SUBDIRECCIÓN GENERAL DE MEDIOS DE PRODUCCIÓN AGRÍCOLA Y OFICINA ESPAÑOLA DE VARIEDADES VEGETALES (OEVV)

Formulario técnico

Technical QUESTIONNAIRE

GIRASOL

sunflower

OEVV/FT-AG-02

Última actualización: diciembre de 2024

*Last update: December 2024*

Los campos o secciones obligatorios están marcados con asterisco (\*)

Mandatory fields or sections are marked with an asterisk

**FORMULARIO PRESENTADO POR**

Form host

Representante legal (*Procedural representative*)

Solicitante (*Applicant*)

|  |  |
| --- | --- |
| **Nombre**:  Name |  |
| **Dirección**  Address |  |
| **Teléfono**  Phone number |  |
| **Correo electrónico**  Email |  |

# **Registro**:

Registry

Registro de Variedades Comerciales (**RVC**) *(Registry of commercial varieties)*

Registro de Variedades Protegidas (**RVP**) *Registry of protected varieties*

# Taxón botánico:

Plant Taxonomy

*Helianthus annuus L.*

# Referencia del obtentor y denominación de la variedad:

Breeder’s reference and variety designation

|  |  |
| --- | --- |
| **Referencia del obtentor (OBLIGATORIA):**  Breeder’s reference (MANDATORY) |  |
| **Nombre de la variedad (denominación propuesta)**:  Variety designation (proposed denomination) |  |

# Solicitudes anteriores:

PREVIOUS APPLICATIONS

## ¿Se ha presentado anteriormente esta variedad en España?

Has this variety been previously presented in Spain?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sí (*Yes*) | **Fecha de presentación:**  Filing date |  | **Nº de solicitud:**  Application number |  |
| No (*No*) |  |  |  |  |

## ¿Se ha presentado en otros países?

Has this variety been previously registered in other countries?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sí (*Yes*) | **Fecha de presentación:**  Filing date |  | **Nombre de los países**  Country names |  |
| No (*No*) |  |  |  |  |

|  |  |
| --- | --- |
| **Situación actual de la variedad en los países en que se ha presentado:**  Variety status in the countries where previously registered |  |

# Información sobre el método de obtención y propagación de la variedad:

Information on the breeding scheme and propagation of the variety

Esta información se tratará de manera confidencial y solo se compartirá con la oficina de examen responsable del examen técnico.

This information will be dealt with confidentially and only shared with the examination office in charge of the technical examination

## Tipo de material

Type of material

|  |  |  |  |
| --- | --- | --- | --- |
|  | Línea parental | *(parental line)* |  |
|  | Híbrido | *(hybrid)* | **En caso de material híbrido, rellenar la descripción de los parentales, a partir del apartado 11**  *In the case of hybrid material, complete the description of the parentals starting from section 11* |
|  | Variedad de polinización libre | *(open-pollinated variety)* |  |
|  | Otro | *(other)* | **Por favor, especifique**:  Please specify |

### Línea Parental

Parental line

|  |  |  |
| --- | --- | --- |
|  | Línea A androestéril | (male sterile line A) |
|  | Línea B fértil (mantenedora de esterilidad) | (male fertile line B -maintainer of sterility-) |
|  | Línea R (restauradora de la fertilidad) | (male fertile line R -restorer of fertility-) |

### Híbrido

Hybrid

|  |  |  |
| --- | --- | --- |
|  | Híbrido simple de masculino estéril | (male sterile single hybrid) |
|  | Híbrido simple de masculino fértil | (male fertile single hybrid) |
|  | Híbrido de tres líneas | (three-way hybrid) |

## Por favor, indicar los componentes del híbrido

Please indicate the components of the hybrid

### Híbrido simple

Single hybrid

|  |  |  |
| --- | --- | --- |
| **Denominación** o **referencia del obtentor** del **parental femenino** del híbrido simple  Denomination or breeder's reference of female parental line of single hybrid |  | **Denominación** o **referencia del obtentor** del **parental masculino** del híbrido simple  Denomination or breeder's reference of male parental line of single hybrid |
| ( ) | **X** | ( ) |

