately 200 animals, with one buck per 50 does.

# MALAGUEÑA



They are also known as the 'Costeña' goat, as they are most frequently found in the Mediterranean coastal regions of Andalusia. This is one of the most important milk-producing breeds in the world.

The Malagueña breed may be considered as one of the breeds of goat to have most influenced other mainland breeds, as it is found in many regions of Spain. It is extremely hardy and resistant to hot climates.

### **GENERAL FEATURES**

This includes animals with a straight or subconvex profile, eumetric and sublongilinear, with coats of varying colours, ranging from creamywhite to light brown and red, or to dark chestnut. They often have long hair on certain parts of the body, which have different names depending on the part of the body where they are located. The animals of both sexes may have horns, in some cases curving backwards, and in other, in spiral form. They often have wattles.

### PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The most important characteristics of this breed include good adaptation to the different farming systems and the high level of milk production, combined with extreme hardiness and their great prolificacy.

Most of the farms are maintained under a semiextensive model and are run by families.

The average production of the Malagueña goats, subject to the Official Milk Controls, registered in the Breed Herdbook, amounts in 210 days of lactation to: 400.29 kg of milk in first birth does, and 540.65 kg in second-birth and successive birth does. It should also be noted that there are records of individuals which have produced over 1000 litres in one lactation. The average composition of the milk from the Malagueña goat is: Fat = 5.35%; Protein - 3.96%; Lactose - 4.60%; Dry Extract - 14.18 %.

### **GEOGRAPHICAL DISTRIBUTION**

It is found all over Spain and Portugal and also in some countries of the Mediterranean Basin and in the north of Morocco. The largest populations are found in Andalusia, in particular in Malaga and the adjacent provinces.



Although it is particularly suited to milk production, the promotion of the production and consumption of by-products is on the rise. These include Cheese from Málaga and the Malagueño Suckling Goat, an animal reared with maternal milk, slaughtered at the age of 30 days and with a live weight of between 8 and 10 kg.

On analysing the reproductive qualities, it is found to be a breed with one of the highest fertility rates, as the does are permanently in polyestrous. This breed has a high rate of sexual precocity and prolificacy.

## MALLORQUINA



#### **GENERAL FEATURES**

It groups animals that show a great uniformity in morphological characteristics, despite the absence of selection in this regard, mainly due to the harsh and inaccessible environment of the area where the breed lives. They have a subconvex profile, medium size and longilinear proportions. Of strong constitution and nervous character. Animals of both sexes are provided with hugely developed horns; in the bucks in open spiral, and in the does frequently of aegagrus type, in backward arch. Bucks have a highly developed black 'beard' and 'tuft' also in black. Females, in some cases also have a less developed tuft, sometimes presenting a 'goatee'. Elongated trunk. Slightly arched ribs. Tight Belly. Strong and well muscled limbs. They coat is red with different shades (from the retinto (reddish) to the rubio (blond). On the other hand, they show black degradations in certain peripheral body areas. The weight is between 45 and 55 kg in does, and between 65 and 75 kg in bucks.

### PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Its productive orientation is limited to meat, also carrying out an important role in the cleaning of the mountain, ecosystem enrichment, and beautification of the landscape. Nowadays, this goat is also being oriented towards big game hunting in mountain areas. Regardingits main aptitude, meat production, it produces two slaughter commercial types: 'young goat' and the 'adult goat'. The first, the most important is an animal fed with milk and resources Named after the Island of Majorca. Some signs seem to indicate their ancestral representative as Capra Aegagrus. In any case, like other breeds of the Balearic archipelago, the Mallorquina goat has been influenced by the Goats of the Western Mediterranean Islands, being this influence favored by the intense trade that has traditionally existed between the aforementioned islands.

#### **GEOGRAPHICAL DISTRIBUTION**

Long ago it was spread throughout the island of Majorca; However, at the end of the 19th century, given the danger that this animal meant for the development of almond trees, which were in full expansion, it was displaced and concentrated in the 'Sierra de Tramontana', where it has lived in a semi-wild state without any man control and whose kids were object of sporting activity used as special food for hunters, shepherds and tourists. Nowadays, it is scattered throughout the geography of the island.



obtained in grazing accompanying the mother. It is slaughtered at about three months of age, with a live weight between 13 and 16 Kg., and a carcass yield close to 51%.

With respect to the new nuclei formed in low areas, controlled by man with a view to the recovery of the census of the breed, generally they are small holdings, frequently in scrubland areas, where the animals live in semi-extensive or mixed regime. In general, family farms, small in size (15-25 animals on average).

# MONCAÍNA



The Moncaina breed, also known as 'del Moncayo', takes its name from the region where it is farmed in the vicinity of Moncayo, a mountain range of the Sistema Iberico on the boundary of the provinces of Saragossa and Soria. The breed has been established as the result of interaction between the primitive Pirenaica breed with the autochthonous population of the regions near to Moncayo, and is considered as a variety of the primitive Pirenaico Group. It is also considered to be a close relative of the Guadarrama breed of goat

#### **GENERAL FEATURES**

This includes animals which are, on the whole, very beautiful, with a straight or slightly subconcave profile, eumetric and midline proportions. They have  $\alpha egagrus$  type horns which curve backwards. The animals of both sexes may have wattles. Well-developed body. Arched ribs. The coat is varied in colour, although black and darker tones are usually predominant, sometimes with degradations on different parts of the body. The body is covered with abundant long hair. The bucks have a very welldeveloped beard. The females sometimes have a goatee. The weight ranges between 55 and 65 kg in adult males and between 40 and 45 kg in the does.

### PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Although this is a dual-purpose breed (milkmeat), at present, it is mainly, and almost only, bred for meat. In this respect, the most important commercial type is the 'suckling kid', an animal fed on maternal milk, slaughtered at the age of 35-40 days with a live weight of 8-10 kg. The weight at birth is around 3.5 kg for the bucks and 3.0 kg for the does. The average daily weight gain, between birth and slaughter as a suckling kid, is between 150 and 180 g in the bucks and between 120 and 150 g in the does. The carcass performance of suckling kids is around 51%. Traditionally, it was also much appreciated for its aptitude as a milk producer.

#### **GEOGRAPHICAL DISTRIBUTION**

Although in the past, when the breed had a large number of animals, the Moncaína goat was found in different regions of Aragon, Navarre, La Rioja and part of Castilla y León, at present, the breeding area of the reduced number of animals remaining is almost entirely limited to the areas close to Moncayo.



It is farmed under an extensive system. The animals go out to graze every day and spend the night in the goat pen, where they receive supplementary feed, when the pastures are limited or the nutritional requirements increase. In general, they live in mountainous regions, with a complicated terrain. The climate is harsh with short cool summers and long winters with very low temperatures. Rainfall is limited and irregularly distributed. The size of the holdings varies, but remains small.

# MURCIANA-GRANADINA



The Murciana-Granadina breed takes its name from the provinces where it originally came from Phylogenetically, it comes from the Capra aegagrus, which in turn produced the Pirenaica goat. It is one of the four populations of domestic animals first defined in Spain, together with the Cerdo Ibérico, the Caballo Español and the Merino sheep, the four species clearly found in literature from the 15th century (Rodero et al.,1992).

### **GENERAL FEATURES**

This breed is formed by eumetric animals, of medium proportions with a tendency to long, and a subconcave profile with marked sexual dimorphism, thin limbs and good poise.

The coat is uniform, black or chestnut with dark or pinkish mucous membranes. Wattles are often present and both sexes may or may not have horns.

The mammary glands are characterised by being broad, voluminous, symmetric and with a broad insertion base.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The breeding of the Murciana-Granadina goat is mainly directed towards the production of milk. According to the figures of the Official Milk Control, the milk yields of the Murciana-Granadina goat are established for first-birth does, over 150 days of lactation, at 310 kg of milk, and for second-birth or successive birth does, over 210 days of lactation, at 513 kg of milk.

In addition, there are individuals which have produced 1300 kg of milk in 304 days of lactation. Most of the milk produced is used for the production of cheese. In this respect, it is important to note that in the Community of Murcia, there are two types of cheese covered by a Denomination of Origin: 'Queso de Murcia al Vino' and 'Queso de Murcia'. The average composition of the milk of the Murciana-Granadina goat is:

#### **GEOGRAPHICAL DISTRIBUTION**

The animals of the Murciana-Granadina breed are found mainly in the Autonomous Communities of Andalusia, Murcia, Valencia, Castilla-La Mancha, the Balearic Islands, Catalonia and Extremadura.



### Fat-5.5%; Protein-3.7%; Lactose-4.5%; Dry extract -14.1%.

They are farmed under an extensive regime, but an increase in the milk production in semiintensive and intensive farming systems has been observed, as the animals adapt well to these systems.

Meat production is secondary to milk production, obtaining the 'suckling kid' aged 25-30 days with a live weight of 7 to 9 kg or the 'caprino mayor' at the age of 50-60 days.

## NEGRA SERRANA



### **GENERAL FEATURES**

This is a large-sized autochthonous goat breed with good meat-production characteristics, consisting of animals with outstanding sexual dimorphism and exceptional hardiness, perfectly adapted to the harsh environment in which they live. They have a convex profile, with a tendency to longimorphosis and large size, although this can vary depending on the farming areas and the management system applied. They have well-developed spiral prisca-type horns. A characteristic feature of the breed is the presence of a dewlap, known as 'gorja', which is much more pronounced in animals living in Andalusia. The coat is black, although a number of animals have white hairs on the snout, ears and base of the tail. On the other hand, some animals, to be found almost exclusively in Andalusia, have a coat in varving shades of grey (a mixture of white and black hairs), which when lighter is called 'blue'. Elongated trunk, with arched ribs. Deep, protruding chest. Muscular hindquarters. In general, the weight of adult animals is 80 to 100 kg in males. and 60 to 80 kg in females. However, weights of over 125 kg have been found in males and 100 kg or more in females.

### PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The Negra Serrana goat has an excellent capacity for meat production in areas of medium difficulty, due to its perfect adaptation to the harsh environment in which it is farmed, its large size, the high birth weight of kids, its high growth weight and the good characteristics of the carcass. For this reason, the main purpose The name of this breed comes from the colour of the coat, mostly black, and the mountain areas where it is bred. It is also known locally as: 'Cabra Castiza' (pure or authentic goat), a name that refers to the fact that it is considered a 'good breed', based, according to breeders, on its particular gait and stance. On the basis of its morphological and phaneroptic characteristics, it could be deduced that it is descended from the 'Capra prisca', with the possible influence of other ethnic groups, such as the Nubian goat.

### **GEOGRAPHICAL DISTRIBUTION**

The geographical area of occupation is located at the confluence of the provinces of Ciudad Real, Albacete and Jaén, in the rugged areas of the foothills of Sierra Morena and Sierra de Alcaraz.



of its farming is meat production, which is based on the following three commercial types: 'suckling kid', 'goat' and 'adult goat'. At present, meat production is focusing more on the 'suckling kid', an animal fed mainly on mother's milk, slaughtered at 35-45 days of age, with a live weight of 8 to 10 kg.

It is farmed extensively. It lives on crags in rocky, wooded hills, where it is subject to rain, cold and high summer temperatures. Generally they are left outdoors on a continuous basis, day and night. In general, they are grouped in large herds averaging 500 to 600 goats, although there is great variability, with farms with more than a thousand heads to others with less than 100.

# PALMERA



The Palmera breed has its origin in the pre-Hispanic population on the island of La Palma. As this island is a stopover on sailing routes to America, the Palmera breed has been strongly influenced by the breeds of the southwest of the Iberian Peninsula.

### **GENERAL FEATURES**

The animals of this breed are characterised by being medium-sized, longilinear and balanced. The coat is red and may have different shades, becoming darker in the area of the limbs. The presence of pelisse, breeches, cloak and beard is common in both males and females.

The horns are spiral; very spectacular in males and more discreet in females. Coats without red colouration, the absence of long hair and beard, the presence of wattles, horns different from those characteristics of the breed and defects in the different body regions are considered unacceptable defects of the breed.

### PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

They are animals that adapt very well to rugged terrain and have good dairy qualities with high levels of alpha-casein, a very important milk protein in cheese making. The Palmera breed is therefore a good cheese producer, its milk being used to make Palmero Cheese, an excellent cheese with Protected Designation of Origin.

The official milk-production checks register an average yield, in the Palmera goat, of 326.6 kg of milk in a period of 210 days of lactation.

### **GEOGRAPHICAL DISTRIBUTION**

The animals of the Palmera breed are distributed all over the Canary archipelago



It has a prolonged production period, and lactation can last as long as 240-270 days. The average milk composition of the Palmera goat is: Fat -4.06%; Protein -4.21%; Casein -3.52%; Lactose -4.66%; Dry Extract -13,75%.

As a meat producer, the Palmera goat produces the suckling kid, slaughtered at around 14 days of age, fed exclusively on mother's milk and with a live weight of 5-6 kg. At present there is a tendency to increase the age of slaughter to 25 days with a weight of 8 kg.

# PAYOYA



### **GENERAL FEATURES**

This breed consists of animals of great sexual dimorphism, subconvex profile, elongated proportions and relatively large size. It has aegagrus-type horns, pointing backwards and open at the tips. It sometimes has wattles. 'Baggy' udders with divergent teats of a good size and pointing forwards and outwards. It has a highly varied coat (berrenda, berry, grey, floral, collalba, sesnegra (blackish), black and red spotted, cordonera, long-haired, brown, asphodel, among others). The hair is generally short, although sometimes it can have longer hair of the 'elbow' and 'breeches' type, more developed in males. Males have a well-developed beard. Females may also have small beards. The weight of the animals ranges from 70 to 90 kg in adult males and from 50 to 65 kg in females.

### PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The main purpose of farming the Payoya goat is milk production, given its high capacity in this regard. In this respect, it should be noted that the average production per goat in natural lactation (219 days on average) is 440 kg, at a rate of 2.09 kg/day. Some individuals have come to produce an average of over 550 litres per lactation. The estimated chemical composition of their milk is: Fat=4.20%; Protein=3.50%; Lactose=4.62%; Dry Extract=13.23%. The milk, for the most part, is intended for the manufacture of 'Payoyo' cheese. In this respect, it should be pointed out that the Protected Designation of Origin of 'Sierra de Cádiz and Serranía de Ronda Goat Cheese' is pending approval. The name Payoya has its origin in the municipality of Villaluenga del Rosario, in the province of Cadiz, cradle of the breed and important livestock centre, where the natives are called 'Payoyos'. In the Sierra de Ronda this breed is better known as 'Montejaqueña'. This population is autochthonous to the Serranía de Grazalema and considered the product of an ancient crossing between the Pyrenean Stock and the autochthonous goat population of the area.

### **GEOGRAPHICAL DISTRIBUTION**

Traditionally it has been farmed in the area of the current Natural Park of Sierra de Grazalema in Cadiz and in the Sierra de Ronda in Malaga. These areas, of great natural value, are characterised by their altitude, which ranges from 700 to 1600 m above sea level, and by high rainfall (the highest in Spain), sometimes having very thick and dense vegetation.



The Payoya goat breed follows a semi-extensive farming method, where grazing resources provide the major part of the diet. Goats take advantage of spontaneous pastures, stubble fields and fields sown for consumption by goats. In general, the high rainfall and the prevailing good temperature make the pastures grow very well, remaining in growth from October-November to May-June. The predominant type of farming is the family type. As for the size of farms, the average number of animals is around 330 females and 17 males.

# PIRENAICA



#### **GENERAL FEATURES**

This breed consists of eumetric animals of pronounced sexual dimorphism, with a straight profile and average proportions, with a tendency to elongation. Animals of both sexes may have large horns, in males pointing backwards and outwards, and in females of the aegagrus type, arching backwards. Polled animals occur with some frequency. They often have wattles. Long, broad trunk with arched ribs. The typical coat is of the Pyrenean type (black with breeches and cheeks), although grey and berrenda are accepted. The body is covered with long, thick hair. Males tend to have a beard. Females also usually have a small beard. It is typically medium to large-sized, with a weight ranging from 75 to 85 kg in males and 55 to 65 kg in females.

### PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The Pirenaica goat is dual-purpose: milk and meat. In this respect, although milk production was traditionally the primary purpose, today, for various reasons, the main purpose is meat production. In this regard, the predominant and almost sole commercial type is the suckling kid, an animal fed exclusively on mother's milk and slaughtered at the age of 30-40 days with a live weight of 8 to 10 kg. It also has a good capacity for milk production and can produce significant yields, although this is not fully taken advantage of due to the particular characteristics of the farming system and general handling applied. The Pirenaica breed owes its name to the Pyrenees, the place where it was formed from the goats that came to Spain from Central Europe and settled in this area. The current Pirenaica breed is considered to be a form stemming from the Capra aegagrus of purely European origin, without the influence of other prehistoric forms. When it arrived in Spain it was located in the Western or Atlantic Pyrenees, from where it later spread to the mountain massifs of the north and centre of the Peninsula. The primitive and original Pirenaica breed, in its spread throughout the peninsula, has given rise to breeds or groups of characteristics that vary according to geographical areas: the Moncayo goat, the Guadarrama goat and the Azpi Gorri breed, among others.

#### **GEOGRAPHICAL DISTRIBUTION**

Originally, the main area of occupation was the Central Pyrenees, primarily the north of Huesca, Saragossa, Navarre and Lleida. At present, the main population of the Pyrenean goat breed is found in the Aragonese Pyrenees.



It is farmed in mountain areas, where the main factor is the climate, with long, cold winters and short, temperate summers, due to the altitude and influence of the sea. The farming system is of the low-technology family type, with small farms of a low economic level. The number of animals in flocks is very variable, from 20-30 heads to 300 or more.

# RETINTA



### **GENERAL FEATURES**

This breed consists of eumetric to large-sized animals of pronounced sexual dimorphism, with a straight profile and average proportions. They have horns, usually of the corkscrew type. The presence of wattles is prevalent. Males sometimes have dewlaps. The coat is a uniform red colour, with different shades ranging from blond to brown and chestnut. Males have a beard and females sometimes have a small beard. The average weight for adult animals is 82 kg in males and 63 kg in females.

### PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

This is a dual-purpose breed: meat and milk; although the main purpose of its farming is currently meat production, focusing mainly on the following commercial types: 'suckling kid' and 'young goat'. The first is an animal fed on mother's milk, slaughtered at 35-40 days of age, with a live weight of 9-10 kg, and a slaughterhouse yield of around 50%. There is a great demand for this type of kid, which fetches high prices on the market. The second type, the young goat (chivo), consists of animals of both sexes that accompany their mothers in grazing and are slaughtered at 4-5 months of age with a live weight of 23-30 kg. This type of production is more common on farms that do not carry out milking. The birth weight of the kids is 3 to 3.5 kg. The average daily gain in kids of 35-40 days with 9-10 kg live weight is around 180 g in males and 160 g in females. Nowadays, milking is carried out, with greater yields than the traditional ones. In experimental tests carried out in flocks controlled during the lactation period of 110 days, after removing the offspring, an average

It owes its name to the red colour of its coat and to its farming in the fields of Extremadura, also being called 'Retinta Extremeña' or 'Retinta Cacereña'. There are signs that suggest that the prehistoric representative of this breed is the Capra aegagrus, but with some influence from the prisca type.

The Retinta goat breed has suffered a significant decline in the last 30-35 years, caused in part by the development of agriculture and intensive livestock farming, although the main cause is the difficulty of finding labour for herd husbandry. It is also necessary to take into account the crosses with other more productive breeds, resulting in their virtual disappearance by absorption.

Since May 6th ,2003, farmers have had the support of the Association of Goat Breeders of the Extremadura Retinta Breed (ACCRE), which in collaboration with the administration and the Faculty of Veterinary Medicine of the University of Caceres is undertaking a series of tasks for the recovery and conservation of the breed.

### **GEOGRAPHICAL DISTRIBUTION**

It occupies the central plains and the southern mountain ranges of Extremadura. At present, the Retinta goat population is spread over the two provinces of Extremadura, although an increasing number of pure-bred herds are appearing scattered throughout the province of Badajoz.



of 125 liters of milk with a fat content exceeding 5.0% has been obtained. Almost all Retinta goat's milk is used for cheese production.

# TINERFEÑA



Considered as a single population, recent molecular genetic studies show differences between the population in the north and south of the island. The current reduced populations of ecotypes in the north and south of the island have led to a recovery programme for both.

### **GENERAL FEATURES**

The population of the north of the island consists of sub-hypermetric, longilinear animals with a pronounced capacity for milk production. Large, elongated head, straight to subconvex profile, large, drooping ears. The horns are of the corkscrew type, emerging in parallel and then diverging. The predominant colours of the coat are black and brown. They always have a beard, quiff, wattles and long hair. The udders are globose and with dark pigmentations.

The population of the south of the island consists of generally medium-sized animals with longilinear proportions and a pronounced capacity for milk production. The head is mediumsized and short, with a straight profile, mediumsized ears and corkscrew horns. The coat is multicoloured, with black and chestnut being the predominant colours. The hair is short and can present an apron and long, coarse hair along the back. They may have a beard and quiff. Females have globose udders with dark pigmentation, small but with well-defined teats.

### PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Both populations have a pronounced milkproducing aptitude, meat production (kids and adults) being a secondary activity. As in the whole of the Canary archipelago, adult goat meat is a major economic input for farms, due to the high level of consumption of this type of meat on all the islands.

The production systems on farms in the north are characterised by the use of grazing on a semi-extensive basis. In contrast, in the south, the animals are farmed intenstively. As for milk

#### **GEOGRAPHICAL DISTRIBUTION**

Both ecotypes are found primarily in Tenerife. The population in the north of the island is adapted to a colder and more humid climate, while the one in the south supports a more arid climate, typical of this part of the island.



production, they provide good yields considering that the goats are milked only once a day, as it is customary on the islands. According to data provided by the Department of Agriculture, Livestock, Fisheries and Food of the Canary Islands Government, the northern ecotype for females with two or more births produces an average of 348.72 kg of milk in 180 days of lactation (5.03 % fat and 4.03 % protein); while the southern ecotype produces 345.35 kg of milk in 183 days (5.11 % fat and 4.01 % protein).

# VERATA



### **GENERAL FEATURES**

This breed consists of eumetric animals with pronounced sexual dimorphism, with a straight or subconcave profile, of average to short proportions. Well-developed predominantly corkscrew-type horns. They may also have aegagrus type horns, although their presence is limited to a small number of animals, generally females. Well-developed trunk. Arched ribs. The udders are well-developed. Generally dark, brown or black coat, with unpigmented areas with white hairs in ears and snout. It has an estimated live weight of 70 to 80 kg in adult males and 45 to 55 kg in females.

### PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Dual-purpose goat (milk-meat). It has excellent meat-production qualities, thanks to the high growth rate of the kids, the high carcass yields and the excellent quality of the meat. The commercial type of animal used is the 'suckling kid', fed with mother's milk and slaughtered at the age of 35-40 days, with a live weight of 9 to 11 kg, which has become very famous for its excellent quality.

The main purpose of the farming of the Verata goat is milk production. In this regard, it is typically highly variable, both at the farm and individual level, as a result, apart from the genetic factors arising from the absence of selection, of the management system applied. With regard to the quality of the milk, some describe it as 'dense, fatty and very aromatic', its composition being characterised by a fat content of 5.42%, protein content of 3.74% and dry extract content of 13.66%. In the production areas, a high The name 'Verata' has its origin in 'La Vera', a region in the northeast of the province of Cáceres considered to be the cradle of the breed, where for a long time the main population of goats has remained.

It has also been called 'Castilian Goat' and 'Goat of the Mountains of Toledo'. All indications are that the breed is an ancient heterozygous product.

### **GEOGRAPHICAL DISTRIBUTION**

Traditionally, the area of occupation of the Verata breed has been at the confluence of the provinces of Cáceres, Ávila and Toledo, in the so-called 'Spanish Depression of the Tagus river', bounded to the north by the westernmost part of the Central System, and to the south by the Toledo Mountains. In recent decades there has been a movement of the breed from the area of origin, La Vera, to the region of Navalmoral de la Mata (Cáceres), in the area of 'Los Ibores'.



quality cheese is produced, similar to that of Ibores, called 'Queso de la Vera', made from the milk of this breed.

The estimated flock size is 100 to 150 goats, although in recent years these figures have increased. In general, new farms have a much larger flock size, some even exceeding 1,000 heads.

### PORCINE

Chato Murciano Duroc Euskal Txerria Gochu Asturcelta Ibérico Ibérico (variedad Entrepelado) Ibérico (variedad Lampiño) Ibérico (variedad Manchado de Jabugo) Ibérico (variedad Retinto) Ibérico (variedad Torbiscal) Landrace Large White Negra Canaria Pietrain Porc Negre Mallorquí Porco Celta



# CHATO MURCIANO



#### **GENERAL FEATURES**

These are eumetric, longilinear animals with a distinctly concave nasal profile. Medium-sized, robust, triangular head. Large, strong, thick snout with a face sloping from front to back and from bottom to top. Medium-sized, erect or vertical, triangular ears fringed with hair. Short, strong, wide neck. Deep, broad chest. Rounded trunk of medium length. Wide, slightly concave, well-muscled and fatty back. Medium, strong and muscular loin. Slightly concave dorsolumbar line. Broad, horizontal or slightly droopy rump. Highly placed tail. Short, strong and wellpoised limbs. Uniform black coat, except for some specimens that may have white patches at the ends of the four limbs, shout and forehead. Long, strong, black but not very abundant hair. Thick skin, with typical folds in the region of the ribs.

### PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The average number of piglets per farrowing is 7.66 (6.68 live and 0.97 dead). The average birth weight is 1.41 kg, with differences depending on the size of the litter. The average weight at weaning, around 26 days, is about 6.6 kg per animal. In post-weaning growth, from 60 to 300 days of life of the animals, the results give an average final live weight of 140 kg at a growth rate of approximately 477.5 grams/day. In terms of slaughterhouse yield, the breed shows levels of over 83%. The yield in fine cuts such as cured ham is around 19.7 kg Its name comes from its shortened face, with convergent craniofacial axes, and its particular location in the Region of Murcia, where it was considered practically extinct and is being recovered and reintroduced thanks to a successful conservation programme. Its origin is in the Mediterranean stock, from which a primitive Murcia breed or Murcia pig was formed, whose farming was always linked to Levante market gardens. The formation of the current Chato Murciano was the natural result of the development of the meat industries in the area, which led to the spread of a type of pig improved by crossing the primitive Murcia pig with imported foreign breeds, especially the Yorkshire, Berkshire, Tamworth, Craonés and Alderney, as well as with the Colorado Extremeño.

#### **GEOGRAPHICAL DISTRIBUTION**

More than 98% of the animals are located in their region of origin, Murcia, the existence of two small herds of females having been discovered in Andalusia and Catalonia.



Currently it is farmed intensively. However, there are some breeders who have family-type farms with a tendency to establish outdoor breeding programmes for environmental and animal welfare reasons.

# DUROC



### **GENERAL FEATURES**

The Duroc breed consists of animals of medium size and length, with long hair, brick red skin and ears of medium length with the tips pointing downwards without hindering vision. The trunk is of medium length, deep and arched. The limbs are long, thinnish and straight with strong black hooves.

### PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The animals of this breed are characterised by their hardiness and good adaptation to hot climates. They stand out, in terms of production, for providing quality meat, the products of their crosses having increased infiltrated fat. The breed is used as an animal base for Iberian products and for industrial or white pigs, different maximum percentages of crossing with Duroc being admitted depending on the product.

In breeding terms, it stands out for its high prolificacy, being used in paternal line and maternal line crosses. The breed has its origin in the United States, and is now widely distributed throughout Europe.



The animals of the Duroc breed are distributed all over the country, especially in Extremadura and Catalonia.



# EUSKAL TXERRIA



### **GENERAL FEATURES**

This breed consists of eumetric, sub-longilinear animals with a subconcave profile. Mediumsized head, broad, long, drooping ears, completely covering the eyes. Very young individuals have wrinkles at the back of the face, which disappear as they become adults. Short, powerful neck, with pronounced snout. Slightly saddled dorsolumbar line, with the rump higher than the withers. Not very pronounced chest, slightly flattened thorax, with very deep, arched ribs, which give it great breathing capacity.

The front and rear limbs are short but with good bone development, slightly elongated with respect to body proportions. The coat is ginger, with blond or reddish shades with a tendency to greyish white in the trunk and abdomen, as well as in the front and rear limbs, from the knee to the hoof; and darker shades in the head and even the neck.

### PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

This pig breed is characterised by being hardy, late developing, with a docile nature, and well adapted to extensive grazing conditions. These pigs live in the wild and feed naturally on beech nuts, acorns, chestnuts, hazelnuts and forest grass. Their diet is only regulated in the two months prior to slaughter, when they are fed grain, beans and cereal. The fattening continues until a weight of about 120 kilos is reached.

Its main purpose is meat production; the muscle mass of the rump is pronounced, giving it a rounded shape and resulting in a good 'maza' (more infiltrated muscle masses). A wide The Euskal Txerria is the only pig breed in the Basque Country that is not extinct. It has its origin in the western part of the Pyrenees, coming from the Celtic Stock. This population is related to the now extinct breeds, Chato Vitoriano and Baztanesa.

### **GEOGRAPHICAL DISTRIBUTION**

The breed is currently distributed in different areas of the Basque Country and Navarre.



range of traditional products is obtained in the Basque Country from this pig, which during recent decades, as a result of the influx of foreign products, had almost disappeared. However, today, their production is gradually recovering, thanks to the support and work of the breeders. Products include the region's Chorizo, also known as Txorizoa, the Cular, the Semicular (types of sausage) and the Chorizo for stewing, boiling or frying, which has a long tradition and history in the Basque Country. Txistorra or chistorra (another type of sausage) is also produced in areas of Navarre and Guipuzkoa and Saturday chistorra, as well as rice black pudding and leek black pudding (Odolkis) and salchichon (salami type sausage), which are almost all manufactured industrially, mainly in Guipuzkoa, Rioja Alavesa and areas of Navarre. One of the characteristics of these Basque Country sausages is that the percentage of fat should not exceed 20%. Other products include sausages, marinated and stuffed pork loin, ham, pinchos (Pintxos) (brochettes), cheek, snout and ears, limbs, tails and suckling piq.

# GOCHU ASTURCELTA



As its name indicates, this is the pig breed autochthonous to the Principality of Asturias, also being phylogenetically linked to a population attached to the old Celtic Stock. Although the breed was thought to have become extinct a few decades ago, the recovery work that has been carried out since 2005 has allowed a substantial increase in the population of the breed.



#### **GENERAL FEATURES**

They are animals with a subconcave profile and a large, wide, elongated head. Long, drooping, forward-facing ears. Wide face. Long, narrow neck. Long trunk, flat ribs, with a somewhat arched and narrow dorsolumbar line. Drooping rump. Tight belly. Hardy-type musculature. Thick skin with abundant long, strong bristles. Long, bony legs. Very long, straight tail with bristles at the end. The colour of these animals is prietu (black), white and pezu or brazalbo (with spots), never red. In terms of height, it can reach 100 cm. Adult animals weigh 180 to 230 kg in females and 230 to 280 kg in males.

### PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The main aptitude of the breed is meat production in extensive farming systems, where, in the fattening phase, the animals are generally finished using the natural resources of their environment, resulting in high quality meat.

Because of its hardiness and adaptation to the environment in which it lives, the breed is reared outdoors, in low-cost farming systems that attempt to optimise the use of the natural resources of the environment through grazing, supplemented by additional rations based on cereals and legumes, usually in the form of cake or flour. The best fattening is achieved with the use of acorns, chestnuts and other forest products, which are largely responsible for achieving the high quality of the meat that these animals provide.

#### **GEOGRAPHICAL DISTRIBUTION**

In the past, the breed was distributed throughout the region of Asturias. After having gone through a truly critical period, the breed is well on the way to recovery and is currently present in 60 of the 78 municipalities that make up the Principality of Asturias.



The products obtained after the slaughter of the Gochu Arturcelta are intended for smoking or by salting (brine). The smoked products include the following types of sausage: Chorizos, Chorizos Sabadiegos, Llonganiza, Morcielles, Andolla, Choscu or Xuan, Butiellu or Xuanicu, Xuanón, Costiella and Rabadal. The salted products include: Tocín (bacon), Xamones (hams), Llacones (shoulder) and Calamocha (head).

# IBÉRICO



#### **GENERAL FEATURES**

In general, the animals of this breed are of medium size, pigmented skin, with variations ranging from intense black to blond or brown, fine, sparse hair (semi-hairless varieties) or no hair (hairless varieties). In good specimens, the back, rump and hams must have well-developed musculature. Their limbs are thin, strong and with uniform, dark-coloured hooves, except for some exceptions in certain varieties. A more complete and revised definition of the breed is the one contained in the Herdbook Regulations.

Iberian ham and shoulders have the following Protected Designations of Origin: Guijuelo, Dehesa de Extremadura, Jabugo and Los Pedroches. In addition, the marketing of its products in Spain is covered by the Quality Standard for Iberian meat, ham, shoulder and sirloin.

### PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Since its origins, the Iberian pig breed has been linked to extensive production systems and, more specifically, to the use of the natural resources of the wooded pasture. The union of this autochthonous breed and the pasture form a combination that could be considered World Heritage.

Iberian pigs are adipogenic animals, with a tendency to store large fat deposits, which infiltrate the muscle mass resulting in their characteristic fat infiltration, not necessarily appreciable to the naked eye, which gives their meat an incomparable smoothness, texture and aroma. The Iberian pig breed has characteristics that make it different in morphology to any other specimen of the pig species and give it a unique identity, despite the diversity between individuals and Iberian varieties. The Iberian pig breed has its origin in the Mediterranean subspecies of the wild boar (sus scrofa mediterraneus) and extends through the central, southern and western areas of the Peninsula.

### **GEOGRAPHICAL DISTRIBUTION**

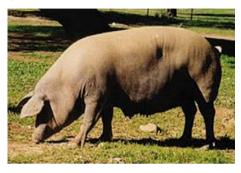
Traditionally limited to the southwest of the Iberian Peninsula, coinciding with the region of wooded pastureland, its largest population is confined to the Spanish provinces of Salamanca, Cáceres, Badajoz, Ciudad Real, Toledo, Seville, Córdoba, Huelva, Cádiz and Málaga.



They are rather anabolic and late developing, with higher conversion rates than those of white breeds. They are also very hardy and adaptable to the harsh environmental conditions of their traditional breeding area.

The quality products that come from the Iberian pig include fine cured cuts: ham, shoulder and loin. The following are also highly appreciated for fresh consumption due to their succulence: the tenderloin, the sirloin and the top loin, as well as other smaller cuts with suggestive names such as the secreto (secret), the pluma (feather), the castañuela (castanet), the lagarto (lizard) or the sorpresa (surprise).

# IBÉRICO (VARIEDAD ENTREPELADO)



### **GENERAL FEATURES**

The general appearance of this variety is that of a hybrid resulting from a cross between the Hairless and Brown varieties, being a little more precocious and less fatty than the Hairless, but without reaching the levels of the Retinto. It stands out for the fineness of its conformation. Hair is sparse and the skin colour brown (retinta) or black at birth. Adult specimens have an intense matte black colouring. The hair is sparse but with an evident increase in density along the spine. It also has thin legs.

### PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The farming system for this variety is the same as that used for the rest of the Iberian pig population. What distinguishes it from other pig breeds is its high slaughter weight and the use of the natural resources of the pastureland (grass and acorns) during the grazing of the animals fattened on an extensive basis.

The Iberian pig breed is farmed using extensive, semi-extensive and intensive systems. The Iberian pig farmed extensively develops over time and in the wild. It feeds by grazing, exercising its muscles, while contributing to the development and conservation of the pastureland.

The semi-extensive system speeds up production to varying degrees compared to the traditional system, using concentrates and a higher degree of confinement of the animals, although it always has a territorial base and a large area of pasture that makes it possible, in many cases, to produce fattened pigs of very good quality. The Entrepelado (in Spanish, Semi-hairless) variety of the Iberian pig breed, recognized in the Official Catalogue of livestock Breeds of Spain, is the result of a cross between two other varieties of this breed, Brown and Hairless, and therefore shows intermediate characteristics between the two.

#### **GEOGRAPHICAL DISTRIBUTION**

Although the origin of the Semi-hairless variety is located in the traditional breeding area of the Iberian pig (southwest of the Peninsula), there are currently specimens with their characteristics throughout the country. It is the most abundant variety after the Brown and is distributed mainly in Salamanca, Cáceres, Badajoz, Seville, Huelva and especially in the Sierra de Córdoba.



The intensive system is the model that increasingly uses facilities and processes similar to those used with white pigs, although in some traditional regions such as Extremadura, Andalusia or Castilla y León, this type of farming is still established on a territorial basis, so that, in some of its production phases, suckling piglets, piglets, young pigs or breeders exercise in parks or even in larger territories, although they are fed on concentrates.

# IBÉRICO (VARIEDAD LAMPIÑO)



The breed takes its name from the place where it has been farmed for centuries, the Iberian Peninsula. The Iberian pig is the clearest representative of the extensively farmed pig in Spain, the traditional support of one of the most important ecosystems of the Mediterranean forest, the meadows.

### **GENERAL FEATURES**

The Lampiño (in Spanish, hairless) variety shows less precocity and body development than the other varieties, also having a greater tendency to fat accumulation. It is characterised by the complete absence of hair or, occasionally, very sparse, fine hair, with numerous skin folds, especially in the frontal region. The skin is thin and the colour of its coat has different shades, varying from deep black to a lighter, slate-like shade. It has a well-proportioned head, small forehead, broad, drooping ears, a distinctly elongated snout, sometimes with a white patch where it meets the face. The limbs are shorter, ranging from very thin to rather thicker.

### PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The Iberian pig, as a breed, has always been linked to extensive productive systems and more specifically to the exceptional use of the natural resources of the wooded meadows. The union of this ancient autochthonous breed and the pasture form a combination that should be considered World Heritage.

Iberian pigs are adipogenic animals, with a tendency to store large fat deposits. These fat deposits infiltrate the muscle mass, resulting in their characteristic fat infiltration, not necessarily appreciable to the naked eye, which gives their meat an incomparable smoothness, texture and aroma. They are rather anabolic and late developing, with higher conversion rates than those of white breeds. They are also very hardy and adaptable to the harsh environmental conditions of their traditional breeding area.

### **GEOGRAPHICAL DISTRIBUTION**

The variety Lampiño can be found at certain points of almost all the traditional breeding provinces of the Iberian pig: Salamanca, Cáceres, Badajoz, Huelva, Seville, Cordoba...



The quality products that come from the Iberian pig include the fine cured cuts: ham, shoulder and loin. The following are also highly appreciated for fresh consumption due to their succulence: the tenderloin, the sirloin and the top loin, as well as other smaller cuts with suggestive names such as the secreto (secret), the pluma (feather), the castañuela (castanet), the lagarto (lizard) or the sorpresa (surprise).

# IBÉRICO (VARIEDAD MANCHADO DE JABUGO)



The breed takes its name from the place where it has been farmed for centuries, the Iberian Peninsula. The Iberian pig is the clearest representative of the extensively farmed pig in Spain, the traditional support of one of the most important ecosystems of the Mediterranean forest, the pastureland.

### **GENERAL FEATURES**

The Manchado de Jabugo variety emerged around the second half of the nineteenth century, in the province of Huelva, from various crosses between black and red varieties of the Iberian breed, with the involvement also of certain foreign populations. With a mesocephalic cephalic index, that is to say, the length and width of the head are very similar, unlike the other varieties of the breed, which have a tendency to dolichocephaly (long head). The coat is always blond with the presence of irregularly distributed black and red patches. The hooves are generally light coloured. The hair is always very abundant.

### PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The Iberian pig, as a breed, has always been linked to extensive productive systems and more specifically to the exceptional use of the natural resources of the wooded meadows. The union of this ancient autochthonous breed and the pasture form a combination that should be considered World Heritage.

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### **GEOGRAPHICAL DISTRIBUTION**

The Manchado de Jabugo pig is found exclusively in certain farms in the province of Huelva, its main herds being those kept by the Provincial Council in the towns of Galaroza and El Almendro.



The quality products that come from the Iberian pig include the fine cured cuts: ham, shoulder and loin. The following are also highly appreciated for fresh consumption due to their succulence: the tenderloin, the sirloin and the top loin, as well as other smaller cuts with suggestive names such as the secreto (secret), the pluma (feather), the castañuela (castanet), the lagarto (lizard) or the sorpresa (surprise).

# IBÉRICO (VARIEDAD RETINTO)



#### **GENERAL FEATURES**

The distinctive feature of this variety is the uniform brown (retinto) shade of the coat, although there may be variations in colour ranging from dark red to almost blond. It has fine hairs spread evenly over the body. As the most representative variety of the current population of Iberian pigs, they are the specimens with the characteristics most consistent with the standard for the breed: animals of medium size, light, lively and with ease of movement, always with pigmented skin and fine, sparse hair. The face is not wide and the snout is strong and elongated, with forward and downward facing ears. The limbs are thin but strong. Some specimens may have wattles.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The farming system for this variety is the same as that of the rest of the Iberian pig population. What distinguishes it from other pig breeds is its high slaughter weight and the use of the natural resources of the meadows (grass and acorns) during the grazing of the animals fattened on an extensive basis. The Iberian pig breed is farmed using extensive, semi-extensive and intensive systems. The Iberian pig farmed extensively develops over time and in the wild. It feeds by grazing, exercising its muscles, while contributing to the development and conservation of the pastureland.