### Híbrido de tres líneas

Three-Way hybrid

|  |  |  |
| --- | --- | --- |
| **Denominación** o **referencia del obtentor** del **parental femenino** del híbrido simple usado como parental femenino  Denomination or breeder's reference of **female** parental line of the single hybrid used as female parent |  | **Denominación** o **referencia del obtentor** del **parental masculino** del híbrido simple usado como parental femenino  Denomination or breeder's reference of **male** parental line of the single hybrid used as female parent |
| ( ) | **X** | ( ) |
| híbrido simple usado como **femenino**  single hybrid used as female |  | **Denominación** o **referencia del obtentor** del **parental masculino** del híbrido de tres líneas  Denomination or breeder's reference of male parental line of the three-way hybrid |
| ( ) | **X** | ( ) |

### Indique el nombre de la línea mantenedora de la línea parental androestéril

Indicate the name of the maintainer line of the male sterile parental line hybrid

|  |  |
| --- | --- |
| **Línea mantenedora de la línea parental femenino**  *Maintainer line of the female parental line* |  |

## Información sobre el método de mejora y el origen genético de las líneas parentales

Information on breeding method and genetic origin of the parental lines

**A completar para cada línea parental de la variedad híbrida**

To be filled in for each parental line of the hybrid variety

| **Denominación de la línea parental**  (parental line denomination) | **Método de obtención**  (breeding method) | **Parentesco con otras líneas parentales ya conocidas**  (parentage with any other parental lines already known) |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

## Información sobre las pruebas DHE de las líneas parentales

Information on the DUS testing of the parental lines

**Por favor, indique si alguna de las líneas parentales involucradas en el híbrido ya ha sido probada por sí misma o en el marco de las pruebas de otros híbridos**

Please indicate if any of the parental lines involved in the hybrid have already been tested for themselves or in the framework of the testing of other hybrids.

| **Denominación de la línea parental**  (parental line denomination) | **Estado del examen DHE**  (*Stage of DUS testing*) | **País de presentación**  (filing country) | **Autoridad de examen, si es distinta del país de presentación**  (*Testing authority if different from filing authority*) | **Fecha de solicitud**  (application date)) |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

# Características de la variedad\*

Variety Characteristics

**Los caracteres marcados con asterisco (\*), son de obligada cumplimentación.**

***The fields marked with an asterisk (\*) are mandatory****.*

**El número entre paréntesis () hace referencia al carácter correspondiente del Protocolo Técnico de la OCVV (CPVO-TP).** Por favor, marque el nivel de expresión que más se ajuste.

**The number in brackets () refers to the corresponding characteristic in the CPVO Technical Protocol (CPVO-TP).** Please mark the state of expression which best corresponds

## Hoja: color verde *(4) (G)*

Leaf: green colour

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | muy claro | *very light* |  |
|  | 2- | muy claro a claro | *very light to light* |  |
|  | 3- | claro | *light* | H 52.9.1.1 |
|  | 4- | claro a medio | *light to medium* |  |
|  | 5- | medio | *medium* | HA 821 |
|  | 6- | medio a oscuro | *medium to dark* |  |
|  | 7- | oscuro | *dark* | HA 303 |
|  | 8- | oscuro a muy oscuro | *dark to very dark* |  |
|  | 9- | muy oscuro | *very dark* |  |

## Hoja: abullonado *(5) (G)*

Leaf: blistering

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | ausente o muy débil | *absent or very weak* |  |
|  | 2- | muy débil a débil | *very weak to weak* |  |
|  | 3- | débil | *weak* | HA 342, RHA 273 |
|  | 4- | débil a medio | *weak to medium* |  |
|  | 5- | medio | *medium* | HA 291 |
|  | 6- | medio a fuerte | *medium to strong* |  |
|  | 7- | fuerte | *strong* | HA 303, RHA 361 |
|  | 8- | fuerte a muy fuerte | *strong to very strong* |  |
|  | 9- | muy fuerte | *very strong* |  |

## Hoja: dentado *(6)*

Leaf: serration

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | aislado o muy fino | isolated or very fine | HA 393 |
|  | 2- | muy fino a fino | very fine to fine |  |
|  | 3- | fino | fine | HA 124 |
|  | 4- | fino a medio | fine to medium |  |
|  | 5- | medio | medium | HA 2713 |
|  | 6- | medio a grosero | medium to coarse |  |
|  | 7- | grosero | coarse | RHA 299 |
|  | 8- | grosero a muy grosero | coarse to very coarse |  |
|  | 9- | muy grosero | very coarse |  |