The semi-extensive system speeds up production to varying degrees compared to the traditional system, using concentrates and a higher degree of confine ment of the animals, although it always has a territorial base and a The retinta or Colorada variety is currently the most widespread, with coats of varying shades, from pale cinnamon-coloured to dark brown, from which it takes its name. These animals always have bristles of the same colour as the skin.

#### **GEOGRAPHICAL DISTRIBUTION**

The Brown variety of the Iberian pig was traditionally found scattered throughout southwestern Spain, from southern Zamora to the Andalusian provinces of Cadiz and Malaga spreading through the centre of the country to Toledo and Ciudad Real. Today, it can be found beyond the traditional production area, being present in virtually all the Autonomous Regions of the country.



large area of pasture that makes it possible, in many cases, to produce fattened pigs of very good quality.

The intensive system is the model that increasingly uses facilities and processes similar to those used with white pigs, although in some traditional regions such as Extremadura, Andalusia or Castilla y León, this type of farming is still established on a territorial basis, so that, in some of its production phases, suckling piglets, piglets, young pigs or breeders exercise in parks or even in larger territories, although they are fed on concentrates.

# **IBÉRICO** (VARIEDAD TORBISCAL)



#### **GENERAL FEATURES**

The Torbiscal variety comes from the crossing of four other strains of Iberian pig (Ervideira and Caldeira from Portugal and Čampanario and Puebla from Extremadura), which in 1944 formed the founding herd of El Dehesón del Encinar (Torralba de Oropesa, Toledo). They are very resistant animals of greater height and greater prolificacy due to the vigour resulting from their hybrid origin. This variety has abundant bristles, whose colour ranges from dark blond to bright reddish brown. The shade of the skin can also range from light to dark, and their hooves are not always of a uniform dark colour, occasionally showing depigmented areas. They have a characteristic head in which the length of the ears and snout stand out. They have a corrected dorsolumbar line, with areater length and straightness. The limbs are thicker than in other varieties

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The Iberian pig, as a breed, has always been linked to extensive productive systems and more specifically to the exceptional use of the natural resources of the wooded meadows. The union of this ancient autochthonous breed and the pasture form a combination that should be considered World Heritage.

Iberian pigs are adipogenic animals, with a tendency to store large fat deposits. These fat deposits infiltrate the muscle mass, resulting in their characteristic fat infiltration, not necessarily appreciable to the naked eye, which gives their meat an incomparable smoothness, texture and aroma. They are rather anabolic and late The breed takes its name from the place where it has been farmed for centuries, the Iberian Peninsula. The Iberian pig is the clearest representative of the extensively farmed pig in Spain, the traditional support of one of the most important ecosystems of the Mediterranean forest, the meadows.

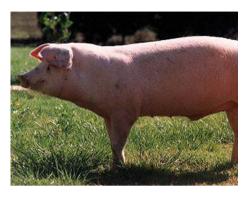
#### **GEOGRAPHICAL DISTRIBUTION**

The Torbiscal variety is found in just a few dozen farms in the Autonomous Regions of Extremadura, Andalusia, Castilla-La Mancha and Castilla y León. The continuity of the original public herd of El Dehesón del Encinar should be noted.



developing, with higher conversion rates than those of white breeds. They are also very hardy and adaptable to the harsh environmental conditions of their traditional breeding area. The quality products that come from the Iberian pig include the fine cured cuts: ham, shoulder and loin. The following are also highly appreciated for fresh consumption due to their succulence: the tenderloin, the sirloin and the top loin, as well as other smaller cuts with suggestive names such as the secreto (secret), the pluma (feather), the castañuela (castanet), the lagarto (lizard) or the sorpresa (surprise).

# LANDRACE



The Landrace breed is of Danish origin, and thanks to its excellent adaptation to the environment and its use as a basis for hybridisation programmes, it is currently widely distributed in Spain.

It is a breed used in the meat industry for its good carcass yield, the production of wellformed hams and the quality of its meat.

#### **GENERAL FEATURES**

These are medium-sized, white coat animals (exceptionally some small black or blue spots may be tolerated, provided that the hair covering them is white). The head is of medium length, with not very long, forward-facing ears almost completely covering the animal's eyes.

They have well-developed musculature are characterised by their elongated form with 16 to 17 pairs of ribs, compared to other breeds that have 14.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The animals of this breed stand out for their good behaviour and adaptability to adverse conditions. They have a good average daily weight gain and feed conversion, with a low level of fat accumulation, being considered a lean breed.

This breed is used as a pure line, either maternal or paternal, and has a high carcass yield and a tendency to produce PSE (pale, soft, exudative) meats. The Landrace breed is an important genetic base in the Spanish market and is authorised for the production of cured products, such as Trévelez ham and Teruel ham, as well as fresh and processed products.

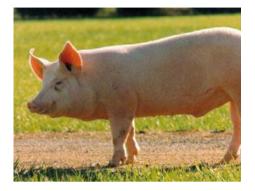
#### **GEOGRAPHICAL DISTRIBUTION**

There is a large population of animals of this breed on Spanish pig farms. Their distribution covers the entire country.



It is the most widely used breed for industrial crosses to produce pigs for slaughter for the domestic and catering markets.

# LARGE WHITE



This breed has its origins in England. The Large White breed improves the quality of meat when used in crosses and rarely produces PSE (pale, soft, exudative) meat.



#### **GENERAL FEATURES**

The animals of the Large White breed, as its name indicates, are white (exceptionally some small black patches may be tolerated, provided that the hair covering them is white).

They are well-formed with strong bones, their length is medium to long, their hair is not particularly strong and their heads are medium sized with small upright ears, with the tips facing inwards or slightly forwards.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

In terms of breeding, their high fertility, prolificacy and good maternal aptitude and attitude (calm temperament, care of offspring, milk yield, etc.) make them very attractive both for pure breeding and for cross-breeding as a maternal line.

They are used in hybridisation programmes, resulting in strains with a higher percentage of lean meat in the carcass. They are used primarily as a maternal line for crossbreeding, being the main genetic base used in Spanish farms.

#### **GEOGRAPHICAL DISTRIBUTION**

The Large White breed is distributed throughout the country.



This breed offers good fattening performance and high-quality meat.

In commercial terms, it is one of the three breeds authorised to produce Trévelez ham.

# NEGRA CANARIA



It is named after the archipelago where it lives, being the only pig breed autochthonous to these islands. According to the archaeological remains found, pigs have been present in the Canary Islands for more than ten 2,500 years. However, most authors claim that they arrived with the first inhabitants of the islands from North Africa, today being the last remnant of the pig populations that inhabited the north of that continent.

#### **GENERAL FEATURES**

Hardy, generally medium-sized animals with an ultraconcave cephalic profile. They have large, drooping ears. Very deep but not very pronounced thorax with flat ribs. The back and loins are elongated and relatively wide, with a rectilinear dorsolumbar line. The rump tends to droop and the hams are characterised by a somewhat narrow buttock. Short, thin limbs. Leathery, scaly skin, with numerous wrinkles all over the body surface. They have abundant, long, strong, evenly distributed hair. The colour of the coat is always black, although they may sometimes have paler patches in the distal areas of the limbs, on the forehead and even belly, due to crosses with other pig breeds in the past.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Outstanding prolificacy, with 8 to 12 piglets per farrowing. Their growth rates, although not comparable to those of other breeds, are quite reasonable in relation to the breeding system to which they are subjected.

The farming of the breed in the islands has been linked to the family economy and characterised by a very small number of animals (just 1 or 2 breeders per family). Currently, the products of this pig are undergoing a boom in Canarian culinary initiatives, with the emergence of an incipient market. The demand for products from this unique ethnic group is much greater than the supply. The conservation programme aimes to increase the population by means of contracts for the transfer of pure-bred animals to new stockbreeders.

#### **GEOGRAPHICAL DISTRIBUTION**

Currently, it can be found in Gran Canaria, Tenerife and La Palma. Its presence in Fuerteventura, El Hierro, La Gomera and Lanzarote is insignificant.



The survival of the breed has always been linked to the multipurpose nature of Canary Islands agriculture, based primarily on the use of agricultural by-products and livestock that are obtained on family farms.

The products of the Canary Black Pig are: suckling pigs (4 to 5 kg/carcass) or piglets fattened up to 8-9 months with a weight of 90 kg/ carcass. The dishes include roast suckling pig, suckling pig stew, shoulder of suckling pig and roast leg of pork; and the sausages include the sweet black pudding and Teror chorizo.

# PIETRAIN



The Pietrain breed, which originated in the town of Pietrain (Belgium), was on the verge of extinction during the Second World War because of its characteristic lack of fat. The Pietrain breed was officially recognised as an integrated breed in Spain in 1988, its breed characteristics being defined and its Herdbook established.

Its origin is found in the well-formed Norman pigs and in a genetic mutation in 80% of the breed. The improvement in the breed was carried out by eight selection and performance stations in Belgium.

# Sourcine Source So

#### **GENERAL FEATURES**

Short length pigs with wide, muscular backs. The characteristic colour of the breed is white with black spots distributed irregularly over the body of the animal. Around the black spots are rings characteristic of the light pigmentation of white hair. The head is relatively light and short with a moderately wide forehead, a straight or slightly concave profile, and a broad, straight muzzle. The ears are short, wide and face forwards and upwards.

The trunk is wide, cylindrical and not too deep. The shoulders are muscular. The withers are wide, and the back is long, straight, wide and flat. The legs have great muscle development and the rump descends to the tip of the hock. The belly is parallel to the back.

The limbs are short and thin. The hooves are closed.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The Pietrain breed is considered one of the most muscular in the world. It adapts well to Spanish farming methods and has good finishing qualities, as it transmits to the offspring a high percentage of meat, a higher proportion of fine cuts and an improvement in the commercial classification.

#### **GEOGRAPHICAL DISTRIBUTION**

It is a very common breed in Spain, both for its geographical distribution and in terms of population.



However, the animals of this breed have poor growth parameters (good up to 75 kg), low prolificacy and often PSE (pale, soft, exudative) meat.

Its production is therefore geared towards fresh produce, producing carcasses with yields of 72-75%.

# PORC NEGRE MALLORQUÍ



#### **GENERAL FEATURES**

This breed consists of harmonious, eumetric, middleline animals with a subconcave frontonasal profile. Medium-sized, slim, medium-length head. Not very large, forward-facing ears, significantly tilted in relation to the longitudinal line of the head. Short, wide, muscular neck, with a pair of large wattles, typical features of the breed. Relatively straight back. Broad, not too deep chest, with arched ribs. Long, broad and somewhat drooping rump. Buttocks long and not too wide. Thin, curly, high-set tail. Relatively short, thin limbs. The animals are slate grey in colour. The specimens with more bristles are called 'cerruts', while those with less are called 'pelats'. A noteworthy feature of the breed is that 81% of the population has only 10 teats.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The productivity of the breed is lower compared to other breeds and crosses typical of intensive production. This population has an estimated average of 2.13 farrowings per animal per year, which represents 12.8 weaned piglets per sow per year. This breed's suckling pig is slaughtered with a live weight of 10 to 12 kg in order to meet market requirements.

This breed has been preserved thanks to its use in the traditional production of Black Pig Majorcan Sobrasada, a sausage recognised with a Protected Geographical Designation. The animals are raised extensively, grazing on stubble, cereals and under fig trees, carob trees and scrubland until they reach the age of one year and are slaughtered at a live weight of over 130 kg. The name of this breed comes from the geographical region it occupies and the colour of its coat. It is the only autochthonous pig breed on the island it is named after, where it is known as the Porc Negre Mallorquí.

#### **GEOGRAPHICAL DISTRIBUTION**

Until the first half of the twentieth century the hegemony of the breed was almost absolute, accounting for 97% of the pig population of the Balearic Islands. After that, the population of the breed began to decrease due to the introduction of other breeds, indiscriminate crossbreeding, or the cessation of activity by many breeders. In the 1990's breeding began to increase and there are currently a total of 64 farms, with an average of 18 breeding animals, spread over the island of Majorca.



There are currently three types of farms depending on their productive focus: breeding, fattening and mixed. The handling and diet of the animals has remained virtually unchanged since the beginning of the 20th century.

# **PORCO CELTA**



#### **GENERAL FEATURES**

The breed consists of eumetric, longilinear animals. Large, wide, elongated head, with a wide, flat forehead and a wide and thick face. Big. drooping ears covering the small eves. Long narrow neck. Well-developed skeletal and muscular system, especially in the anterior third. Narrow, arched back and loins. Drooping rump, depressed ribs. Tight belly. Elongated limbs. There are three different varieties. On the one hand the Santiago variety, located in the central strip of Galicia; this ecotype has the pinkish white skin, covered with abundant, long, strong bristles. In the province of Ourense to the south of Galicia, up to the border with Portugal, is the Barcina variety (with slatecoloured spots). Then there is the Carballina variety, located in the region of Carballo (La Coruña and surrounding areas), with a glossy black coat, which sometimes covers almost the whole body.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The meat of this breed, taking into account the parameters of colour, juiciness and hardness, has proven to have very satisfactory characteristics for both fresh consumption and for the preparation of semi-processed, processed and cured products. The carcass yield of the fattened pig, with a live weight of 130 to 150 kg, is 77.67%. The average weight of piglets at birth is 1,750 g in males and 1,491 gr in females and their growth rate until weaning (60 days) is 312 g in males and 285 g in females. The breed takes its name from the original stock from which different ethnic groups have developed in Europe, the Celtic Stock, which descends from Sus scrofa ferus.

#### **GEOGRAPHICAL DISTRIBUTION**

Currently the animals of the breed are mainly to be found on small farms in different parts of Galicia, with some extensive industrial farms with areas of more than 100 hectares.



Traditionally the breed has been farmed on an extensive or, at least, semi-extensive basis. It is characterised by its hardiness, being perfectly adapted to the environment in which it is reared, grazing and feeding on seasonal natural resources such as acorns, chestnuts and different types of vegetables from the extensive and rich Galician forests, contributing to the control of plant biomass.

Typical products from the Celtic Pig include: the different cuts of fresh meat, which have done away with the seasonality of slaughter and have positioned this breed on the menu of top restaurants, and the ham and sausages sold in delicatessen stores. PORCINE

# HORSES

Anglo-Árabe Árabe Asturcón Burguete Caballo Deporte Español (C.D.E.) Caballo de las Retuertas Caballo de Monte de País Vasco Cabalo de Pura Raza Galega Cavall Mallorquí Cavall Menorquí Cavall Pirinenc Català Hispano-Árabe Hispano-Bretón Jaca Navarra Losina Marismeña Monchina Pottoka Pura Raza Española Estirpe Cartujana Pura Sangre Inglés Trotador Español



# ANGLO-ÁRABE



#### **GENERAL FEATURES**

The Arabian blood in these horses gives them beauty, elegance, strength and functional balance; while the English Thoroughbred contributes to their size and, fundamentally, speed and sports faculties, thanks to long legs that give them to a height of around 1.60 and 1.70 m. The most common coat colours are bay, chestnut and grey. They are highly functional, with flexible movements and a distinguished trot that is broad and balanced. This breed's best gait is its gallop, which reveals the ample, swift movements of a powerful and fast horse. They are docile and balanced with a strong character, but they are never aggressive.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Anglo-Arabian horses are used for various sporting disciplines due to their great vivacity and endurance. Their speed and strength make them perfect for participating in eventing. Just like in endurance riding, show jumping, and even in purely Spanish disciplines like 'doma vaquera' (Western dressage) and 'acoso y derribo' (animals are brought to the ground by two riders using a lance), Anglo-Arabian horses are easily the favourites. In addition to these athletic features, the Anglo-Arabian horse is great for improving other breeds, providing above all class, distinction, strength and quality. The Anglo-Arabian horse breed originated in France in the mid-nineteenth century, when cross-breeding Arabian and English Thoroughbred horses official began, thus resulting in the Anglo-Arabian horse. However, successive crosses have made this breed's features more defined. The number beside the animal's name refers to the percent of Arabian blood it possesses. It is a very versatile saddle breed that is used in all equestrian disciplines, especially in eventing and endurance competitions, in addition to pleasure and leisure riding. There are currently four sections in the stud book for this breed: Section I: Specimens that come exclusively

Section I: Specimens that come exclusively from crosses between purebred Arabian and English Thoroughbreds, and/or Anglo-Arabian horses obtained from these crosses. Section II: Animals with 5 complete generations of controlled (registered) ancestors, in which 1 in 16 ancestors in the 4th generation, or an equal ratio, is registered in a stud book other than those for English Thoroughbred, Purebred Arabian and Anglo-Arabian horses, but which is not a draught or pony breed. In addition, there is Section III: Anglo-Arabian Crossbreed; and Section IV: Anglo-Arabian Half Blood.

#### **GEOGRAPHICAL DISTRIBUTION**

This breed is distributed throughout all of Spain, with a larger number of herds in Andalusia.



# ÁRABE



#### **GENERAL FEATURES**

Overall, they have a harmonious, proportionate and attractive appearance, which reinforces its classification as 'the most beautiful in the world', while at the same time confers it a special hallmark experts call 'desert'.

The height of the Arabian horse ranges between 148 and 156 cm. They have a small and concave head, a pyramidal and short stock, broad jaws, short and separated ears, broad and rounded croup with a high-set tail, muscular limbs, a broad chest and a well-arched rib cage.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Its most remarkable feature is its combination of strength and speed, because it was selectively bred to withstand the desert's harsh conditions.

As its most noteworthy feature is its strength, endurance riding is the discipline in which it performs best and where it stands out from other breeds.

In many countries throughout the world, there are also horse races reserved for purebred Arabian horses.

Because of its origin, this breed adapts perfectly to any geographical area, even the harshest ones. One should not forget that it is the most widespread breed in the world.

The Arabian horse originated in the desert between the Red Sea and the Persian Gulf, and extended north to part of Iran and Iraa. Archaeologists and historians have not been able to pinpoint the exact time and place of its appearance. However, there is reasonable evidence to believe that Arabian horses were domesticated in that aeographical area 1,500 years before Christ. The Arabian horse has undergone a human-directed selective breeding process for 350 generations. The Arabian horse is the oldest and the only pure breed that exists, and from which all other breeds originated: modern, light and warmblood (English Thoroughbred, Anglo-Arabian, Hispano-Arabian, Lipizzan, Morgan, Trakehner, and a long etc.).

Regarding Spanish horses in general, an important historical event was when Queen Elizabeth II ordered a group of purebred stallions to be imported from the desert with the aim of 'improving the Spanish horse population'. The Arabian stud book in Spain, which dates back to 1847, is the oldest one in the world. Years later, selected specimens were imported from Egypt, Poland and the entire Middle East. These imports, together with strict systems for selecting and breeding Arabian horses, gave rise to the 'genetic jewel' that we enjoy today. Spain is the only country in the world that still has 22 direct and expanding lines of the mares imported from the Najed desert.

#### **GEOGRAPHICAL DISTRIBUTION**

This horse breed is distributed throughout all of Spain.









# ASTURCÓN



#### **GENERAL FEATURES**

This breed has an average height of 1.35 m, with black, chestnut or brown coat colours and no spots accepted other than a small frontal star. They have a medium-sized head, a straight or subconcave frontonasal profile, small ears and wide nostrils, a medium-length neck with a good, strong build and a long back that is not overly sloped. Their limbs are straight and slender, with scarce fetlocks and small chestnuts that may be absent on the hind limbs. They have a well-arched rib cage and a sloping croup, never double, of proportionate width.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

There are two distinct breeding systems. One involves meadow animals that are raised in close contact with humans on pastures or in meadows and are destined to be used mainly as sport ponies, standing out in show jumping and harness activities, although they have proven themselves to be excellent at horseball. The other involves mountain animals that live in mountain passes that are difficult to access. They are raised in a semi-free state and are fully integrated into the ecosystem. Once tamed, these animals are especially skilled at working in the hills with livestock, thanks to their great physical strength and their keen ability to cope even in the roughest areas.

They help maintain and clean the mountains, but thanks to their docile nature and strength, they are being used more and more for sports, which will undoubtedly be the future of the breed. The Asturcon pony, originally from Asturias, has a very long history. It was bred by the Asturians both for agricultural and livestock work, as well and for war. In that regard, Asturcon ponies were known and admired by Roman conquerors, who, after taking over the territory and its animals, brought them to Rome where they were greatly appreciated. The first documented bibliographic citations that refer to them date from 78 BC in 'Rhetorica ad Herennium', which mentions the small horsesof the Asturian tribes that were considered a sacred animal.

They experienced a period of splendour in the Middle Ages, when thousands were distributed throughout the region. Their population decreased alarmingly after the Civil War, mainly due to reforestation policies. Several isolated herds remained: in the east along the Sierra del Sueve, and in the west throughout the most inaccessible mountain ranges of several town councils. It was in 1979 when the Regional Asturcon Breeders Association was formed. which was created to recover the breed and at that time consisted of 23 specimens owned by 4 breeders. It later became what is now the Association of Breeders of Asturcon Ponies, the entity in charge of managing the breed's stud book, as well as protecting and promoting it.