## Hoja: aurículas *(9)*

Leaf: auricules

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | ausentes o muy pequeñas | none or very small | HA 290 |
|  | 2- | muy pequeñas a pequeñas | very small to small |  |
|  | 3- | pequeñas | small |  |
|  | 4- | pequeñas a medias | small to medium |  |
|  | 5- | medias | medium | HA 852 |
|  | 6- | medias a grandes | medium to large |  |
|  | 7- | grandes | large | HA 89 |
|  | 8- | grandes a muy grandes | large to very large |  |
|  | 9- | muy grandes | very large | HA 303 |

## Época de la floración *(14) (G)*

Time of flowering

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | muy temprana | *very early* | HA 302, RHA 381 |
|  | 2- | muy temprana a temprana | *very early to early* |  |
|  | 3- | temprana | *early* | RHA 273 |
|  | 4- | temprana a media | *early to medium* |  |
|  | 5- | media | *medium* | RHA 274 |
|  | 6- | media a tardía | *medium to late* |  |
|  | 7- | tardía | *late* | RHA 271 |
|  | 8- | tardía a muy tardía | *late to very late* |  |
|  | 9- | muy tardía | *very late* | RHA 361 |

## Flores liguladas: densidad *(15)*

Ray florets: density

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | muy escasa | *very sparse* |  |
|  | 2- | muy escasa a escasa | *very sparse to sparse* |  |
|  | 3- | escasa | *sparse* | HA 385 |
|  | 4- | escasa a media | *sparse to medium* |  |
|  | 5- | media | *medium* | HA 89 |
|  | 6- | media a densa | *medium to dense* |  |
|  | 7- | densa | *dense* |  |
|  | 8- | densa a muy densa | *dense to very dense* |  |
|  | 9- | muy densa | *very dense* |  |

## Flor ligulada *(19) (G)*

Ray floret: colour

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | blanco amarillento | *yellowish white* |  |
|  | 2- | amarillo claro | *light yellow* |  |
|  | 3- | amarillo medio | *medium yellow* | HA 89 |
|  | 4- | amarillo anaranjado | *orante yellow* | RHA 361 |
|  | 5- | naranja | *orange* | CM 587, RHA 295 |
|  | 6- | púrpura | *purple* |  |
|  | 7- | marron rojizo | *reddish brown* |  |

## Planta: altura *(28) (G)*

Plant: natural height

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | muy baja | *very short* | HA 379 |
|  | 2- | muy baja a baja | *very short to short* |  |
|  | 3- | baja | *short* | HA 291 |
|  | 4- | baja a media | *short to medium* |  |
|  | 5- | media | *medium* | RHA 801 |
|  | 6- | media a alta | *medium to tal* |  |
|  | 7- | alta | *tal* | H 52.9.1.1 |
|  | 8- | alta a muy alta | *tall to very tall* |  |
|  | 9- | muy alta | *very tall* |  |

## Panta: ramificación (excluyendo la causada por el medio ambiente) *(29) (G)*

Plant: branching (excluding environmental branching)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | ausente | *absent* | HA 89 |
|  | 9- | presente | *present* | RHA 271 |

## Semilla: color principal *(38) (G)*

Seed: main colour

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | blanca | *white* |  |
|  | 2- | gris blancuzca | *whitish grey* |  |
|  | 3- | gris | *grey* | TRISUN 860 |
|  | 4- | marrón clara | *light brown* |  |
|  | 5- | marrón medio | *medium brown* | RHA 273 |
|  | 6- | marrón oscuro | *dark brown* |  |
|  | 7- | negra | *black* | HA 89 |
|  | 8- | purpura | *purple* |  |

## Semilla: estrías en el borde *(39) (G)*

Seed: stripes on margin

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | ninguna o muy débilmente definidas | *none or very weakly expressed* | RHA 273 |
|  | 2- | débilmente definidas | *weakly expressed* | H 52.9.1.1 |
|  | 3- | fuertemente definidas | *strongly expressed* | HA 89 |

## Semilla: estrías entre los bordes *(40) (G)*

Seed: stripes **between** margins

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | ninguna o muy débilmente definidas | *none or very weakly expressed* | RHA 273 |
|  | 2- | débilmente definidas | *weakly expressed* | RHA 293 |
|  | 3- | fuertemente definidas | *strongly expressed* | HA 89 |

## Caracteres complementarios solicitados por el Centro de Examen

Additional characteristics requested by the Examination Center

### Época de maduración

Time of maturity

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | muy temprana | *very early* | ES Artic, Elena |
|  | 2- | muy temprana a temprana | *very early to early* |  |
|  | 3- | temprana | *early* |  |
|  | 4- | temprana a media | *early to medium* |  |
|  | 5- | media | *medium* | Suzuka |
|  | 6- | media a tardía | *medium to late* |  |
|  | 7- | tardía | *late* |  |
|  | 8- | tardía a muy tardía | *late to very late* |  |
|  | 9- | muy tardía | *very late* |  |

# Variedades similares y diferencias respecto a dichas variedades:

SIMILAR VARIETIES AND DIFFERENCES from these varieties

Tenga en cuenta que la información respecto a las variedades similares puede ayudar a identificar variedades comparables y a evitar un periodo adicional de ensayo.

(Please note that information on similar varieties may help to identify comparable varieties and can avoid an additional period of testing.)

## ¿Se conocen variedades similares?

Any similar varieties known?

|  |  |  |
| --- | --- | --- |
|  | Sí (*Yes*) |  |
|  | No |  |

## Variedades similares y diferencias con respecto a ellas:

Similar varieties and differences from these varieties:

| Denominación de la(s) variedad(es) similar(es) a la variedad candidata  (*Denomination of similar variety(ies) to the candidate variety*) | Caracteres en los que la variedad candidata difiere de la variedad similar  (Characteristics in which the candidate variety differs from the similar variety) | Estado de expresión en la variedad similar  (State of expression of similar variety) | Estado de expresión de la variedad candidata  (*State of expression of candidate variety*) |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# Información adicional que pueda ayudar a distinguir la variedad:

ADDITIONAL INFORMATION which may help to distinguish the variety:

## Adicionalmente a la información proporcionada en los apartados 05 y 06, ¿existe alguna característica adicional que pueda ayudar a diferenciar la variedad?

In addition to the information provided in sections 05 and 06, is there any additional characteristic that can help differentiate the variety?

|  |  |  |
| --- | --- | --- |
| Sí (*Yes*) | **Por favor, especifique:**  Please, specify: |  |
| No |  |  |

## ¿Hay que tener en cuenta condiciones especiales para el cultivo de la variedad o para llevar a cabo su examen?

Are there any special conditions for growing the variety or conducting the examination?

|  |  |  |
| --- | --- | --- |
| Sí (*Yes*) | **Por favor, especifique:**  Please, specify: |  |
| No |  |  |

## Otra información

Other information

### RESISTENCIA a plagas, enfermedades o herbicidas

Resistance to pests and diseases

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Jopo | (*sunflower broomrape*) | **Indicar razas:**  *Precise the races*: |  |
|  | Mildiu | (*Downy Mildew*) | **Indicar razas:**  *Precise the races*: |  |
|  | Roya | (*rust*) | **Indicar razas:**  *Precise* *the races*: |  |
|  | Herbicidas | (herbicides) | **Espedificar:**  *Specify* |  |
|  | Otros | (others) | **Por favor, especifique:**  Please, specify: |  |

### Uso principal

Main use

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Aceite y torta | (oil and cake) |  |  |
|  | Para pájaros | (birds consumption) |  |  |
|  | Consumo humano: confitería | (human consumption-confectionner) |  |  |
|  | Consumo humano: descascarillado | (human consumption - hulling) |  |  |
|  | Otros usos | (other use) | **Por favor, especifique:**  Please, specify: |  |

#### Tipo de aceite

Oil type

|  |  |  |
| --- | --- | --- |
|  | Alto oleico | (high oliec) |
|  | Medio oleico | (mid oleic) |
|  | Alto esteárico | (high stearic) |

### Otra información

Other information

|  |  |  |
| --- | --- | --- |
| Sí (*Yes*) | **Por favor, especifique:**  Please, specify: |  |
| No |  |  |

## Fotografía:

Photo

Se debe **adjuntar** al formulario técnico una **fotografía** a color representativa de la variedad.