#### **GEOGRAPHICAL DISTRIBUTION**

There are two isolated herd groups in Asturias. Those in the eastern herd are exclusively black, and those in the west are chestnut. There are also a number of horses and associate members of the breeder's association throughout all of Spain.



# BURGUETE



It was named after the Burguete region, located in the Autonomous Community of Navarre where it originated. It arose from crosses between autochthonous horse populations (Jaca Navarra) and stallions from foreign breeds, such as the Trait, Postier Breton, Percheron, Ardennes and Comtois, which were introduced to give greater conformation to the local population and, as a result, produced animals with very defined morphological characteristics. The females were characterised by their maternal aptitude, and they were used in crosses to breed mules. They were also crossed with foreign breeds that were larger in size and conformation for meat production.

#### **GENERAL FEATURES**

These horses tend to be sub-hypermetric, middleline, and have a straight, subconcave profile. They are a very hardy breed used mainly for meat. It is a robust, symmetrical, proportioned animal that is well-developed and structured. It matures fairly quickly, reaching its full size in three or four years. Its height is proportionate to its length, with a well-developed abdomen that is not excessively retracted.

All varieties of the breed have bay and chestnut coat colours. Some specimens may have a blaze, star or socks, but these are considered undesirable characteristics. Their tongue and internal mucous membranes should be pink.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

They have a semi-free farming system. In the spring, the animals are taken to the hills or to the mountains around the valleys where they are free to roam until autumn. During the winter, due to the scarcity of resources and the harsh climate, the animals are moved to areas close to the villages, either to meadows or communal pastures. Their diet is made up of natural food sources and is only supplemented at critical moments-mainly in winter-with hay, concentrates and straw. The stallions usua-Ily receive a special diet consisting of oats, beans, barley and fodder. Mares are normally mate for the first time at 3 years of age. Foals are weaned at 6 months and farmers generally do not try to fatten them up, as they sell them

#### **GEOGRAPHICAL DISTRIBUTION**

They are mainly present in the Autonomous Community of Navarre.



out to handlers. Other methods exist: farmers may keep the foals longer if they have enough fodder, or the handlers themselves may fatten up the foals for a few months to obtain horses with larger bodies and greater quality. The breed is replenished with animals of the same breed and from the same area. It is becoming less and less important to buy animals from other regions or breeds with good meat qualities, or to buy animals in France. Today, most of the horsemeat sold in Navarre comes from this breed. 

# CABALLO DE DEPORTE ESPAÑOL (C.D.E.)



#### **GENERAL FEATURES**

These horses are characterised as having the same morphology as the breeds that are permitted in crosses between their parents, and that are suitable for the different equestrian disciplines.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Horses used for sport normally stay in equestrian facilities during the sports season, where they can develop and perform their specific training routines, and during periods of rest they relax in their enclosures.

These horses are highly valued on the market, so their diet is carefully selected and prepared down to the smallest detail. A sport horse is considered to be any horse derived from cross-breeding, with the exception of ponies and draught horses, that are included in the W.B.F.S.H. and are used to practice any discipline regulated by the International Equestrian Federation, fundamentally those considered Olympic sports: show jumping, dressage and eventing competitions. The Spanish Sport Horse (in Spanish, Caballo de Deporte Español (CDE) arose from the need to establish an entry in a stud book for horses derived from pure breed crosses. These crosses are gimed at obtaining high quality sports horses. The main advocate of this breed has been the National

Association of Spanish Sport Horse Breeders (ANCADES), founded in 1993. National legislation regarding the zootechnical characteristics of the breed was published for the first time in 2002, and it indicated the cross-breeds that are permitted to consider the resulting animals as CDE. Its name derives from its features. And when it was officially recognised, it radically margi-

nalised the name 'crossbreed', which was its generic title years ago.

#### **GEOGRAPHICAL DISTRIBUTION**

The Spanish Sport Horse is spread throughout the country, with larger populations in regions where there is a strong interest in equestrianism, as it is a breed used especially for sport.



# CABALLO DE LAS RETUERTAS



In Doñana, where this breed originated, these horses were known as being 'from the retuertas' due to the fact that they were usually seen at the freshwater lagoons in the area, in addition to the lagoons that formed in summer in the areas between the sandy soil of the mountains and the clay of the marshes, called 'retuertas', where they went to drink during the season. Their ancestors can be traced back to the work horses that were used in Doñana for field labour and for carrying and hauling loads, especially through the flooded marshes. They are therefore originally related to the Marismeño horse breed.

# HORSES

#### **GENERAL FEATURES**

They are eumetric, middleline and subconvex animals, with a physical structure that reflects their feral nature. This structure makes them unattractive for the stereotyped criteria of horse breeders, but it helps them adapt very well to their environment. Sexual dimorphism is evident. The body of these animals is symmetrical, with an elegant appearance and strong, rhythmic, flexible movements. They show their wild character at all times and are highly integrated into their environmental setting. Their coats are chestnut, although often with a whitish flea-bitten pattern, and they can also be dapple-grey.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

In the past, they were mainly used for working in the fields and as draught animals. Their ability to drag flat-bottomed boats along the marshes was widely cited. The boats were tied to their tails and loaded with food and equipment to supply to residents living in remote areas in Doñana. Currently, the vast majority of the breed lives in the wild. The behaviour of these animals is very different when they are bred in the wild, compared to when they are bred domestically. In the past, when it was common to breed them for work, they were calm animals: noble but hardy; but when they are in the wild, they are very excitable around humans and difficult to handle. They can adapt perfectly to a very peculiar and hostile environment, like flooded plains and marshes, thus contributing to the balance of the ecosystem.

#### **GEOGRAPHICAL DISTRIBUTION**

The Guadalquivir marshes (in Andalusia) and, more specifically, the marshes on the right bank of the river where the Doñana Natural Area is currently located, comprising the National Park and the Doñana Natural Park.



Every year, the horses are captured in summer to carry through a traditional practice of shearing their tails and manes (in Spanish, 'tusar'), although the main purpose of capturing them is to identify and mark the foals and to eliminate any surplus. They are also captured to obtain serum and blood samples, which have been used for parentage testing and other research.

# CABALLO DE MONTE DE PAÍS VASCO



#### **GENERAL FEATURES**

This breed has an overall symmetrical and proportional shape. They are medium-sized, although tend to be small, with a stocky and hardy appearance. It is a meat-producing breed, thanks to its compact features characterised by its eumetry, short flanks and straightsubconcave profile.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Their farming system is extensive and wild, which is why these horses are characterised by their highly hardy nature. In summer they can be found in mountainous areas, while in winter they move down to meadows and riverbanks.

Their diet is made up of natural food sources without complementary supplements, except during especially difficult times or for mares during specific moments of their reproductive cycle. The herds are gathered in the mountains once a year to perform husbandry tasks: rearing, age separation, medical and administrative procedures. They are named after their autonomous community of origin, the Basque Country, and the regions where they can be found. 'Euskal Herriko Mendiko Zaldia' is their name in Basque. They originated from the horses that inhabited the Basque Country and that gradually adapted to a specific environment and primarily for meat production, which make its hardy and stocky appearance stand out.

#### **GEOGRAPHICAL DISTRIBUTION**

The Caballo de Monte del País Vasco breed (Basque Mountain Horse) is located in the Basque Country, the autonomous community where it originated.



Its main utility is to produce meat and, to a lesser extent, to carry and haul loads, although it is becoming increasingly more important for recreational purposes. It is sometimes used as a maternal breed when crossed with heavier ones, the females from which are used for replacement.

# CABALO DE PURA RAZA GALEGA



#### **GENERAL FEATURES**

This group includes animals with a straight or subconcave profile, are small in size and have sublongilinear proportions. They have a docile nature and are calm, brave and intelligent. Well-adapted to the undergrowth and brushwood of Galicia, they are exceptionally robust, vigorous and resistant to fatigue.

Their coats can range from bay to black. Other colours and depigmentations are not accepted. The breed standard penalises white spots. Their height at the withers varies between 120 and 140 cm, and their weight ranges from 165 to 300 kg depending on the animal's prototype, its sex and environmental conditions.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Their farming system is extensive, wild in its most extreme form, which is why they are also called wild horses or fierce beasts. They usually form groups in the hills of parish property, in herds called 'greas', that can range in size from between 10-15 to 300-500 specimens. They usually have multiple or communal ownership and take the name of the stallion or the settlement. They only have one diet and it is based on grazing. The herds are collected annually in enclosures called 'curros', where typical husbandry tasks are performed, in addition to shearing their manes and tails, ridding them of insects and parasites, and fertility control. It is called 'rapa das bestas' (the shaving of the beasts), an activity that has acquired considerable tourist interest

They get their name from their autonomous community of origin, Galicia, mainly mountainous areas with woody vegetation and scarce fodder. They were formerly called (in Spanish and Galician): Raza Gallega, Cabalo Galego do Monte, Burras, Galega/Galiciana, and Faca Galega, which were replaced by the current Caballo de Pura Raza Gallega (Purebred Galician Horse). They originated from prehistoric Spanish horses, with influence from Celtic European-Atlantic horse populations. There is even literature from Roman times (Pliny, Strabo, Silius Italicus, Columella) that mentions this population in Galicia. They extended all throughout Spain until the machine age, which pushed them into the background. This breed has had a very strong role in the creation of American livestock, such as in the 'petisos' (short-statured horses) or in the Mexican Galiciana breed

#### **GEOGRAPHICAL DISTRIBUTION**

They inhabit Galicia, the autonomous community where they originated, mainly in mountainous areas at an altitude of 800 to 1000 m with mild temperatures and high humidity.



The majority are slaughtered for their meat, which is of high quality due to its nutritional value, namely its iron concentration and low levels of fat. Due to this breed's features, it is used as a saddle horse; its attractive ambling gait makes it ideal for modern horseback riding or for harness sports and recreational purposes, especially those for children.



# CAVALL MALLORQUÍ



#### **GENERAL FEATURES**

This is an eumetric horse, sublongilinear, with a slightly convex profile and slender silhouette. Its strength, hardiness, serenity and high degree of adaptability to its surroundings are noteworthy. Black coat colours and all variants are admitted, but not any other colour. White spots on the face are also acceptable.

Males have an average height at the withers of 161 cm and a weight of 456 kg; and females, 162 cm and 467 kg.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Because of its history, this breed is highly skilled for agricultural work and mule production, and as a saddle and harness horse. Their hardiness, serenity and reproductive capacity stand out. Currently, their skills have been directed towards recreational purposes given their suitable characteristics for riding: a slow, rhythmic, measured and steady gait, with a uniform stride and strong tread, as well as their good character. This last feature gives them a certain predisposition for harnesses. Their name comes from the island of Majorca, in the Balearic Islands, where they originated. They arose from the southern variant of primitive horses from the Iberian Peninsula, with references to them dating back to ancient times. Highly associated with agricultural work, where they also

stood out for mule production, being used to a lesser extent for pulling small carriages. The horse herds where they bred were traditionally located next to farms. With the mechanisation of rural areas, they experienced a significant decline in population. In 1985, a process began to locate horses of the Cavall Mallorquí breed, which then led to mating and breed selection procedures.

#### **GEOGRAPHICAL DISTRIBUTION**

It is a local breed that lives on the island of Majorca, where it originated, mainly in old country houses but also occasionally on farms. The classic horse herds are exceptionally well maintained.



# CAVALL MENORQUÍ



Their name comes from the island of Minorca, in the Balearic Islands, where they originated. In English texts, they can also appear under the name of Menorca or Minorca.

They originated from the variety of primitive horses that inhabited the south of the Iberian Peninsula. They were traditionally used as pack and saddle animals, due to the difficulty of local roads for carriage transportation. But the mechanisation of rural areas and the arrival of horses from other breeds intended for sports caused

a significant decline in their population. Starting in 1988, efforts began recover these horses, beginning with their official recognition as a breed and the creation of the Breeders Association of Minorcan Horses.

#### **GENERAL FEATURES**

They are eumetric animals with a subconvex to straight profile, a slender figure and high up from the ground.

The stud book will only accept specimens with black coats in all its varieties, and will exclude animals with any other coat colour. Likewise, white patches on the head and limbs are permitted as long as they are small in size, and for which they can be eliminated.

Their average height at the withers is around 161 cm for males and 157 cm for females.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Their farming system is mixed (stabling and grazing), generally on small farmsteads made up of one or two mares. Stabling is more or less continuous for males, while females are placed in stone enclosures where they stay most of the year. The males are continually given supplements, while the females are fed by grazing to take advantage of natural resources. However, pregnant or nursing females are given supplements if grass is scarce.

They are easy and comfortable horses to ride, strong and well adapted to rugged trails. Their docile character and the favourable nature of their gait have allowed them to be incorporated, in recent years, into the sporting world as horses for classical and Minorcan dressage, where they are achieving very good results.

#### **GEOGRAPHICAL DISTRIBUTION**

They live mainly on the island of Minorca, although for more than 10 years they have been expanding throughout the Iberian Peninsula and other areas of Western Europe. There are important breeding groups in countries such as France, Italy, Germany, Holland, Switzerland and Denmark.



It is also worth mentioning that this breed plays an important role in the popular culture of the Balearic Islands, as they are the central figure in all the traditional festivals celebrated in Minorca. This important relationship has helped to maintain this population in the environment until now, although with greater importance placed on the males than the females. Also noteworthy is their use in equestrian shows and exhibitions, due to the quality of their gait and their ability to perform specific movements.



# CAVALL PIRINENC CATALÀ



#### **GENERAL FEATURES**

These animals, which have a calm disposition while at the same time being lively, passionate and vigorous, can be classified as sublongilinear with a subhypermetric to hypermetric format and subconvex frontonasal profile. Their height at the withers ranges between 1.45 and 1.60 m, depending on their sex, and they are a semi-heavy to heavy breed, weighing between 650 and 750 kg. They have noticeable sexual dimorphism with strong predominance in the front quarters of males. They are very hardy animals, long-living and serene, with a great facility for calving and excellent maternal skills for rearing.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

They are used primarily to breed foals, those of which are later sold when they are six to eight months old. They have an entirely extensive farming system, staying outdoors all year round. Husbandry is very basic: continuous grazing, natural mating, unassisted natural births, rearing foals alongside their mothers and abrupt weaning at 6-8 months, with no facilities other than handling raceways.

The breed arose from crosses between the ancient Catalan Horse-a liaht-drauaht. eumetric breed that went extinct in the midtwentieth century and that is phylogenetically related to other southern breeds in Spain: Andalusian, Lusitano, Majorcan and Minorcanwith European heavy breeds, mainly Breton. Comtois and Ardennes. It has maintained its hardy quality, facility to adapt to its terrain and high fertility. As a consequence of its multiethnic background, it has broad morphological diversity. However, the special orographic and environmental characteristics of the Pyrenees, as well as the breeds' production management and preferred marketing objectives, ended up aiving these crossbred animals a particular and unique hallmark.

#### **GEOGRAPHICAL DISTRIBUTION**

They are mainly found in the Pyrenees and Pre-Pyrenees region of Catalonia.



They are not stabled in winter, and it is only on the coldest days that they are given a serving of low-grade straw. They stand out for their high degree of adaptability to the terrain and their hardiness. Also, they reach sexual maturity quite early, have good fertility, great facility for calving, and remarkable maternal aptitudes.

# HISPANO-ÁRABE



#### **GENERAL FEATURES**

These are orthoid, mesomorphic and eumetric animals. Their bodies are slim and well-balanced, resulting in elegant movements. They have a wide range of ethnic characteristics. Overall harmony, sturdy body, slender and graceful figure. They are extraordinarily gentle animals with agile movements, a lively temperament and quick responses. Hardy, serene and strong.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

This is a saddle horse that has a particular predisposition for sport, especially for cross-country races and jumping, as well as for classical and Western dressage. It also has a very suitable temperament for the TREC (a long-distance sport involving a variety of terrains and obstacles), long-distance rides and group sports. The combination of physiological trotting features inherited from the two parent breeds have given this horse an intermediate range of movements that include both good elevations and wide extensions, without the former being too pronounced. It takes its name from the two breeds that created it: the Spanish and the Arabian. The breed developed mainly in Andalusia, beginning during the Muslim invasion of the Iberian Peninsula, and was formed through crosses between the two breeds that gave it its name. The objective was to obtain an animal that combines

the characteristics of both breeds: from the Arabian horse, its balance, stamina, and athletic qualities; and from the Spanish horse, its serenity, intelligence and facility for learning. The aim was to create a versatile horse that was highly trained for work, with both short and targeted tasks as well as those requiring strength.

#### **GEOGRAPHICAL DISTRIBUTION**

This breed settled primarily in the Autonomous Community of Andalusia; however, it has now spread throughout all of the Spanish peninsula.



The result is a horse which is easy to handle and that responds promptly to its rider or handler. They can effortlessly overcome adverse situations.



# HISPANO-BRETÓN



#### **GENERAL FEATURES**

These are animals with a straight profile, hypermetric, sublongilinear, good conformation and quite sturdy. Their heads have a straight and pyramidal profile. The neck, back, croup and chest are muscular and robust, giving them a rounded appearance. They have an abundant mane and strong, well-poised limbs.

Their height at the withers varies according to the geographical area, ranging from 145 to 154 cm. The average weight is 715 kg for males and 702 kg for females.

The most frequent and valued coat colour is bay, in addition to chestnut and black. The roan, palomino and grey horses are becoming less common. The most prevalent features on its head are the snip and the star; and on its limbs, stockings and socks.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The breed originated as a draught animal to satisfy the needs of the rural and military world. The mechanisation of farming has changed how they are used, which today is mainly for food, and for which their good conformation and excellent meat quality stand out. Their farming system is extensive in mountain areas to take advantage of pasturelands and, in winter, they go down to the valleys with occasional straw and hay supplementation. The name comes from the breeds used to create it. This breed arose from the farmers' need for animals with greater draught and hauling power than that which could be found in autochthonous Spanish breeds. This breed was the result of crosses, mainly with the French Breton breed, to improve the local semi-heavy breed. The hardiness of the former was key for them to be able to adapt to the harsh climatic conditions and food shortages in mountain areas. These crosses took place mainly on the Cantabrian coast, the Pyrenees and mountainous areas of Castilla y León.

#### **GEOGRAPHICAL DISTRIBUTION**

This breed can primarily be found in mountainous areas of the Autonomous Community of Castilla y León, Cantabria, Rioja and the Aragonese Pyrenees.



They are often used for the same purposes as beef cattle on small family-run farms. Mating is generally performed with stallions of the same breed through natural methods. The foals are weaned in winter when they come down from the mountains.

# JACA NAVARRA



#### **GENERAL FEATURES**

This breed is hardy, strong, vigorous and welladapted to mountain areas. They have a longlife span, an excellent temperament, and the characteristics of a lively, well-balanced and proportioned animal. They tend to be elipometric and are a middleline breed with a straightsubconcave profile.

The most common coat colour is chestnut with dark tones, with no white on the face or limbs. Their height at the withers ranges from 126 to 136 cm.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Their farming system is extensive with the use of communal pastures. Breeding happens through natural mating, with births generally taking place outdoors. Supplementation is rare and occurs only when grass is very scarce.

Their early use as a light draught horse and, to a lesser extent, as a saddle and hauling horse is limited. They are now mainly used to maintain natural spaces, for meat production and occasionally for horse riding-mostly for childrenand for leisure riding with light harnesses.

Their name comes from their geographical region of origin, Navarre, and from their morphology. Jaca (small horse), as they are horses with a height of less than 147 cm. In the past, they were also known as the Jaca de Montaña (small mountain horse) or the Raza de Pamplona or Pamplonica (the Pamplona breed). They originated from primitive horse populations in the Iberian Peninsula, with a slight influence from Celtic ponies of European origin. Their peak period of growth dates back to the time when a Jaca Navarra mare was given as a gift to new farmers who were settling in the area. The mechanisation of the rural areas and crosses with draught breeds drastically reduced their population. Efforts began to recover the horses at the end of the last century through breeding and horse selection

#### **GEOGRAPHICAL DISTRIBUTION**

They can be found mainly in the northwestern region of Navarre, in municipalities located in the Andia and Urbasa Mountain Ranges. They prefer wooded areas, mainly beech forests, as well as areas of brushwood. The breed has expanded mainly to Mediterranean areas, which include the provinces of Castellón, Valencia, Alicante and Murcia, and is used as a draught animal for small carts.





HORSES

# LOSINA



#### **GENERAL FEATURES**

These horses are characterised by being eumetric, middleline animals. They have a wellproportioned head with fine features, small ears and a robust neck. Their chest is broad, back wide and they are somewhat saddled. Their limbs are slim with fine, wispy fetlocks and slightly closed hocks. They have a rounded and steep croup with a low-set tail.

They have black coats, although the blackishred variant is accepted, producing reddish tones in summer and darker ones in winter. Bushy black mane. Both males and females can have stars, which may be larger in the latter. Until the age of two, offspring have coarse hair similar to donkeys, later acquiring the characteristic hair of the breed.