*A representative color* ***photograph*** *of the variety must be* ***attached*** *to the technical form.*

|  |
| --- |
| **Foto de hoja (último estado antes del comienzo de la floración)** *Picture of the leaf (last stage before blooming)* |
|  |
| **Foto del capítulo (los tres círculos exteriores de las flores liguladas tienen sus anteras visibles y separadas; y sus estigmas desplegados)** *Picture of the head (the three external circles ray floret’s have their athers visible and splitted, and their stigma unfolded)* |
|  |

# Información OGM

gMO-information

## Información OGM requerida:

GMO-information required

**¿La variedad es un organismo genéticamente modificado** según la definición del artículo 2(2) de la Directiva del Consejo EC/2001/18 del 12/03/2001?

**Is the variety a genetically modified organism** according to the definition in Article 2(2) of Council Directive EC/2001/18 of 12/03/2001?

Sí (Yes)

**En caso afirmativo**, por favor, adjunte **en el punto 08.02** una copia de la declaración escrita de las autoridades competentes en la que se afirme que la realización del examen de la variedad, en virtud de los artículos 55 y 56 del Reglamento marco, no supone riesgos para el medio ambiente de acuerdo con las normas de la mencionada Directiva.

**If yes**, please attach **in section 08.02** a copy of the written attestation of the responsible authorities stating that a technical examination of the variety under Article 55 and 56 of the Basic Regulation does not pose risks to the environment according to the norms of the above-mentioned Directive.

No

## En el caso de OGM, adjunte una copia de la declaración escrita de las autoridades competentes en la que se afirme que la realización del examen de la variedad, en virtud de los artículos 55 y 56 del Reglamento marco, no supone riesgos para el medio ambiente de acuerdo con las normas de la mencionada Directiva.

In case of GMO, join attestation of the responsible authorities stating that a technical examination of the variety under Article 55 and 56 of the Basic Regulation does not pose risks to the environment according to the norms of the above-mentioned Directive.

# Información respecto al material vegetal a examinar:

INFORMATION REGARDING THE PLANT MATERIAL TO BE EXAMINED

**La expresión de un carácter** o de varios caracteres de una variedad **puede verse afectada** por factores como plagas y enfermedades, tratamientos químicos (p. ej., reguladores del crecimiento o pesticidas), efectos derivados del cultivo de tejidos, diferentes portainjertos, vástagos tomados en diferentes fases de crecimiento de un árbol, etc.

**The expression of a trait** or several traits of a variety **can be affected** by factors such as pests and diseases, chemical treatments (e.g., growth regulators or pesticides), effects derived from tissue culture, different rootstocks, shoots taken at different growth stages of a tree, etc.

En consecuencia, **el material vegetal a examinar no deberá haber sufrido ningún tratamiento que afecte la expresión de los caracteres** de la variedad, a menos que las autoridades competentes lo permitan o lo soliciten.

As a result**, the plant material to be examined should not have undergone any treatment that affects the expression of the variety's traits** unless permitted or requested by the competent authorities.

**Si el material vegetal ha sido sometido a dicho tratamiento**, **se deben proporcionar todos los detalles del tratamiento**. Si es así, por favor, indique, si el material vegetal a examinar ha sido sometido a:

**If the plant material has undergone such treatment, all details of the treatment must be provided**. If so, please indicate whether the plant material to be examined has been subjected to:

## Microorganismos (p.ej. virus, bacterias, fitoplasmas):

Microorganisms (e.g., viruses, bacteria, phytoplasmas)

|  |  |  |
| --- | --- | --- |
| Sí (*Yes*) | **Por favor, especifique:**  Please, specify: |  |
| No |  |  |

## Tratamientos químicos (p.ej. reguladores del crecimiento, pesticidas):

Chemical treatments (e.g. growth regulators, pesticides)

|  |  |  |
| --- | --- | --- |
| Sí (*Yes*) | **Por favor, especifique:**  Please, specify: |  |
| No |  |  |

## Cultivo de tejidos:

Tissue culture

|  |  |  |
| --- | --- | --- |
| Sí (*Yes*) | **Por favor, especifique:**  Please, specify: |  |
| No |  |  |

## Otros factores:

Other factors

|  |  |  |
| --- | --- | --- |
| Sí (*Yes*) | **Por favor, especifique:**  Please, specify: |  |
| No |  |  |

# DECLARACIÓN

DECLARATION

Por la presente declaro que la información proporcionada en este formulario es completa y correcta.

I hereby declare that the information provided in this form is complete and accurate.

|  |  |
| --- | --- |
| **Fecha**:  Date |  |
| **Lugar**:  Location |  |
| **Nombre**:  Name |  |
| **Firma** **o firma electrónica**:  (Signature/ electronic signature) |  |

**RECUERDE** consultar el documento “**RVC/RVP-Especies, FECHAS, CANTIDADES, CONDICIONES y centros de ensayo”** antes de enviar el material vegetal, en el apartado “**Descarga de documentos/archivos”** en las siguientes direcciones:

REMEMBER to consult the document 'RVC/RVP-Species, DATES, QUANTITIES, CONDITIONS, and testing centers before sending the plant material, in the 'Download documents/files' section at the following addresses:

**RVC**: [Registro de variedades comerciales (mapa.gob.es)](https://www.mapa.gob.es/es/agricultura/temas/medios-de-produccion/semillas-y-plantas-de-vivero/registro-de-variedades/reg-de-variedades-comerciales/)

**RVP**: [Registro de variedades protegidas (mapa.gob.es)](https://www.mapa.gob.es/es/agricultura/temas/medios-de-produccion/semillas-y-plantas-de-vivero/registro-de-variedades/reg-de-variedades-protegidas/)

# Características del pARENTAL FEMENINO a\*

FEMALE PARENTAL line A Characteristics

|  |  |
| --- | --- |
| **Denominación** o **referencia del obtentor** del **parental femenino** A  Denomination or breeder's reference of female parental line A | ( ) |

## Hoja: color verde *(4) (G)*

Leaf: green colour

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | muy claro | *very light* |  |
|  | 2- | muy claro a claro | *very light to light* |  |
|  | 3- | claro | *light* | H 52.9.1.1 |
|  | 4- | claro a medio | *light to medium* |  |
|  | 5- | medio | *medium* | HA 821 |
|  | 6- | medio a oscuro | *medium to dark* |  |
|  | 7- | oscuro | *dark* | HA 303 |
|  | 8- | oscuro a muy oscuro | *dark to very dark* |  |
|  | 9- | muy oscuro | *very dark* |  |

## Hoja: abullonado *(5) (G)*

Leaf: blistering

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | ausente o muy débil | *absent or very weak* |  |
|  | 2- | muy débil a débil | *very weak to weak* |  |
|  | 3- | débil | *weak* | HA 342, RHA 273 |
|  | 4- | débil a medio | *weak to medium* |  |
|  | 5- | medio | *medium* | HA 291 |
|  | 6- | medio a fuerte | *medium to strong* |  |
|  | 7- | fuerte | *strong* | HA 303, RHA 361 |
|  | 8- | fuerte a muy fuerte | *strong to very strong* |  |
|  | 9- | muy fuerte | *very strong* |  |

## Hoja: dentado *(6)*

Leaf: serration

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | aislado o muy fino | isolated or very fine | HA 393 |
|  | 2- | muy fino a fino | very fine to fine |  |
|  | 3- | fino | fine | HA 124 |
|  | 4- | fino a medio | fine to medium |  |
|  | 5- | medio | medium | HA 2713 |
|  | 6- | medio a grosero | medium to coarse |  |
|  | 7- | grosero | coarse | RHA 299 |
|  | 8- | grosero a muy grosero | coarse to very coarse |  |
|  | 9- | muy grosero | very coarse |  |

## Hoja: aurículas *(9)*

Leaf: auricules

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | ausentes o muy pequeñas | none or very small | HA 290 |
|  | 2- | muy pequeñas a pequeñas | very small to small |  |
|  | 3- | pequeñas | small |  |
|  | 4- | pequeñas a medias | small to medium |  |
|  | 5- | medias | medium | HA 852 |
|  | 6- | medias a grandes | medium to large |  |
|  | 7- | grandes | large | HA 89 |
|  | 8- | grandes a muy grandes | large to very large |  |
|  | 9- | muy grandes | very large | HA 303 |