The minimum height for adult mails should be 130 cm and 120 cm for females. The maximum height in both sexes is 147 cm. Weight ranges from 300 to 350 kg in adult horses.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

They have an extensive farming system in mountainous terrain with plenty of undergrowth. Supplementations to their diet are provided only in very adverse weather conditions. They have a high digestive coefficient.

Breeding happens through controlled natural mating, keeping males separated from females in order to schedule births at the most appropriate time. They take their name from the geographical area where they originated, Valle de Losa, in the Burgos province. There are two theories about their origin: monophyletics, which links them to the primitive przewalskii horse, and polyphiletics (predominant). according to which they originated from crosses between Celtic horses and primitive populations of wild horses that inhabited the Iberian Peninsula. Cave paintings in Ojo Guareña (40,000 - 9,000 B.C.), in the municipality of Merindad de Sotoscueva, suggest that Losino horses have been recognised since ancient times. The mechanisation of the rural areas had a significantly negative effect on its population, and work began to restore the breed at the end of the last century.

#### **GEOGRAPHICAL DISTRIBUTION**

They belong to the area where they originated, in the Burgos province. However, there are currently two large breeding herds: The Losa Valley (in Las Merindades) and the Obarenes Mountains (Pancorbo).



The mares have high fertility rates.

They have outstanding traits as saddle horses, which suits their small size. They have a steady step, lively temperament and are very effective in rugged terrain, which makes them very valuable animals for equestrian mountain tourism.

# MARISMEÑA



#### **GENERAL FEATURES**

An eumetric breed with a subconvex profile and sublongilinear body proportions. Robust, harmonious conformation in both sexes and low to the ground. They have a somewhat large head, short neck, deep chest, rounded abdomen and medium-sized, slender limbs. Their character is balanced and calm, but lively and determined when working. Great strength and hardiness. Elevated and confident movements, fast pace and good concentration.

Their average height at the withers ranges from 140 to 148 cm.

They have a wide variety of coat colours, the most common being grey, bay and black.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Their farming system involves free grazing in the marshlands of the Guadalquivir river in the Doñana National Park. The horses are gathered once a year in corrals, an activity which is called 'Saca de las yeguas', to carry out basic husbandry tasks, although this is difficult due to the feral nature of the breed. On this day, which traditionally coincides with the 26th of June, a fair is held that revolves around promoting the Marismeña horse breed.

They are named after the geographical area where the breed has traditionally been located. the marshes of the Doñana National Park in the municipality of Almonte (Huelva), part of the Autonomous Community of Andalusia. They originated from the primitive horses that inhabited the marshes of the Guadalguivir River. Throughout their evolution, they have been crossed with other breeds, mainly from North Africa. Some writers mention them as being the Iberian ancestors to American horses, as they were taken to the Americas during Christopher Columbus' travels. They are also the origin of Andalusian horses, through which they have influenced a variety of breeds in

Central and Northern Europe. Recovery and classification work on this breed began in 2003.

#### **GEOGRAPHICAL DISTRIBUTION**

These horses live in the marshlands of the Doñana National Park in Huelva, which is located in the Autonomous Community of Andalusia.



# HORSES



# MONCHINA



They get their name from the local word that refers to small and to their suitability for walking in the mountains.

They originated from the autochthonous breeds in the north of the Iberian Peninsula, with a strong influence from Celtic ponies. Throughout their history, there has been a wealth of literature relating them to the British Exmoor horses, due to the fact that they were imported by the English from the north of the Iberian Peninsula to work in the mines. It was in the Guriezo valley, in the Autonomous Community of Cantabria, where efforts began to recover the breed, as well as breeding and selection processes, beginning primarily in 1996.

#### **GENERAL FEATURES**

Classified as elipometric, this breed has a subconcave to concave profile and is breviline or sub-breviline.

Their coat can range in colour between black or bay, but if they are bay, they must have black manes and tails. It is common for them to have large stars, a star with a blaze or just a star on their foreheads. Socks or Half-cannon are accepted, provided they do not go more than halfway up the cannon. The hair of their manes and tails is long, bushy, strong and black, while their mucous membranes range in colour from black to chestnut.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Their farming system is extensive, and they compete with other horse breeds used for meat production as well as the Monchino cattle breed.

They are currently used in cattle farming as pack animals or for pulling small carriages. After domesticating them, their character makes them well-suited for children's horse riding, which is practiced in local equestrian clubs.

#### **GEOGRAPHICAL DISTRIBUTION**

They are distributed mainly throughout the geographical area where work began to recover them, the Guriezo Valley in Cantabria, although there are also breeding herds in the Basque Country, Asturias, and Castilla y León.



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# ΡΟΤΤΟΚΑ



#### **GENERAL FEATURES**

These animals generally have a sober conformation, are elipometric, have a straight to subconcave profile and are middleline.

Their average height at the withers is 124 cm in both sexes, with an average weight for males varying between 200 and 250 kg, and for females between 170 and 200 kg.

Whereas several types of coat colours were accepted in the past, today only black or very dark bay coats are recognised.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

In general, their farming system is extensive. Pottok horses graze in the mountains of the Basque Country in a semi-wild state for nine months, and for the remaining three months of winter they live in pastures close to the farm or are semi-stabled.

They are currently no longer put to use as pack and draught animals. Today, Pottoka horses are used for recreational horse riding, as well as for a variety of sports and equestrian tourism.

The Pottoka or Basque Pony is a breed of horse autochthonous to the Basque Country whose presence dates back more than 30.000 years, as shown by existing cave paintings. Their purebred nature has been maintained until recently, although in some parts of Spain it has undergone a process of hybridisation, due to being crossed with foreign breeds, a situation that has endangered its existence. The breed, which has inhabited the Basque Country since ancient times and has been official registered in Northern Basque Country since 1970, was not recognised as such in this autonomous community until June 1995, when its breed standard was published. Zoometric studies carried out since 1996, as well as censuses and work performed both by the local government and by the Pottoka Breeders Federation, indicated the need to establish a new breed prototype in 2010 and. along with that, to adjust the structure of the stud book to the latest regulations.

#### **GEOGRAPHICAL DISTRIBUTION**

The Federation's area of activity is located exclusively within the Autonomous Community of the Basque Country. There are also specimens in Navarre and southern France.







HORSES

# PURA RAZA ESPAÑOLA



#### **GENERAL FEATURES**

This group includes horses with soft and rounded lines, eumetric, mesolinear and a subconvex to straight profile. They have proportional conformation, remarkable overall symmetry, great beauty and noticeable sexual dimorphism. Their necks are slender and gently arched at the top, except for the mares whose necks are not as arched. They have long, wavy and silky manes, a strong rounded croup and a short, wide lumbar region. Their tails are lowset and hang closely to their bodies. All coat colours are accepted.

Exemplary, energetic, rhythmic and agile movements with pronounced elevations and extensions that reflect their disposition for collection and turning on their haunches. They take firm steps, have a rhythmic stride, synchronised movements, clear and steady balance, an attractive gait and a short, swift trot. They move easily around their centre of gravity for direction changes, sudden stops and quick starts.

They have a spirited nature, are gentle, noble and well-balanced, and learn quickly. Obedient to commands, highly responsive even to the most basic aids, manageable and fully collaborative, they are recognised as an easy, noble, generous, intelligent, selfless and cooperative horse with athletic ability and good functionality.

As they are exceptional saddle horses, they are highly talented at classical dressage, Western dressage, high school and carriages. The Pura Raza Española breed (internationally known as the Purebred Spanish Horse, PRE in Spanish) is present in many countries, where it has easily adapted to different farming and husbandry systems and has been used to create other horse breeds.

It is advisable not to refer to PRE as other horses, like Iberian or Carthusian horses, as these do not correspond to breeds; the Carthusians are a family of horses within the PRE.

#### **GEOGRAPHICAL DISTRIBUTION**

It is the most widespread breed in Spain and can be found in all the autonomous communities. It is also present in 62 countries, both in and out of the European Union.



# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Their farming system follows a semi-extensive pattern, with wide enclosures that allow the animals to maintain their physical fitness through daily exercise. These horses are well established on the market, so their diet is carefully prepared down to the smallest detail.

They have a genetic improvement programme that genetically assesses the horse specimens, and the best breeders are chosen for classical dressage, morphology or their aptitude for saddle riding.

This breed's athletic performance is exceptional, and they stand out for having appeared at and participated in the most important equestrian sporting events (the World Equestrian Games, the Olympic Games, etc.).

# ESTIRPE CARTUJANA



The Carthusian lineage (in Spanish, Estirpe Cartujana) of the Purebred Spanish (PRE) horse originated in Cartuja de Jerez de la Frontera in 1484, when the Carthusian monks decided to breed livestock using the Spanish mares autochthonous to the area. The pureness of their breeding since then has led to their designation as "Puro Cartujano', as these animals have their own unique features that distinguish them from the PRE.



#### **GENERAL FEATURES**

With respect to phaneroptic features, there are notable differences in coat colours. Carthusian horses are predominantly grey (81.56%), while the majority of non-Carthusians have coat colours that are either grey (56.95%) or bay (31.93%)..

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The uses of the Carthusian horse are similar to those of the Purebred Spanish horse: It is a versatile animal that participates in various activities within the equestrian arts. Besides being an excellent saddle horse, Carthusian horses are used prominently for dressage (high school, classical and Western), eventing, jumping, bullfighting on horseback, 'acoso y derribo', harness racing, and for livestock handling in the field.

#### **GEOGRAPHICAL DISTRIBUTION**

There are speciments Carthusian horses throughout Spain, but Seville and Cadiz are the provinces where the largest number of these horses can be found.





# PURA SANGRE INGLÉS



During the 18th century, the English crossed their local mares with Arabian stallions with the goal of producing fast and resilient horses. More specifically, this breed comes from three horses: the Byerley Turk, the Darley Arabian and the Godolphin Arabian. They are considered the fastest horses, with their slender bodies and very fine legs. That is why they are also known as Purebred Racing Horses. Today, the English Thoroughbred is one of the fastest, most admirable and most expensive breeds in the world.

#### **GENERAL FEATURES**

This breed comprises animals that have a great personality and are sensitive and intelligent. They have a long and muscular neck, a wide and straight back, long and strong limbs, and a height at the withers of about 1.58 to 1.68 metres. Their most common coat colour is bay, although they can also be chestnut, black and grey, and they frequently have white spots are on their foreheads.

Their finest gait is their gallop, with a wide stride and constant rhythm, showing great aptitude for racing from a very early age. They are confident and calm horses that save their energy until the rider asks for it.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

English Thoroughbreds are characterised by their long lifespan, good fertility and tremendous muscle power and range of motion. Therefore, they are primarily bred for racing purposes, for which experts set an optimum age for competition of between three and six years. However, exceptions are made for earlymaturing horses or even for horses that are still competing after the age of ten.

They also stand out for their participation in other equestrian disciplines, such as show jumping, eventing and dressage, for which they obtain great results. Gestation, birth and wea-

#### **GEOGRAPHICAL DISTRIBUTION**

This horse breed is distributed throughout all of Spain.



ning of the newborn foals are all important. After the foal is born, it is reared among the herd of horses. The first year it stays by its mother's side in a meadow, so it is very important that the meadow is high in mineral content as the foal needs them to ensure optimal development. They are the most common breed used to improve other breeds

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# TROTADOR ESPAÑOL



#### **GENERAL FEATURES**

The Trotador Español breed is a collection of horses that have a large body with a robust back and sloping, muscular hindquarters, long and strong limbs, and a height at the withers of 1.60 to 1.70 m. Their coats are chestnut or bay and their knees are sometimes black or very rarely dapple-grey, with subtle white marks on the head and limbs.

They have a docile, obedient and collaborative nature, which are essential traits for harness activities.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

These robust and elegant horses have extraordinary endurance. Their bravery and good disposition make them ideal for harness racing, both with a two-wheeled cart and on the saddle. Their history goes back to the end of the 19th century, when the first officially recognised trotting races started to take place in Majorca. It was at the beginning of the 20th century when Anglo-Norman trotting horses, both stallions and mares, were first imported. But it was not until the 1920s, however, that real efforts were made to create the foundation for a sport that was beginning to expand and which is based on breeding this type of horse: the Spanish Trotter. The Spanish Trotter is bred almost exclusively

on the Balearic Islands, which is why it is also known as the Majorcan Trotter. This is a typical driving or harness breed, which performs trotting events using its very own unique gait pattern.



Breeding the Spanish Trotter is prominent in the Balearic Islands, where there is great love for this horse breed.





# ASS

Andaluza Ase Balear Asno de las Encartaciones Catalana Majorera Zamorano-Leonés



# ANDALUZA



They get their name from the Autonomous Community of Andalusia, where they originated. They are known as the Andalúz donkey, and also the Lucena or Cordobesa donkey, as the latter is said to be its original birthplace. They come from the Egyptian donkey, which was possibly introduced by the Hamites or Iberians into the Iberian Peninsula. They are mainly used for carrying loads on rough roads and to breed mules. Their population experienced a significant decline with the mechanisation of the countryside, and they were relegated to a few cattle farmers in the Sevillian and Cordovan countryside and to a breeding herd in the Ecija Military Stud.

#### **GENERAL FEATURES**

They are characterised as being hypermetric animals, with a subconvex profile and sublongilinear body proportions. Robust and wellbalanced conformation in both sexes. A somewhat gaunt but expressive head, giving the impression of energy and strength. Its stock sits between parallel, sturdy limbs with great bone and joint development, allowing it to perform graceful and unwavering physical movements. They have a balanced and gentle nature but are also confident.

They are tall animals, with a minimum height at the withers of 145 cm for jacks and 135 cm for jennets. Their coats range from light to dark grey, and are frequently dappled, with a tendency to lose pigmentation in their black hair. They have short, fine hair that is flattened and soft to the touch, but thicker and coarser in winter, and thin, taut, dark skin.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

They are a robust and tall-statured breed, although very strong and hardy, which is why they have traditionally been used to carry crops through difficult terrain. They are very well adapted to their environment, which is particularly sparse and makes up their diet: They graze the land in marginal areas that have low-quality fodder, and they are given cereal straw during the summer season.

#### **GEOGRAPHICAL DISTRIBUTION**

They belong mainly to the Autonomous Community of Andalusia, where they can be found in all eight provinces, particularly Seville and Cordoba. There is also an extensive herd in the Autonomous Community of Extremadura.



They are rarely given supplemental food. It is not advisable to give them concentrate feed with fatty acids due to the tendency of the breed to accum itionally, these animals were raised on shared spaces with other livestock, without any specific facilities to maintain and manage them.

# ASE BALEAR



#### **GENERAL FEATURES**

This is a breed with a concave-linear profile that are subhypermetric and sublongilinear. Wide and robust animals with outstanding bone diameters, and generally slender, slightly stretched out or elongated bodies.

According to the official standard, their minimum height at the withers should be 140 cm for jacks and 130 cm for jennets. However, the latest studies reveal that these measurements are increasing. They have a blackcurrant coat colour with greyish-white discoloration around the eyes, nostrils, muzzle, below the jaw, chest, armpits, inner limbs, belly and lower abdomen. The extent of discoloration varies depending on the specimen. Those with lighter and more extensive greyish-white areas are more highly valued, while those with a significant absence of discoloration (called 'fumat') are objected to and even dismissed in the case of jacks.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

There have been two main uses for this breed: for pack, transportation and agricultural tasks, and for mule production. Their farming system was extensive, with breeding herds located in mountain areas or scrublands where they were able to take advantage of the natural resources. In a stabled environment, these animals could be found helping with agricultural work, while the jacks were used for directed breeding. Today, the main utility of the breed involves the management of agroecosystems and leisure. They get their name from the Autonomous Community of the Balearic Islands, where the breed originated, and they come from the Equus asinus

somaliensis. This breed is highly valued for producing mules. Because of this trait, they were exported to the United States at the end of the 19th century, where the Balearic donkeys ended up contributing to the creation of the American Mammoth of Kentucky donkey breed, commonly known as 'Mammoth Jack'. The decline in the demand for mules due to mechanisation dramatically decreased the breed's population, bringing them to the brink of extinction in the last guarter of the 20th century. A process of recovery began in the 1980s, starting with the creation of an association for the conservation and promotion of the breed in 1993, the publication of the breed's stud book in 2002, and the change of its name from 'Majorcan donkey' to 'Balearic donkey' in 2005.

#### **GEOGRAPHICAL DISTRIBUTION**

They mainly inhabit the Balearic Islands, with the greatest percentage of the population in Majorca, where they are distributed unevenly throughout the island. The rest of the population is in Minorca, and there are currently no animals registered on the islands of Ibiza and Formentera.



Other possible uses for the donkey are being studied: to restore the breeding of mules for leisure activities, to help in family orchads, to participate in excursions and mountain crossings, therapy for the disabled, etc.

# ASNO DE LAS ENCARTACIONES



## **GENERAL FEATURES**

This is the only elipometric donkey breed in the Iberian Peninsula. It has a straight profile and middleline body proportions. These donkeys have a docile character and are highly agile. Small ears and hooves. Their height at the withers is about 120 cm in jacks, and their weight rarely exceeds 200 kg.

They have a black or dark bay coat with lighter shades around the eyes, armpits, belly and inner legs. One of the special features of their coat is their white muzzle.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

They were mainly used as pack animals, performing the usual farmhouse work: hauling grass, carrying sacks, etc., as well as sheepherding. Their small size and weight, great strength, facility to bend their knees and lie down, as well as their small hooves—which do not pick up the land where they step—made them ideal for carrying out these tasks on the steep, rugged terrain of Basque villages. Recent changes in the breed's management have shifted its use to that of a companion animal or for minor agricultural work, resulting in their average age increasing to 25-30 years. They get their name from the Encartaciones region where they originated, located in the westernmost region of the Autonomous Community of the Basque Country. They are very common animals in all Basque villages, small in size and indispensable as a pack and transport animal. They were highly regarded for their work in mining activities along the Cantabrian coast. At the beginning of the 20th century, they suffered a gradual decline. which worsened with the mechanisation of agricultural, forestry and mining work. In 1996, efforts began for the recovery, rearing and selection of the breed. This is the only small donkey breed on the Iberian Peninsula.

## **GEOGRAPHICAL DISTRIBUTION**

It lives in the westernmost region of Encartaciones, where it gets its name, which is in the Biscay province, pertaining to the Autonomous Community of the Basque Country and adjacent areas.



Their natural mating season is in spring, between April and May, and their gestation period is 12 months, although slightly longer in the case of male offspring. Weaning takes place at 5-6 months of age; however, jacks do not allow competition with other animals, so exit alternatives are sought at an early age.

# CATALANA



## **GENERAL FEATURES**

They are hypermetric, longilinear and have a subconcave profile, which is more pronounced in jennets and young donkeys than in jacks, that have a rectilinear tendency. Their limbs are sturdy and well-balanced, making them well prepared for work that requires a lot of time and strength. They are noble, vivacious and have considerable genetic power (hypermetabolic or oxidative biotypology), with an average height at the withers of 140 cm and a weight of 350-450 kg.

Their coat colour is typically black, with different shades depending on environmental factors. Their abdomen and inner limbs have whitish discolorations, as well as on the snout, the area around the eyes and at the base of the ears. These discolorations, especially the ones on the head, contain a very characteristic reddish fringe.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Their farming system is varied but predominantly semi-extensive: the animals graze freely and are given dietary supplements in the form of cereal, compound feed or bales of hay. Their sexual instinct is particularly noteworthy. Their gestation period is approximately 12 months, at the end of which they have quick and easy deliveries. They have traditionally been used for work (as pack and draught animals) and to rear jacks for the production of mules. Currently, their utility is mainly geared towards agrotourism, and breeders are placing great

Their name comes from the Autonomous Community of Catalonia, where they originated. In the past, and given the importance of the jacks in this area, they were known as 'Guarà de Vic' (in Catalan) and, even before that, they were known as the 'Ausetana' breed (which corresponds to the ancient Roman temple of Ausa). There are two theories about their origin. One is that they are descendants of the ancestral lineage Equus asinus somaliensis or the Somalia Donkey, which gave rise to the donkeys of southwestern Asia and probably most European breeds. A second theory places them as descendants of the primitive lineage Equus asinus europeus, which was limited to the Mediterranean area.

They have played a significant role in the creation of other European and American breeds, the most notable being the American and Kentucky donkies.

## **GEOGRAPHICAL DISTRIBUTION**

They inhabit two main areas: the Catalan Pyrenees and Pre-Pyrenees, and Catalan central depressions (the plains of Vic, Lleida and Urgell). Although this breed is mainly located in Catalonia (80% of the population), large herds can be found in the south of France, Huesca, Seville and Toledo.



importance on teaching and training them given their behavioural traits: They are docile and noble animals but still maintain their characteristic sanguine temperament. They are also used as companion animals in country houses where they control the growth of vegetation.



# MAJORERA



#### **GENERAL FEATURES**

Middleline tendency; they are elipometric and have a subconcave cranial profile. Their body structure is proportionate and balanced, which gives them a very harmonious overall appearance. They are hardy, although their appearance may make them seem weak, long-living and serene. Lively, energetic and resilient in situations of deprivation.