## Época de la floración *(14) (G)*

Time of flowering

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | muy temprana | *very early* | HA 302, RHA 381 |
|  | 2- | muy temprana a temprana | *very early to early* |  |
|  | 3- | Temprana | *early* | RHA 273 |
|  | 4- | temprana a media | *early to medium* |  |
|  | 5- | media | *medium* | RHA 274 |
|  | 6- | media a tardía | *medium to late* |  |
|  | 7- | tardía | *late* | RHA 271 |
|  | 8- | tardía a muy tardía | *late to very late* |  |
|  | 9- | muy tardía | *very late* | RHA 361 |

## Flores liguladas: densidad *(15)*

Ray florets: density

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | muy escasa | *very sparse* |  |
|  | 2- | muy escasa a escasa | *very sparse to sparse* |  |
|  | 3- | escasa | *sparse* | HA 385 |
|  | 4- | escasa a media | *sparse to medium* |  |
|  | 5- | media | *medium* | HA 89 |
|  | 6- | media a densa | *medium to dense* |  |
|  | 7- | densa | *dense* |  |
|  | 8- | densa a muy densa | *dense to very dense* |  |
|  | 9- | muy densa | *very dense* |  |

## Flor ligulada *(19) (G)*

Ray floret: colour

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | blanco amarillento | *yellowish white* |  |
|  | 2- | amarillo claro | *light yellow* |  |
|  | 3- | amarillo medio | *medium yellow* | HA 89 |
|  | 4- | amarillo anaranjado | *orante yellow* | RHA 361 |
|  | 5- | naranja | *orange* | CM 587, RHA 295 |
|  | 6- | púrpura | *purple* |  |
|  | 7- | marron rojizo | *reddish brown* |  |

## Planta: altura *(28) (G)*

Plant: natural height

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | muy baja | *very short* | HA 379 |
|  | 2- | muy baja a baja | *very short to short* |  |
|  | 3- | baja | *short* | HA 291 |
|  | 4- | baja a media | *short to medium* |  |
|  | 5- | media | *medium* | RHA 801 |
|  | 6- | media a alta | *medium to tal* |  |
|  | 7- | alta | *tal* | H 52.9.1.1 |
|  | 8- | alta a muy alta | *tall to very tall* |  |
|  | 9- | muy alta | *very tall* |  |

## Panta: ramificación (excluyendo la causada por el medio ambiente) *(29) (G)*

Plant: branching (excluding environmental branching)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | ausente | *absent* | HA 89 |
|  | 9- | presente | *present* | RHA 271 |

## Semilla: color principal *(38) (G)*

Seed: main colour

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | blanca | *white* |  |
|  | 2- | gris blancuzca | *whitish grey* |  |
|  | 3- | gris | *grey* | TRISUN 860 |
|  | 4- | marrón clara | *light brown* |  |
|  | 5- | marrón medio | *medium brown* | RHA 273 |
|  | 6- | marrón oscuro | *dark brown* |  |
|  | 7- | negra | *black* | HA 89 |
|  | 8- | purpura | *purple* |  |

## Semilla: estrías en el borde *(39) (G)*

Seed: stripes on margin

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | ninguna o muy débilmente definidas | *none or very weakly expressed* | RHA 273 |
|  | 2- | débilmente definidas | *weakly expressed* | H 52.9.1.1 |
|  | 3- | fuertemente definidas | *strongly expressed* | HA 89 |

## Semilla: estrías entre los bordes *(40) (G)*

Seed: stripes **between** margins

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | ninguna o muy débilmente definidas | *none or very weakly expressed* | RHA 273 |
|  | 2- | débilmente definidas | *weakly expressed* | RHA 293 |
|  | 3- | fuertemente definidas | *strongly expressed* | HA 89 |

# Características del pARENTAL masculino b\*

MALE PARENTAL line B Characteristics

|  |  |
| --- | --- |
| **Denominación** o **referencia del obtentor** del **parental masculino B**  Denomination or breeder's reference of male parental line B | ( ) |

## Hoja: color verde *(4) (G)*

Leaf: green colour

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | muy claro | *very light* |  |
|  | 2- | muy claro a claro | *very light to light* |  |
|  | 3- | claro | *light* | H 52.9.1.1 |
|  | 4- | claro a medio | *light to medium* |  |
|  | 5- | medio | *medium* | HA 821 |
|  | 6- | medio a oscuro | *medium to dark* |  |
|  | 7- | oscuro | *dark* | HA 303 |
|  | 8- | oscuro a muy oscuro | *dark to very dark* |  |
|  | 9- | muy oscuro | *very dark* |  |