Their height at the withers varies between 100 and 120 cm, with weights ranging from 125 to 175 kg.

Their coats are grey, with shades ranging between light and dark that are highly dependent on environmental factors, and also brown. There can have different shades of colour on their abdomen, inner legs, snout and the area around the eyes. Unique features of their coat include a dorsal stripe on their back, a shoulder stripe and zebra-striping on their limbs.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

These animals are perfectly adapted to the conditions of the islands. They stand out for their rusticity and serenity and are able to easily endure situations of deprivation. Their longevity, vitality and energy have given them indisputable value. They were historically stabled in enclosures, from where they were taken to graze and work. Their diet was greatly varied: grass supplemented with agricultural by-products in particularly sparse areas or duTheir name comes from the native inhabitants of Fuerteventura, their island of origin, belonging to the Autonomous Community of the Canary Islands. It refers to the caves that served as dwellings for the island's aborigines, called 'majos' or 'mohod'. They are descendants of the Equus asinus africanus lineage, and they are perfectly adapted to the conditions of the island, better than other less hardy animals. Their history on the island is closely linked to the Spanish conquest. They were presumably brought to the island by the first conquerors who, during their attacks on the African continent, transported their animals to Maxorata (Fuerteventura), and from there they spread to the rest of the islands. It is the only equine on the Canary Islands.

## **GEOGRAPHICAL DISTRIBUTION**

They inhabit the island of Fuerteventura almost exclusively, and to a lesser extent Lanzarote. Their presence on the rest of the islands is incidental.



ring times of scarcity. At present, fodder and concentrates have been introduced into their diet. They have natural mating methods, and babies stay with their mothers until 6 months of age. They were traditionally used for work, as they were better adapted to the steepness of the terrain than other larger animals, and they could easily travel the short distances on the islands. Today, they are used as companion animals in country homes and farmhouses, as well as for tourism.

# ZAMORANO-LEONÉS



## **GENERAL FEATURES**

These donkeys have a subconcave profile, are hypermetric and sublongilinear. They have a well-formed body, exhibit acromegaly, and have a bulky body and massive head with wide, enlarged ears. They have a robust frame with prominent legs, noticeable hirsutism, good height and significant sexual dimorphism. Hardy and serene. Their average height at the withers is 141 cm in jacks and 134 cm in jennets, with an average weight of 169 kg and 167 kg, respectively. Their coats are predominately black, which may turn a dark brown colour in older animals. Paler colours can be seen in their muzzles and in adult animals. They exhibit colour shades that can even become silver in the area around the nose, from the middle of the face to nearly the corners of the lips, around the eyes, the armpits and the area between them, under the chest, the inner thighs, inner limbs, and the lower-abdomen, but the fusion between these two colours is almost imperceptible. Their hair is long, bushy and coarse.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

In the regions where traditional breeding continues, permanent stabling is practised using small stalls, and the animals leave to carry out necessary work or to graze. Their calm character and great strength for draught activities were the characteristics that led to their traditional use in agriculture and livestock operations, which is still true and mainly in their area of origin. They are also capable of imposing their nature on their descendants, which is why the jacks were in high-demand. Their

Their name comes from the provinces where they were most important, Zamora and León, which belong to the Autonomous Community of Castilla y León. They originated from the lineage common to other European donkeys: Equus asinus europeus, specifically from those that are found in the southern regions of Europe, mainly the Mediterranean basin but also including donkey breeds from the northern half of Spain. Their ability to pass on their traits has favoured their contribution to the evolution of other donkey breeds, such as the Poitou and the American mammoth donkey. The mechanisation of the countryside and the loss of interest in mule production have had a considerable effect on its population, and recovery efforts began mainly in 1996.

## **GEOGRAPHICAL DISTRIBUTION**

They live primarily in the western and central regions of the Zamora province, such as Aliste, Tierra de Alba and Tierra del Pan. Their presence other provinces of Castilla y León is scarce, as they are found mainly in León.



diet comes almost exclusively from homemade products, which is sometimes supplemented with barley or other cereal to feed the jennets. Jennets are taken to breed at 2.5 to 3 years of age and, due to their prolonged gestation, they would mate on alternate years, a system that is still practised on occasion today. Landowners who do not carry out field work use them for recreation, rural equestrian tourism or conservation work on country farms. ASS V.

## AVIAN

Andaluza Azul Combatiente Español Euskal Antzara Euskal Oiloa Galiña de Mos Gallina Castellana Negra Gallina del Prat Gallina del Sobrarbe Gallina Eivissenca Gallina Empordanesa Gallina Extremeña Azul Gallina Pedresa Indio de León Mallorquina Menorquina Murciana Oca Empordanesa Pardo de León Penedesenca Pita Pinta Utrerana Valenciana de Chulilla



# ANDALUZA AZUL



The geographical region it originally occupied and the colour of its plumage are the reasons behind its name: Andaluza Azul (Blue Andalusian). It also has the characteristic triad of the

typical light breeds that have Mediterranean roots: a single comb, white earlobes and feet with a slate grey pigmentation. This is the oldest-known Spanish hen that can be seen in books, and it is highly prestigious not only among Spanish poultry farmers, but also outside Spain's borders.

## SPECIFIC FEATURES OF THE ROOSTER

It has a moderately long, deep head and a full, smooth, finely textured face. Its beak is long to moderate and delicately curved. It has big, full eyes and a medium-sized, single comb that is smooth, upright, uniform and deeply serrated, formed by five well-defined points. The centre of these points is slightly longer and proportionally broader than the other four. The blade of the comb slightly follows the curve of the neck. It has long, thin, smooth wattles and medium-sized earlobes that are smooth, white and shaped like almonds. It has a rather long neck, well-arched, and an abundance of hackles that float down its back.

Its wings are large; the primaries and secondaries are wide and overlap naturally when the wing is closed. It has a rather wide, long back that is raised in the middle then falls slightly towards its tail, and which is full of long saddle feathers; a wide, deep, well-rounded chest that is upright and forward-facing; a large tail, full and fanned out, with wide and overlapping feathers that sit at a 45° angle to the horizon; and long, uniform, well-curved sickles with plenty of coverts. Its thighs are moderately sized, rather long, revealing the knee well below the profile of its body, and it has long shanks that are set wide apart. It has four straight toes, slate blue-coloured legs, graceful and elegant

## **GEOGRAPHICAL DISTRIBUTION**

As its name indicates, the Blue Andalusian breed is primarily distributed throughout Andalusia, with its main population in the countryside of Seville and Cordoba, although other large groups can be found in Cadiz, Huelva and Jaen.



movements, and a weight ranging from 2.9 to 3.5 kg.

#### **SPECIFC FEATURES OF THE HEN**

Its head, face, beak and eyes are like those of the rooster. It has a single, medium-sized comb that is deeply serrated with five defined points. The front of the comb, as well as the first point, stand erect. The remainder of the comb falls gradually to one side, and it has a fine texture with no folds or wrinkles. Its wattles and earlobes are like those of the rooster, and it has a rather large, gracefully arched neck. Its wings and back are like those of the rooster, as well as its chest. Its tail is long and fanned out, sitting at a 35° to the horizon, with wide and overlapping feathers. Its thighs, shanks and toes like those of the rooster. It carries itself like the rooster and has a weight of 2.5 kg.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The breed is used for its good egg-laying capacity, with yields of around 165 eggs (white) per year, those of which have an average size of 70-80 grams. It can be found in farmhouses and backyard flocks, generally for self-consumption, although it is currently also bred as an ornamental breed due to its international recognition. It is one of the Spanish exhibition breeds with the greatest strength and yield. Some writers mention its low tendency to go broody.

# COMBATIENTE ESPAÑOL



## SPECIFIC FEATURES OF THE ROOSTER

Its head is small and eagle-shaped with a full. smooth, finely textured face. It has a slightly curved, short and strong beak. It is somewhat broader in the shoulders than in the tail. It has large, vivid and defiant eyes; a comb that is either single or rose, but always small; small wattles and earlobes; a strong, well-curved neck with lots of hackle feathers covering its shoulders; wings that are large and strong, covering its thighs and overlapping back below its tail; a short and flat back, a wide, prominent chest with large muscles; a long, forked tail that sits rather horizontally; thighs that are strong, muscular and separated; and strong, mediumlength shanks with a well-developed spur that is rather low set. Its toes are short, strong and nicely separated; the last toe is nearly flat. The comb. face, wattles and earlobes are all red. The beak is a light horn colour, and the feet and toes are yellow, green or slate blue. Its plumage contains a wide variety of colours. It weighs between 1.5 and 2 kg. There are three varieties: Combatiente Español (Spanish), Combatiente Jerezano (Jeréz) and Combatiente Canario (Canary).

## SPECIFC FEATURES OF THE HEN

Considering its intrinsic sexual differences, it is similar to the rooster. It lacks hackle, saddle and sickle feathers, and its tail tends to be more erect, It weighs between 1 and 1.5 kg. It was named after the skill that caused it to be selected("Combatiente" means fighter). It is one of the breeds that most closely resembles Gallus bankiva, which is considered the ancestor of domestic chickens. There are two theories regarding its origin: The first claims that it was introduced by the Phoenicians and Carthaginians 3,000 years ago; and the second, that it originated from the Mediterranean wild rooster and, thus, it would form part of the Mediterranean lineage.

## **GEOGRAPHICAL DISTRIBUTION**

It can be found throughout most of Spain. The Jerezano variety is located mainly in Jeréz de la Frontera; and the Canario, in the Canary and Balearic Islands. However, it should be noted that most of the breed's specimens can be found in the provinces of Cadiz and Seville.



# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

This breed is used as a fighting animal, and today they are well known for their bravery, nobility and courage, as well as for being highquality, elegant roosters.

When they are crossed, the male is not usually chosen for his kinship to the other animals, but rather for being among the best ranked, which is why inbreeding is not high. Individualized breeding methods are carried out, which makes it possible to know both the father and mother of each animal born. To this end, the females are placed in separate henhouses that can only be accessed by one male.

# EUSKAL ANTZARA



## SPECIAL FEATURES OF THE GANDER

It has a large, strong head, although its forehead is not very prominent; and a rounded skull and rather narrow cheeks, with a gentle indentation that forms at eve level, curving inward to reach its greatest depth at the base of the eye, then returning back out between its mandibles. It has a medium-sized, firm beak that is slightly smaller on the bottom, and the top half forms a straight line with the forehead. The tip of the beak is curved and black, the rest is a pale orange colour. Its eyes are light orange with a chestnut-coloured iris. It has a medium-length, nearly cylindrical neck that is wider at the base, and which it carries vertically. Its trunk has rounded contours and is slightly elevated, and its back is rather flat. It has a wide, round, full chest that is somewhat raised: a broad abdomen, which prolongs the chest and ends in two well-developed paunches, each identical in size, sitting no less than four finger-widths from the ground. Its tail is rather short, a little bit raised and slightly open. The wings lay tightly against the body and are long but do not extend past the tail, although they do cross slightly over it. Its thighs are medium-sized but not visible, and it has well-proportioned, medium-sized shanks with sinews, orange in colour, with four medium-length toes joined together by interdigital webbing, which is also orange. Its neck and head are dark grey, but lighter on the chest. The wing coverts form dark bars that alternate with bars that are thinner and lighter in colour. These bars are also present in its secondary wing feathers, but here they follow the line of the back and are

Its name means 'Basque country goose' in Basque, which is where it originated and has been bred since ancient times. thus forming a population with uniform characteristics. Its size is typical of that of medium-sized geese in southern Europe.

#### **GEOGRAPHICAL DISTRIBUTION** The Basque country.





perpendicular to those on the coverts. The bars are also present on the sides of its chest. which are more intense where the ventral area begins, then fade as they approach the throat region, where they disappear. The weight of an adult gander ranges between 7 and 9 kg.

## SPECIFC FEATURES OF THE GOOSE

They are guite similar to the ganders, with natural differences due to sex. The weight of an adult goose is between 6 and 8 kg.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The eggs, which are white in colour, must weigh at least 160 g.

# **EUSKAL OILOA**



## SPECIFIC FEATURES OF THE ROOSTER

This animal has a long, wide head and a single, medium-sized comb that is upright and firm, with five to seven well-defined points. The blade, which is somewhat raised off of its neckline, is bright red in colour. Its wattles are thin, round and also bright red, and it has medium-sized, spear-shaped earlobes that sit tightly against its smooth face. It has a strong, powerful, well-curved beak; large, oval-shaped eyes with a light chestnut-coloured iris; a moderately long, well-arched neck with abundant hackle feathers floating down over its back; a wide back that slopes gently down towards its tail with an abundance of medium-sized saddle feathers: a wide, deep and well-rounded chest: a well-developed abdomen; a medium-sized tail; wide and overlapping feathers that sit at a 45° angle to the horizon: medium-length sickles with good curvature; large, well-folded wings that fit tightly to its body; strong, robust thighs; and fairly long, yellow shanks that are thick and strong, each with four toes. The breed has five varieties: Beltza, Gorria, Lepasoila, Marraduna and Zilarra. Its average weight is 3.5 kg.

## **SPECIFC FEATURES OF THE HEN**

The hen is quite similar to the rooster, except for features like its beak, which is not as curved. Its comb stands erect without swaying to the side, unlike Mediterranean breeds, although it is less developed than them. Its wattles are shorter and rounder, and its earlobes are smaller, although they retain the same spear shape. Its chest is wide and prominent, but less so than the rooster's. It has a rather small tail, The name of the breed refers to its birthplace, the Basque country, in the Basque language. It originated from free-range specimens living on Basque farms, which were being displaced by commercial hybrids. In 1975, eggs were collected on many of these farms, mainly in Guipúzcoa, which were laid by hens that had different coloured plumage. The purpose of this was to purify the breed, a task that a variety of organisations have been carrying out since then. This breed is a clear example of the Atlantic lineage.



**GEOGRAPHICAL DISTRIBUTION** 

which is only slightly raised (35°), with broad, overlapping feathers. Its thighs and shanks, although quite similar to those of the rooster, reveal the differences inherent in its sex with regard to size.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

This is a hardy, dual-purpose breed, as it offers acceptable yields for both eggs and meat. Its average egg production varies between 209 and 220 eggs/hen/year, with an average egg weight between 56 and 60 g.

# GALIÑA DE MOS



#### SPECIFIC FEATURES OF THE ROOSTER

This breed has a rather small, well-formed head with a red, smooth and finely textured face. It has a pea comb with three longitudinal rows of papillae, or points, that are red in colour: small, red, smooth wattles that are finely textured with a well-rounded bottom edge; and small earlobes sitting tightly against its face that are smooth, spear-shaped and red in colour. It has a strong, powerful and well-curved beak; on the upper mandible, there is more of a dark brown colour than yellowish-horn; on the lower mandible, dark brown spots may appear but only at the point of attachment. Its eyes are large, round and dark orange in colour. It has a slender and robust neck, rather long, erect, fully feathered and well aligned on the body, with abundant hackle feathers floating down over its back:

a wide, deep, long trunk that slopes gently down towards its tail; a wide back that tilts slightly towards its tail, full of medium-sized saddle feathers; a wide, deep, prominent and powerful chest; and a small tail with sickle feathers that are short and slightly surpass its wide and overlapping main tail feathers. The tail sits at a 45° angle to the horizon. It has a broad abdomen, and its wings are rather small, well-folded and snug against its body. It has strong, robust, medium-length, visible thighs and strong, thick, yellow, medium-sized shanks that are free of feathers, at the end of which are four strong, straight toes. The weight of an adult rooster ranges between 3.5 and 4 kg. It is named after the parish of San Xiao de Mos, located in the municipality of Castro de Rei (Lugo), where the first specimens were acquired and with which the breeding and selection of this breed began. These specimens came from a group of free-range hens that were raised in the interior of Galicia, mainly in the region of A Terra Chá, in the province of Lugo.

#### **GEOGRAPHICAL DISTRIBUTION**

It is located in the Autonomous Community of Galicia, although it is beginning to expand throughout all other regions in Spain.



## SPECIAL FEATURES OF THE HEN

In general terms, the phenotype of the hen is very similar to that of the rooster, except for its intrinsic sexual differences. The comb is less developed, as are the wattles and earlobes, which have the same spear shape. It has a protruding chest, but less so than the rooster. The weight of a live adult hen is estimated to be between 2.5 and 3 kg.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The Galiña de Mos is bred in a traditional way, which is favoured by its high degree of hardiness. When the animals reach adult age, they are bred in freedom, feeding mainly on grains and natural products. It is a dual-purpose bird that has a high meat yield, meat that is highly appreciated for its flavour and quality. In addition to this, it produces a good number of eggs per year. The eggs that have a light brown shell and a minimum weight of 50 g.

# GALLINA CASTELLANA NEGRA



## SPECIFIC FEATURES OF THE ROOSTER

This breed has only one variety, which is reflected in its name: 'Negra' (black). This is a light, Mediterranean-type rooster with a wide and thick head; a medium-sized, strong beak; long, wide wattles composed of very fine tissue; and normal-sized earlobes. It has a medium-sized comb, which sits upright and has five or six wide, flat points. The back end of the comb, or blade, is raised slightly above the neckline. Plumage colour is the same in both sexes: black with metallic reflections on some parts of the body and tail.

Shanks and toes that are any colour other than dark slate are considered to be disqualifiable characteristics, as well as tails that sit too low and are grey, white or any colour other than black.

The rooster's weight ranges between 2.8 and 3 kg.

## SPECIFC FEATURES OF THE HEN

The hens have the same features as the rooters, except for their intrinsic sexual differences: absence of sickles, saddle and hackle feathers. In addition, their combs fall to one side and only the front end stands erect. The hen's weight is approximately 2.3 kg. This breed of chickens was presumably brought to Spain by the Arabs. This belief is based on the fact that in northern Spain, where Muslim domination was the briefest, these animals were not seen until the end of the 19th century. Their initial geographic distribution spanned much of Spain, but with the arrival of white egg-laying commercial hybrids, which are based on strains of the Leghorn breed, they experienced a major decline.

#### **GEOGRAPHICAL DISTRIBUTION**

Its production is distributed throughout all of Spain, mainly in the regions of Castilla-La Mancha, Castilla y León, and Madrid.



# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The Gallina Castellana Negra is used only for the purpose of laying eggs. They produce quality eggs-characterised by their large size and the hardness of the shell (white)-and they have a high egg-laying rate. Nevertheless, they are not considered good for meat production.

This is a very hardy breed that is resistant to disease, has good plumage and grows quickly. It has good fertility but almost no incidence of broodiness, except in older birds.

# GALLINA DEL PRAT



## SPECIFIC FEATURES OF THE ROOSTER

It has a moderately large head that is wide and long; a smooth, bright red face without granulations; a single, bright red comb that is rather large and well serrated; large, hanging wattles that are fine in texture and have round edges; large, white, oblong-shaped earlobes that are thin, sitting tightly against the face, and smooth, without wrinkles or folds; a rather long beak that is strong, powerful and well arched; a fairly long, erect neck that is well arched and has an abundance of hackle feathers, which open in the front to reveal the chest, whereas on the sides and back of the head they cover the shoulders and upper back;

a long, wide, deep trunk; a rather long, wide and flat back that slopes down gently, with an abundance of medium-length saddle feathers that cover both sides of the abdomen nicely; a wide, deep and prominent chest; a copious, long tail with well-curved sickles that show a clear distinction between the three types of tail feathers, and which is carried at a 40° to 45° angle to the back; large wings; rather long and meaty thighs with well-separated joints; and medium-length shanks, without feathers and slate blue in colour. It weighs 3 kg. The fawn variety is characterised by its slate blue legs and dark blonde feathers, which are lighter in hens. It owes its name to the capital of the region where it originated, and it is one of the oldest chicken breeds in Spain. It was derived from the rooster and hen populations that were prevalent in the lower region of the Llobregat river. At the end of the 19th century, a recovery programme began using uncrossed specimens that could be found in rural houses and farmhouses in the municipal district of El Prat.

## **GEOGRAPHICAL DISTRIBUTION**

Mainly in Catalonia, although it is widely distributed throughout all of Spain. There are also breeding centres in countries such as Germany, France, Holland and Italy, along with Central and South America.



#### **SPECIAL FEATURES OF THE HEN**

In general, it is like the rooster, taking its inherent sexual differences into account, but its beak is not so arched and its wattles are fairly round. Its comb falls to one side, although the first point is upright, and it is free of folds and wrinkles, does not cover the eye, and has a firm base. It weighs 2.2 kg.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

This breed is used to produce a traditional type of meat, and it is the only breed in Spain with a protected geographical indication for the Prat chicken and capon. These chickens and capons are raised on land with access to the outdoors and a maximum density of 8 animals/m2 of indoor area. The chickens are not slaughtered until they reach a minimum age of 90 days; and the capons, 182 days. Average egg production is 180 to 200 eggs/hen/year.

# GALLINA DEL SOBRARBE



## SPECIFIC FEATURES OF THE ROOSTER

This is a light, Mediterranean breed with a short, plump back. It has a modest comb and a medium-sized tail that is raised high, rather closed, and has lots of feathers, two of which are longer than the rest. It has a single comb, white earlobes with a hint of red colour, yellow shanks and tight-fitting plumage. Its chest is wide, round and meaty, sitting rather low and not very prominent, but with a visible breastbone. Its abdomen is not very developed and its tail is medium-sized, rather full yet fairly closed, with two longer feathers that are well curved. There are two colour varieties: 'roya' or 'trigueña' (wheaten), and 'negro con pajizo' (black and yellow).

## **SPECIFIC FEATURES OF THE HEN**

Considering its inherent sexual differences, it resembles the rooster; however, its comb is much more obvious than the rooster's, its wings are carried more horizontally, its tail is quite closed and its abdomen is more developed. Its comb stands upright and straight.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

The main use of this breed is for meat production. Productive characterisation studies have found that the chickens belonging to both of this breed's varieties reached 2.1 kg (the minimum commercial weight) at 19 weeks old. It is an ancient breed, but one that has never been recorded. It must have spread through the Pyrenees of Huesca and its foothills, as can be seen in photographs from the early 20th century and in various economic treaties. It was identified in 1995 in some villages in the Sobrarbe region, and enough specimens were rescued to ensure its conservation.

#### **GEOGRAPHICAL DISTRIBUTION**

It is distributed mainly throughout the regions pertaining to the Pyrenees of Huesca.



The cumulative conversion rate at 19 weeks of age for each variety is: 4.94 for the 'negro con pajizo' chickens, and 4.37 for the 'trigueña' chickens.

These data show that the Gallina del Sobrarbe breed is comprised of light, slow-growing animals. As far as egg production is concerned, the specimens in this breed reach sexual maturity fairly early and will start laying eggs at 20 weeks of age. They have an average production of 170 eggs per laying cycle.

It is important to note that no significant differences were observed between the two varieties of Sobrarbe chicken breeds for the majority of the parameters studied, both for meat and egg production.

# GALLINA EIVISSENCA



#### **SPECIFIC FEATURES OF THE ROOSTER**

It has a medium-sized, long head and a smooth, red face with some filoplumes. Its comb has between six and seven well-defined points that are not too deep, with a blade that follows the contour of its neck. It has fairly large wattles that are red and oval-shaped; a medium-sized, thick, curved, horn-coloured beak; a long neck that is arched at the nape, with an abundance of hackle that reaches, but does not cover, its shoulders; a wide, medium-sized trunk that is tilted back slightly; and a wide, well-developed chest.

It has a medium-sized to fairly large, single red comb that stands upright; and a medium-sized, bushy tail that does not exceed the height of the nape of its neck, and forms a 45° to 90° angle to the horizon.

There are several different varieties: Silver black, barred black, and silver wheaten. In general, roosters have a black chest, thighs and tail, with large coverts and primary wing feathers. Its hackle feathers, neck, saddle and saddle feathers are silver. The barred black rooster has alternating bars of colour ranging from very light to dark grey. In the silver wheaten variety, the rooster has a silver cape and a black chest. Its primary wing feathers are white. The weight of an adult rooster is 3.5 kg.

## SPECIFC FEATURES OF THE HEN

The hen's morphological characteristics are the same as those of the rooster, except for its sexual differences. The weight of an adult hen is 2.5 kg. Hens have black plumage, oftentimes with wisps of silver on their necks. In the barred-black variety, the hens have goldenThe Ibicenca chicken has been present in almost all of Ibiza's rural houses for many years. The first references made to this animal date back to 1867. Publications that referred more specifically to morphological descriptions and productive aspects of the Ibicenca chicken did not begin to appear until the end of the 20th century.

## **GEOGRAPHICAL DISTRIBUTION**

This chicken breed can be found on the island of Ibiza. But special mention should be made of the island of Formentera, which is very close and has been dependent on Ibiza for many years.



red bars only on the neck area. Their shanks are white, but they may also have some slate grey spots. In the silver wheaten variety, hens have black on their necks, a very light cream contrast on their chests and salmon-coloured backs.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Currently, these chickens still have a dual purpose (meat/egg) on the farms where they are bred, which continue to do so for their own consumption. However, based on the results obtained in the studies presented above, the possibility of setting up a programme to improve meat production is being studied, which would allow these farms to supply to the local market.

Animals play a key role in providing fertiliser as well as helping to restructure the soil's balance, which again is a step towards farm selfsufficiency and sustainable rural development. In addition, the hardiness that is inherent in this breed and its great adaptation to Ibizan agriculture throughout so many years have made it highly resistant to diseases.

# GALLINA EMPORDANESA



## SPECIFIC FEATURES OF THE ROOSTER

It has a short, wide, round head; a smooth, red face; and a red, moderately large, single comb that stands upright, is arched and well anchored to the head, smooth and serrated with five or six flat and moderately short points, the first and last of which are shorter than those in the middle. The blade, which has an arched base, follows the contour of the neck but does not touch it and there are several lobes at the rear. Its wattles are moderately large, round and red. Its earlobes are somewhat elongated and slightly wrinkled, fitting snug to the head at the top and hanging at the bottom; they are red, although one-third of their surface can be white. Its beak is short, moderately curved and has a reddish-horn colour. It has a wide. medium-length back, rounded and sloping down towards its tail, with an abundance of medium-sized saddle feathers; a wide, deep, elongated chest with well-arched ribs; a fairly well-developed tail that is bushy and open with two lengthier, well-curved feathers; and large wings that are carried at an incline, in such a way that their central axis forms a 45° angle to the ground, and which are held close to its trunk without extending past it. It has mediumlength, strong thighs with tight-fitting plumage; yellow, fairly long shanks that are thick, smooth, well separated and free of feathers; and four strong, open and straight toes. Adult birds can reach a weight of 3 kg. There are four varieties: White, Red, Buff, Light Buff and Partridge, the latter of which gave rise to the former varieties.

The Gallina Empordanesa breed owes its name to the region where it originated: Empordà. Although it has been present in poultry competitions since the beginning of the 20th century, the base population—which is the source of the current population—comes from specimens that were collected by the IRTA (Institute of Agrifood Research and Technology) from traditional farmhouses in the Empordà region starting in 1982.

## **GEOGRAPHICAL DISTRIBUTION**

It is distributed throughout almost all the autonomous communities, although most of its population is located in Catalonia.



## SPECIAL FEATURES OF THE HEN

Considering its natural sexual differences, it is very similar to the rooster; however, its wings are carried more horizontally, the back half of its comb falls to one side, its wattles are almost completely round, it has a more voluminous abdomen, and up to half of its earlobes may be white. Adult hens have an average weight of 2.2 kg.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

It is bred as a laying bird in a mainly intensive system, with an average production of 180 eggs/ hen/year, those of which weigh an average of 60 g. Chicks start laying between 4.5 and 5.5 months of age. The eggs have reddish-brown shells. The hens have good maternal behaviour, with a broodiness incidence of 14% and an average hatching rate of around 72%.

# GALLINA EXTREMEÑA AZUL



## **GENERAL FEATURES**

This type of bird is midway between the Mediterranean and Atlantic breeds, somewhat lighter than the semi-heavy ones. It has smooth feathers, a single comb and bare shanks. Three varieties of plumage exist: grey, dirty white (white speckled with grey or black) and black (with green iridescence). Its distinctive morphological features are: the plumage colour of heterozygotes (grey), the colour of its earlobes (red or predominantly red on white; with age, the amount of white may increase), the colour of its shanks (green and yellow skin), as well as the colour of its eggs (light brown with a pink or ivory hue).

Adult roosters weigh between 2.5 and 4.2 kg, and adult hens between 1.3 and 3.2 kg.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

This breed has traditionally been raised in freerange conditions on country farms, as it has very few dietary requirements. The hardiness of the Extremeña Azul hen is its most highly valued feature among poultry farmers. This is demonstrated by its resistance to disease, its scarce nutritional requirements, its ability to graze and prey, and its good maternal behaviours. It is a dual-purpose chicken breed (eggs and meat).

The size of the eggs in the first clutch is medium (53-63 g), while in the second clutch they are smaller and larger (49-78 g). The 'Gallina Extremeña Azul' breed began to be categorised as such in the 1980s. In 1991 the Regional Government of Extremadura started a programme to recover the 'Extremeña Azul' chickens.

#### **GEOGRAPHICAL DISTRIBUTION**

The majority of the population is located in the province of Badajoz, with only a few registered populations in the province of Cáceres.



The annual number of eggs laid is around 200/bird in a cage with a light/dark regime of 14/10h.

In terms of behaviour, it is a lively animal that actively searches for food, cleans and grooms itself, and performs the typical courtship, mating, and nesting rituals. Its docility depends on the way it is handled. If many roosters are kept together in parks or pens, their fights to establish hierarchy cause quite a few casualties; however, if several roosters are together but have enough hens, they can form their harems and live together without any problems.

# GALLINA PEDRESA



## **GENERAL FEATURES**

This is a light Mediterranean breed with a medium-sized, well-shaped head and a smooth, red face. It has medium-sized, bright red wattles and medium-sized earlobes, pressed closely to its face, that are a white-cream colour with some red flecks. It has a single comb-medium sized in roosters (5-7 points) and small in hensthat is red in colour, but brighter in males. Its beak is strong, curved and yellow with horncoloured spots. It has large, round, dark eyes with tomato-coloured sclera: a medium-length. strong neck; a wide stock that is not very long and slopes gently down towards its tail; a wide, long back that slopes down towards its tail; and a deep chest. Roosters have a medium-sized tail with elongated white sickles, which are sometimes barred at the ends. The hen's tail is not as elevated as that of the rooster, and it sits at a 40° angle to the horizon. Its abdomen is pulled in and covered by wings whose length

Its name comes from 'Pedrés', a word used to describe the irregular barred plumage that is typical of this breed. From the middle of the 20th century, the Pedresa chicken suffered a drastic decline in its population due to the arrival in Spain of foreign, higher yielding breeds, which made it practically extinct at the end of the century.

## **GEOGRAPHICAL DISTRIBUTION**

This breed is mainly located in Cantabria, although originally it could also be found in Asturias, Galicia and in the north of Castilla y León.



exceeds their width. It has long, strong thighs. Adult roosters can reach a weight of 2.3–3 kg, whereas the weight for hens is 1.4–2 kg.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

This bird is well adapted to the climatic conditions and humidity that are typical of the Cantabrian coast, and it is raised mainly outdoors. Although it was traditionally a dual-purpose breed, today its main productive activity is laying eggs, yielding an average of 209 eggs per year. The eggs are a light ochre colour and have an average weight of 53 gr.

# INDIO DE LEÓN



#### SPECIFIC FEATURES OF THE ROOSTER

The roosters in this breed are models of a wellbalanced and robust demeanour with their strong, high and straight heads. They have a single comb with five to eight serrated and deep points, which extends down over the beak and rests on it. Their wattles are large and fine, yet hang nicely. The comb, face and wattles are all bright red in colour. They have large earlobes that are red with white pigmentations; a strong, muscular, wide and elongated trunk; a very well-developed tail that is nicely arched and sits on the body at a right angle; wings that are well developed in terms of length and width, closed tightly against the body; thighs that are broad and robust with slim and strong shanks; 4 long, strong and well-separated toes with a bluish- or greenish-grey colour; and a powerful, well-developed long spur. Their plumage is grey with bluish highlights, and their capes vary greatly depending on the colour of their plumage: white, grey, red, brown and black. Adult specimens weigh 2.0-2.4 kg.

#### SPECIFC FEATURES OF THE HEN

Except for natural sexual differences, the hens have similar morphological characteristics to the roosters, with adult specimens weighing between 1.2 and 1.8 kg.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

This breed's sole purpose is to produce feathers for making lures, almost exclusively flies for trout fishing. Only the roosters are bred for commercial feather production, as their feathers are superior in quality to those of the hens. Roosters The origin of this breed goes back a long time; nevertheless, it is poorly documented. There are historical references describing its existence and breeding as far back as the 17th century. It is believed to have originated from the primitive Red Junglefowl (Gallus gallus) and, thereafter, to have adapted to altitudes of over 1,000 metres.

According to Orozco (1989), the Andalusian breed was involved in its creation-or the two share a similar origin-as it is a carrier of the blue gene (Bl/bl).

#### **GEOGRAPHICAL DISTRIBUTION**

This breed can be found mainly in the municipalities of La Vecilla and Valdepiélago (the towns of La Vecilla, La Cándana, Campohermoso, Valdepiélago, Aviados and Ranedo), in the León province.



produce feathers between 1 and 4 years of age, achieving optimum feather quality when they are 2 or 3.

Plucking is the most unique and characteristic handling procedure for this type of production. Plucking is first carried out at six months of life. but the plumage is discarded because it is far too short, although it is useful to predict the future quality of the rooster's feathers. Each anatomical region used for feathers has a different plucking schedule. The best feathers are the ones in spring, as opposed to the ones in winter. Feathers are grouped by guality, colour and size, then gathered into bundles of one dozen, called 'mazos'. They have an extensive, traditional farming system, and the birds are always kept outside in open or fenced pens. Their diet is mainly based on grain and whatever they pick up off the ground in parks or farmyards.

# MALLORQUINA



## SPECIFIC FEATURES OF THE ROOSTER

This breed has a moderately long and wide head with a smooth, red face and a smooth, fairly large, single comb that stands upright, is arched and firmly anchored to its head. It is serrated with five or six flat points that are not very long. The blade should not be serrated and should follow the contour of the neck without touching it. It has moderately large, hanging wattles that are red in colour; mediumsized, white earlobes; an elongated, slightly curved beak that is a waxy-white colour, with the tip of its upper mandible a bit darkened; large eyes with a honey-coloured iris; a mediumlength neck that is evenly arched with lots of hackle flowing down to its back; a mediumlength, wide body that is tilted back with an abundance of saddle feathers; a wide, long and prominent chest: a rather flat abdomen: a large, sickle-shaped tail with two longer feathers, which sits at a 45° to 90° angle to the horizon and has lots of down feathers where it attaches to the body; large, folded wings that are slightly inclined and fit snugly against its body; medium-length, strong thighs that are visible and have tight-fitting plumage; and white, fairly long feet that are smooth, well separated and free of feathers, with four strong and open toes.

## SPECIFC FEATURES OF THE HEN

Similar to the rooster, considering its sexual differences and that fact that its comb is upright and small, the back part of which is separated from its head or slightly drooping in birds that are old or incubating. It has short earlobes and wattles, which are well separated. Its plumage differs greatly from that of the roosters, as the The breed owes its toponymic name to the largest of the islands of the Balearic Islands, Majorca, where it originated. There is no clear indication as to when this bird came on the island. It descended from the Mediterranean lineage, whose specimens are characterised by their medium size and a body conformation that is typical of a light breed.

## **GEOGRAPHICAL DISTRIBUTION**

This breed is located on the island of Majorca, with occasional exceptions outside of the island and under the care of poultry collectors, given the elegance of the Majorcan roosters.



feathers on its head and neck are light brown, its back is salmon coloured and both its chest and abdomen are light cream. Its tail, which is rather small, comprises a combination of black and salmon-coloured feathers.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

It is considered a hardy animal and has a dual purpose (eggs/meat), as its body size and egglaying ability are suitable for the domestic economy, to which it has always been linked. The hens have good maternal behaviours. Their first clutch happens between 5 and 6 months of age. However, the normal age to start mating them is not until they are 10 months old. Roosters can be used for reproduction until they reach 3 1/2 years of age. Average egg production, despite variations due to different farming conditions, exceeds 100 per year. The average weight of the eggs is at least 55 g.

# MENORQUINA



#### SPECIFIC FEATURES OF THE ROOSTER

This breed has a long head that is somewhat flat in the back. It has a full, smooth, bright red face that is completely devoid of feathers and fluff. It has a single, large comb that is also bright red. stands upright, is quite elongated and evenly serrated with five or six points-the middle of which is the longest. It has long wattles that are large and finely textured, without folds or wrinkles, bright red in colour and rounded at the bottom. Its earlobes are large, smooth, flat and completely white, have an almond shape and are nicely aligned on the head. Its beak is not very long, yet solid and consisting of a dark horn-coloured material, almost black. It has large, dark, oval-shaped eves that are bright and expressive: a long, gently arched neck with an abundance of hackle feathers that float down over its back: a long, deep trunk that slopes gently down towards its tail; a deep, round and prominent chest; a large, full tail that never tilts to the side: moderately long wings that are closely fitted to its body; strong feet that have a medium to long length; black or dark slate-coloured shanks; glossy, greenish-black plumage; and feet, shanks and toes that are black or slate coloured. The average weight of adult roosters is 3.43 kg.

#### SPECIFC FEATURES OF THE HEN

It has a single, large-sized comb that is bright red; it rises up on one side above the beak, forming a bend and then falling completely over to the other side, but without covering the eye. It is evenly serrated with five or six points. It has a long and full tail. Its main tail feathers are wide and overlapping, forming an angle to the The breed's name is derived from the toponym for Minorca, one of the Balearic Islands. The exact date when these birds originated on the island is unknown; however, certain proto-historic discoveries have confirmed their existence on the island between 1000 and 600 BC, before their presence was apparent on the Iberian Peninsula. This breed is a clear example of the Mediterranean Stock.

## **GEOGRAPHICAL DISTRIBUTION**

Although the Menorquina breed is present on four continents, the presence of purebred specimens in Spain is virtually limited to the islands of Minorca and Majorca, the former of which is home to the vast majority of them.



horizon that is somewhat greater than that of the rooster (50° or 60°), due to the reduced slope of its body. Adult hens have an average weight of 2.495 kg. They are similar to the rooster in all other characteristics

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

These are moderately hardy hens with a good egg-production capacity. During their first year of laying, they are able to yield more than 150 eggs—which are classified as large compared to those of other breeds—the average of which is at least 60 grams.

# MURCIANA



## SPECIFIC FEATURES OF THE ROOSTER

The roosters in this breed are characterised by their long and wide heads. They have a smooth. bright red face and a single, large, comb that stands upright with five to seven well-defined points that are perpendicular to the curve of the head and with the blade laving close to the contour of the neck. Both blade and comb are bright red. They have large, hanging, bright red wattles with a rounded bottom edge; moderately elongated, white earlobes that sit snugly against the face; a medium-sized, yellow beak that is strong and curved; round eyes that are well proportioned to the face with a reddishchestnut coloured iris: a strong, medium-length neck with an abundant amount of hackles resting over the back: a wide, well-developed and fairly large stock that is tilted slightly back;

a wide back that slopes gently down from the neck to the sickles, but which is prone to sit horizontally, with plenty of saddle feathers that are virtually touching the hackle feathers, making the back look short; a wide, long and strong chest; a medium-sized tail that has wide and overlapping main feathers, and sickles that tend to sit vertically; a wide, deep and welldeveloped abdomen; well-folded wings that sit closely against the body, their length exceeding their width; strong and hardy thighs; and yellow, smooth shanks that are proportionate to the rooster's size, with four strong, open, straight toes that are also yellow. The average weight of an adult ranges between 3.4 and 3.7 kg. The breed, which takes its name from its birthplace-the Autonomous Community of Murcia-was created by Zacarías Salazar y Mouliáa, director of the Estación Pecuaria Central (Central Livestock Station), which was responsible for collecting birds from different poultry sites in Murcia.

**GEOGRAPHICAL DISTRIBUTION** The breeding group is located almost exclusively in the Murcia region.



## SPECIFIC FEATURES OF THE HEN

Although its proportions are naturally different due to sex, it has the same general features as the rooster, except for its comb, which falls slightly to one side; its wattles, which are rounded; its earlobes, which are also round; its back, which is carried horizontally; and its tail, which sits at a 45° angle to the horizon. The weight of an adult bird ranges between 2.3 and 2.6 kg.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

It is considered a light breed with slow but sustained growth, which could be an indication of its egg-laying capacity. Its eggs, which are considered large in size, have an almost elliptical shape and a characteristic cream colour. The conservation of the breed is focused on satisfying the ever-increasing consumer demand for healthier and more natural products.

# OCA EMPORDANESA



#### SPECIFIC FEATURES OF THE GANDER

It has a strong, round head and no dewlap. It has a rather large crown that is accentuated by a protrusion on its skull. Its face is covered in feathers, with a wide jaw that tapers gradually towards its beak. Its eyes have a sky blue-coloured iris and an orange rim. It has a mediumsized, high-set beak that does not form a continuous line to its forehead, and which is orange at the base and pink towards the tip. The nail on the tip is a pale rose colour. It has a long, strong and slightly curved neck that is nearly cylindrical at the top, narrows in the middle, then widens to form a broad base that continues on to the chest.

It has a long, rounded back, which is slightly convex and covered by its wings; a flat yet rounded chest and a tall posture; a slightly raised tail; a well-developed abdomen with two paunches that are large but do not touch the ground; large and long wings, the tips of which cross above the tail; feather-covered thighs; and medium-length, strong, rose-coloured shanks.

#### SPECIFC FEATURES OF THE GOOSE

Similar to the gander, considering its inherent sexual differences. Its neck is a bit shorter, with more of a curve, and does not appear as strong. Its abdominal paunch is more developed.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

These geese begin to lay eggs at 8 to 10 months of age, and the goslings usually hatch

It gets its name from the region where it originated, Empordà, which is part of the Autonomous Community of Catalonia. Its origin is most likely similar to that of other European geese, diversifying thereafter to adapt to the surrounding environment. The first bibliographic accounts—at the beginning of the 19th century—refer to them as 'country geese' or 'white geese', which were quite common in Girona and Barcelona and highly regarded by Empordanese farmers, but it wasn't until 1950 when the name 'oca del Empordà' (Emporda goose) first appeared.

#### **GEOGRAPHICAL DISTRIBUTION**

This breed is primarily located in the Empordà region, which is in the Autonomous Community of Catalonia, although it can also be found throughout the rest of Spain. It has even been seen in other European countries, such as France and Germany.



between February and June after 28-29 days of incubation. In general, geese are monogamous, although a male can have up to 2 or 3 females. Their laying season goes from mid-January to the end of June. The female can lay eggs until she is 10 years old, although the second and third years are the best for egg production. The average number of eggs laid in the first year is 65, with an average weight of 145 g. It is characterised by its good behaviour during the laying season, a feature that is highly valued by breeders. Their meat yield is good.

# PARDO DE LEÓN



## SPECIFIC FEATURES OF THE ROOSTER

It has a balanced and robust posture, with a large, strong head that is straight but does not sit high above its shoulders. Its comb is predominantly single, straight and medium-sized with five to seven points that have a medium depth, all of which are evenly shaped; it stretches out over the beak, resting on it, and also extends back beyond the nape of the neck, without any folds or wrinkles. The comb, face and wattles are all bright red in colour.

Its earlobes are rather small, oblong, red and sit closely to its face, with white or yellowish colourations on the surface. A small percent of specimens have a rose-coloured comb. It has a wide chest and a tail that is fairly elevated, with an abundance of feathers and well-developed sickles that almost form a complete circle, and it sits at an obtuse angle with its tailbone.

Its thighs are fine and lean yet quite muscular, and it has strong, smooth shanks that are a bluish-grey slate colour. It has black plumage with a bluish-greenish shine on some parts of its body and tail. In addition to the varieties defined solely by plumage colour (silver, yellow, golden-red), the 4 basic varieties that exist based on individual plumage patterns are: 'Corzuno' (many very small markings), 'Aconchado' (few markings in the shape of a shell), 'Langareto' (uniform markings in the shape of an inverted V), and no spots. The weight of adult roosters is between 2.4 and 3.0 kg.

## SPECIFC FEATURES OF THE HEN

The hens' features are similar to those of the rooster, except for intrinsic sexual differences,

Historical references to this population and its breeding date back to the 17th century. It is believed to have originated from the primitive Red Junglefowl (Gallus gallus), thereafter adapting to altitudes of over 1,000 metres.

#### **GEOGRAPHICAL DISTRIBUTION**

This breed can be found mainly in the municipalities of La Vecilla and Valdepiélago (the towns of La Vecilla, La Cándana, Campohermoso, Valdepiélago, Aviados and Ranedo), in the León province.



and they have a straight comb or one that may fall slightly to the side. The weight of adult hens is between 1.4 and 2.0 kg.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

This breed's sole purpose is to produce feathers for making lures, almost exclusively flies for trout fishing. Feathers are only taken from the roosters, because their quality is superior to those of the hens. The parts of the animal where the feathers are taken, and the names of the feathers in each of these parts. are: kidney region, saddle region, wing coverts and neck. The feathers on the rest of its body cannot be used. Plucking is first carried out at six months of life, but the plumage is discarded because it is too short; nevertheless, it is useful to predict the future quality of the rooster's feathers. Feathers are grouped by guality, colour and size, then put in bundles of one dozen, called 'mazos'. A rooster's production capacity varies greatly, but an average yearly production would be: 20 kidney bundles, 16 saddle bundles and another 16 semi-saddle bundles. 8 neck bundles and 10 wing bundles.

They have an extensive, traditional farming system and are fed a grain-based diet.

# PENEDESENCA



#### SPECIFIC FEATURES OF THE ROOSTER

This breed has a moderately long and wide head with a smooth, red face; a red, moderately large, single comb that stands upright, is arched, firmly anchored to the head and smooth and serrated with five or six flat and moderately short points, the first and last of which are shorter than those in the middle. The blade, which has an arched base, follows the contour of the nape of its neck but does not touch it. It has moderately large, red, hanging wattles and its earlobes are guite oblong and stretched out, slightly wrinkled, and sit closely against the head at the top and hang loose at the bottom; they are white with a red border. Its beak is long, moderately curved and strong, and it has a wide back that is rounded and rather short, sloping downward toward the tail with lots of saddle feathers. It has a wide, deep, long and prominent chest with well-arched ribs; a well-developed, full and open tail with two longer, well-curved feathers that sit at an angle between 45° and 90° to the horizon; large wings that it carries inclined in such a way that their central axis forms a 45° angle to the ground; medium-length, strong thighs with tight-fitting plumage; fairly long, smooth shanks that are well separated, free of feathers and have a colour that depends on the variety; and four strong, open and straight toes. Based on the characteristics of this breed's plumage, there are four varieties: Black, Partridge, Wheaten and Barred. The average weight of an adult bird is 2.5 kg, whereas the black variety can weigh up to 3 kg.

It is named after the region where it originated: Alt Penedés (Catalonia). References to this breed already existed at the beginning of the century. It was characterised by the reddish-brown colour of its eggs, a colour that was highly valued at the time. Efforts to recovery this breed began at the IRTA (Institute of Agrifood Research and Technology) in the 80s, using very diverse specimens taken from different country and rural houses.

## **GEOGRAPHICAL DISTRIBUTION**

This breed can be seen primarily in Catalonia. However, it is possible to find specimens throughout almost all of Spain, even in other European countries and in the United States.



## SPECIFC FEATURES OF THE HEN

Considering its inherent sexual differences, it is quite similar to the rooster. The hens carry their wings more horizontally, their combs have no folds or wrinkles and tend to fall to one side, and their abdomens are more developed. The average weight of an adult hen is 1.8 kg, which can increase to 2.2 kg for the black variety hens.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

They have very good egg-producing capabilities, which is their primary purpose, except for the black variety chickens that are used for their meat as well. The average number of eggs laid during the first year is 160 eggs/hen/ year, with an egg weight of 60 g. The hens are characterised by their good maternal behaviour, with a broodiness incidence of 14% and hatching rate of 72%.

# ΡΙΤΑ ΡΙΝΤΑ



## SPECIFIC FEATURES OF THE ROOSTER

This breed has a medium-sized, round and wide head; a smooth, red face; a bright red, single, upright and firm comb that has between 5 and 7 well-defined points that are not too deep, the blade of which is raised above the nape of its neck; medium-sized wattles that are well-developed, rounded and also bright red in colour; and medium-sized, long earlobes that sit snugly against its face, are smooth, finely-textured like its wattles and are always red. It has a mediumsized beak, strong and well curved, which is yellow with black spots scattered irregularly on it; round eyes with an orange-coloured iris; a medium-length, strong neck with lots of hackle feathers that rest uniformly on its back, uniting it nicely to its trunk;

a wide, deep and muscular chest; and a medium-sized tail that is full of wide and overlapping tail feathers. The sickles are fairly long and well curved and, as a whole, the tail is somewhat raised yet not completely vertical. Its abdomen is wide and well-developed. The length of its wings is greater than their width, and they are well-folded and closed tight against its body. It has muscular thighs, smooth shanks that are yellow with black spots, and four well-separated toes that are also yellow with black spots, like its shanks. All the varieties have pale-coloured nails. It has a strong and well-balanced posture. There are several colour varieties, the most characteristic of which are mottled black and mottled orange. The weight of an adult rooster can reach 4.5 kg.

Its name is a reference to its phenotype. This is a clear example of the Atlantic lineage. Efforts to recover this breed began in the 80s using specimens from different regions within the Principality of Asturias, all of which had the same characteristic plumage that this breed is known for.

## **GEOGRAPHICAL DISTRIBUTION**

This breed can be found mainly in Asturias, with breeders in Santander, Galicia, Castilla y León, Madrid, Extremadura, Catalonia and Palma de Mallorca–and even occasionally in some European countries



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## SPECIFIC FEATURES OF THE HEN

The morphological characteristics of the hen are similar to those of the rooster, except for intrinsic sexual differences. Its back is more horizontal than that of the rooster. Its tail size is not very large, not as elevated as that of the rooster, and it forms a  $40^{\circ}-45^{\circ}$  angle to the horizon. The weight of an adult hen can exceed 3 kg.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

This breed's most outstanding ability is its production of free-range eggs. The average number laid is 140/hen/year, with an average egg weight of 65 g. The hens' longevity is worth noting: they can continue laying eggs until the age of 4 or 5. The quality of their meat also stands out, resulting in what is known as 'Pitu de Caleya' (raised in freedom), which is associated with roosters that are more than one year old. This breed's characteristic plumage has increased its appeal as an ornamental animal.

# UTRERANA



#### SPECIFIC FEATURES OF THE ROOSTER

This breed has a moderately large head that is wide and rather thick; a medium-sized, strong beak; large and lively eyes; a medium- to largesized comb that is deeply serrated with five to six points, the blade slightly following the contour of the neck; long, wide and thin wattles that are rounded at the bottom; moderatelysized earlobes; a rather long, gracefully arched neck, and long wings that sit tightly against its body.

Its back is long, wide and straight, and slopes steeply from its shoulders to its tail. It has a long and deep body with a wide back that narrows in the saddle. It has short, tightly-fitting plumule and a wide, deep, well-rounded chest that it carries erect and forward. Its tail is not a very large, but raised and has well-curved sickles. It has tall and hardy thighs, rather long shanks that are thick and free of feathers, knees that are visible under the contour of its body, and four straight and slender toes. It weighs 3 kg. There are four recognised varieties: Utrerana Blanca (white), Utrerana Negra (black), Utrerana Franciscana (white spotted) and Utrerana Perdiz (partridge).

## SPECIFC FEATURES OF THE HEN

It is quite similar to the rooster, except for natural sexual differences. Its comb falls to one side of its head, covering one of its eyes; it is bright red in colour, just like its face and wattles. It has reddish, chestnut-coloured eyes. Its plumage varies depending on the variety: white in the case of Utrerana Blanca; in Utrerana Franciscana, greyish-white with dark grey bands of colour that alternate on each feather This breed was created through the work of Joaquín del Castillo in his henhouse in Utrera, where it gets its name. It originated from a heterogeneous population of hens living in farmhouses and areas of the Andalusian countryside. It is characterised by its high degree of hardiness and for having been traditionally selected to attain the largest possible size, both in terms of its body and its eggs.

## **GEOGRAPHICAL DISTRIBUTION**

This breed can be found in the Autonomous Community of Andalusia, mainly in the countryside of Seville and Cordova and, to a lesser extent, in Cadiz and Huelva



in the shape of crossbars; in Utrerana Negra, black with metallic-greenish highlights; and, in Utrerana Perdiz, there is a phenotypic pattern that differs for each sex. Its beak, shanks and toes are a rosy-white colour in the Negra and Franciscana variety, black in the Negra variety, and slate grey in the Perdiz variety.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Its hardiness makes it an ideal breed for extensive farming, although it can also be bred intensively. Average egg production is 180 eggs/ hen/year, which may vary depending on farming conditions. The eggs are white with an average weight between 62 and 64 g. Broodiness is practically null, appearing exceptionally in hens with their second or third clutch and rarely in hens with their first clutch. Their meat is quite flavourful.

# VALENCIANA DE CHULILLA



## SPECIFIC FEATURES OF THE ROOSTER

This breed has a medium-large head that is long and wide; eyes that are lively, nicely positioned and predominately a honey and orange colour; a long, strong and curved beak that is black with ivory-coloured variations; a large, red, single comb with five or six points; long and oval-shaped wattles that are bright red; white, oval-shaped earlobes with red hues that can cover up to a third of their surface; and a bright red face. Its neck is conical, forming an uninterrupted line with its chest and stock due to the density of its feathers.

It has a black chest with fairly underdeveloped breasts, a wide back that slopes gently down towards its tail, and a light abdomen. Its wings are well-folded, fit snugly against its body, and provide a large wingspan. It has a long, wide tail that forms an angle between 90° and 140° with respect to its body, and it has well-curved sickles. Its thighs are quite muscular and it has medium-length, slate-coloured shanks that are free of feathers. Its feet have four strong, straight toes and a very large spur. These are birchen animals: black plumage with metallic reflections. Its hackle, saddle, and the underside of its wings have tonalities that are typical of this colour. The average weight of an adult rooster is 2.8 kg.

## SPECIFC FEATURES OF THE HEN

Considering its sexual differences, it is similar to the rooster. It is smaller than the male and has an aquiline profile; small, round earlobes This breed's name comes from the town of Chulilla, which is in Valencia. This town is located in the region of Los Serranos, so it is also known as the 'Los Serranos chicken'. Since the beginning of the 20th century, there have been bibliographic records that mention these Mediterranean-type 'birchen Valencian' chickens, from whom they originated.

## **GEOGRAPHICAL DISTRIBUTION**

It can be found in different regions of the three Valencian provinces, as well as in areas bordering the Cuenca province and, to a lesser extent, in those of Guadalajara and Teruel.



that are white with red-coloured tinges on up to a third of their total surface area; a bright red face and slender neck; a black, underdeveloped chest; a straight back that forms a 900 angle to its tail; a wide abdomen that becomes deeper towards its cloaca; well-folded wings that are developed enough for flight; and a straight tail that is large with respect to its body. Its plumage is predominately black with metallic reflections, and on its neck and hackle it has the typical hues of the birchen colour. The average weight of an adult hen for this breed is 2.1 kg.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

They are raised mainly on farmyards for their eggs, which are a creamy-white colour and have an average weight of 58 g. This breed produces around 150 eggs/hen/year.

AVIAN

## **OTHER SPECIES**

Camello Canario Conejo Antiguo Pardo Español Conejo Gigante de España



# CAMELLO CANARIO



#### **GENERAL FEATURES**

This is an eumetric breed with a relatively strong build. Its height tends to be greater than the length of its trunk. Its morphology is quite homogeneous, elegant and well proportioned.

Its wither height is 184 cm for males and 154 cm for females. The average weight for males is 503.3 kg and 484.1 kg for females. Their heads have a rectilinear profile and are medium-sized. with strong and well-proportioned necks. They have well-developed chests and strong backs. large humps, and strong and well-formed feet. They grow a lot of wool in the winter season. In summer, the wool is shed and their skin is covered by a dense layer of hair, which can be smooth or ring shaped. Their manes are longer on the throat and nape of the neck. They do not usually have a uniform coat colour but rather a variety of shades, the proportion of which changes according to body region, with an irregular distribution of tone and colour intensity. There is mainly dark hair on the shoulders and top of the hump, and light hair on the chest and abdomen.

Many specimens have uniform hair colour on their trunk, which graduates towards the tips, limbs and feet, the latter of which can even be white. There are many specimens whose coats are chestnut, brown and cinnamon. Other known coats are: ash, white/dove, black/dark black, roan, vermilion/dark red, blackthorn, dark cinnamon, and yellow. Two-toned animals exist (which are called 'stained' or 'painted' if the colour that combines with white is either grey or ash: tin) and ones with white spots on their faces (called 'capiloto'). The history of the camel on the Canary Islands goes back to the time of European colonisation, with no pre-Hispanic evidence that this species existed alongside the ancient Guanches. Originating on the African continent, they travelled with the first expeditions from the nearby African coast. As the camels adapted well to these islands, they gradually spread throughout the archipelago, although their presence was greater in southern areas of Gran Canaria and Tenerife, as well as all throughout the islands of Fuerteventura and Lanzarote.

#### **GEOGRAPHICAL DISTRIBUTION**

There are around 1,000 animals in the Canary Islands, mainly in Lanzarote, the south of Gran Canaria and Fuerteventura. All of the populations are linked to the tourist sector.



# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Historically, they were mainly used as pack animals, transporting all types of merchandise over short and long distances. Today they are mainly used for tourism, although their milk, wool and meat can also be enjoyed. Camel milk is a highly nutritious product and is rich in insulin.

# CONEJO ANTIGUO PARDO ESPAÑOL



## **GENERAL FEATURES**

This is a standard, classic rabbit breed. It is eumetric and has a rounded shape. It has a cylindrical, rectangular-shaped body, without any excessive body mass, a balanced lumbar contour and a rounded rump.

Overall, the specimens in this breed have low sexual dimorphism. Adult animals weigh between 3.5 and 4.5 kg. They have a convex profile with a rounded head, which is light in relation to its body. Their ears have a rounded and smooth profile and an average length proportionate to their size, the length doubling the width. They carry their ears in a 'V'. Their eye colour is consistent with the intensity of their coats and tends to be black or dark chestnut. Regarding coat colour, there is a strong predominance of brown coats-typical of classic breeds-with different variations of dark fawn, or reddish and ochre shades. There are no pastel, fawn or cinnamon colours. They have short fur with a uniform tone throughout, except for the belly and the underside of the tail that tend to be lighter, almost white. Grey coats and tones are allowed, but never white, black or any lack in colour uniformity.

# PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

This breed has a carcass yield of 56.4%, with an ADG from weaning to slaughter of 31.8 g. With respect to the main reproductive data, it demonstrates a prolificacy of 7.4, with an interval between births of 50.4 days and an average litter size of 6.8-7.3 offspring. It is called a farmyard rabbit, or country rabbit, in different parts of Spain. It is the result of the evolution by selection of an ancestor of this rabbit that arrived at farmhouses from the Roman leporias (game reserves). Over time, the Antiguo Pardo Español–in the hands of a few breeders who preserved it and selected it as the domestic species it really is–has developed a greater homogeneity of phenotypic traits and has evolved towards more productive shapes and sizes. Nevertheless, they still cannot compete with those of specialised, synthetic breeds or their crosses.

## **GEOGRAPHICAL DISTRIBUTION**

It has been displaced in recent decades by modern rabbits, albinos and hybrids, although its reproductive vitality is supported on many family farms in southeastern Spain, in Galicia, Asturias, and some towns in Aragon and Castilla y León.



Rabbit meat is generally very lean. This is especially true of the loin, which has a fat content of around 1%-even less than a chicken breast.

# CONEJO GIGANTE DE ESPAÑA



Some authors propose that three breeds were involved in its creation: the Flanders Giant rabbit (males), the Spanish Brown rabbit (females), and males from the Belier breed that were used on the female hybrids (López and Sierra, 2002). However, it is difficult to accept that the Belier breed formed part of this process, due to the fact that it entered Spain after the Spanish Giant rabbit's creation and official recognition (Contera, personal communication).

## **GENERAL FEATURES**

This is a hypermetric breed. It is convex and longilinear, bulky (length: 85 to 95 cm) and robust, and has rounded shapes. It has large, wide, fleshy ears that are shaped like a spoon, and it carries them quite straight, yet not together. Its body is robust, without angles or protrusions, and it has strong sexual dimorphism: the males have a larger size and more commercial shape than the females.

It has a fawn-coloured coat without any white, grey or black spots. The tone of its fur is uniform throughout, except for the belly and the underside of the tail, which tend to be lighter, almost white. The dirty blond, somewhat saffron, colour that can sometimes occur indicates a lack of selection and colour degeneration in the breeding animals. The grey variety is currently accepted, but the white variety has been declassified; it is neither bred nor recognised as belonging to the breed.

## PRODUCTION CHARACTERISTICS AND FARMING SYSTEM

Despite its size, Spanish Giant Rabbits possess a fair amount of liveliness in their movements. They do not tend to lie down, except for females who are in an advanced state of gestation. They are oftentimes seen with their paws up, leaning against the walls of their cage. Although somewhat lymphatic, they have faster movements and move around more frequently than other large breeds. Males are docile, active and insistent when in the presence of females, which become rather agitated when they have offspring and are always alert when someone comes into the shed.

### **GEOGRAPHICAL DISTRIBUTION**

At the moment, pure-breeding these animals are limited to several sites scattered throughout Spain, in the provinces of Barcelona, Huesca, Burgos, and Saragossa, as well as in Málaga and Guadalajara.



The use of this breed is aimed at meat production due to its good carcass yield (57.5%) and the prolificacy of females (weaning average of 6.5 kittens). It is selected and sold for industrial crosses, where the national breed is used as the breeding male. In this breed, an increase in weight at the time of slaughter is associated with a slight increase in the commercial yield of the carcasses and an improvement in their compactness, with the level of fat cover remaining unchanged. However, the organoleptic quality of the meat is not affected by its increase in weight when slaughtered.





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