## Hoja: abullonado *(5) (G)*

Leaf: blistering

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | ausente o muy débil | *absent or very weak* |  |
|  | 2- | muy débil a débil | *very weak to weak* |  |
|  | 3- | débil | *weak* | HA 342, RHA 273 |
|  | 4- | débil a medio | *weak to medium* |  |
|  | 5- | medio | *medium* | HA 291 |
|  | 6- | medio a fuerte | *medium to strong* |  |
|  | 7- | fuerte | *strong* | HA 303, RHA 361 |
|  | 8- | fuerte a muy fuerte | *strong to very strong* |  |
|  | 9- | muy fuerte | *very strong* |  |

## Hoja: dentado *(6)*

Leaf: serration

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | aislado o muy fino | isolated or very fine | HA 393 |
|  | 2- | muy fino a fino | very fine to fine |  |
|  | 3- | fino | fine | HA 124 |
|  | 4- | fino a medio | fine to medium |  |
|  | 5- | medio | medium | HA 2713 |
|  | 6- | medio a grosero | medium to coarse |  |
|  | 7- | grosero | coarse | RHA 299 |
|  | 8- | grosero a muy grosero | coarse to very coarse |  |
|  | 9- | muy grosero | very coarse |  |

## Hoja: aurículas *(9)*

Leaf: auricules

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | ausentes o muy pequeñas | none or very small | HA 290 |
|  | 2- | muy pequeñas a pequeñas | very small to small |  |
|  | 3- | pequeñas | small |  |
|  | 4- | pequeñas a medias | small to medium |  |
|  | 5- | medias | medium | HA 852 |
|  | 6- | medias a grandes | medium to large |  |
|  | 7- | grandes | large | HA 89 |
|  | 8- | grandes a muy grandes | large to very large |  |
|  | 9- | muy grandes | very large | HA 303 |

## Época de la floración *(14) (G)*

Time of flowering

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | muy temprana | *very early* | HA 302, RHA 381 |
|  | 2- | muy temprana a temprana | *very early to early* |  |
|  | 3- | Temprana | *early* | RHA 273 |
|  | 4- | temprana a media | *early to medium* |  |
|  | 5- | media | *medium* | RHA 274 |
|  | 6- | media a tardía | *medium to late* |  |
|  | 7- | tardía | *late* | RHA 271 |
|  | 8- | tardía a muy tardía | *late to very late* |  |
|  | 9- | muy tardía | *very late* | RHA 361 |

## Flores liguladas: densidad *(15)*

Ray florets: density

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | muy escasa | *very sparse* |  |
|  | 2- | muy escasa a escasa | *very sparse to sparse* |  |
|  | 3- | escasa | *sparse* | HA 385 |
|  | 4- | escasa a media | *sparse to medium* |  |
|  | 5- | media | *medium* | HA 89 |
|  | 6- | media a densa | *medium to dense* |  |
|  | 7- | densa | *dense* |  |
|  | 8- | densa a muy densa | *dense to very dense* |  |
|  | 9- | muy densa | *very dense* |  |

## Flor ligulada *(19) (G)*

Ray floret: colour

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | blanco amarillento | *yellowish white* |  |
|  | 2- | amarillo claro | *light yellow* |  |
|  | 3- | amarillo medio | *medium yellow* | HA 89 |
|  | 4- | amarillo anaranjado | *orante yellow* | RHA 361 |
|  | 5- | naranja | *orange* | CM 587, RHA 295 |
|  | 6- | púrpura | *purple* |  |
|  | 7- | marron rojizo | *reddish brown* |  |

## Planta: altura *(28) (G)*

Plant: natural height

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | muy baja | *very short* | HA 379 |
|  | 2- | muy baja a baja | *very short to short* |  |
|  | 3- | baja | *short* | HA 291 |
|  | 4- | baja a media | *short to medium* |  |
|  | 5- | media | *medium* | RHA 801 |
|  | 6- | media a alta | *medium to tal* |  |
|  | 7- | alta | *tal* | H 52.9.1.1 |
|  | 8- | alta a muy alta | *tall to very tall* |  |
|  | 9- | muy alta | *very tall* |  |

## Panta: ramificación (excluyendo la causada por el medio ambiente) *(29) (G)*

Plant: branching (excluding environmental branching)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | ausente | *absent* | HA 89 |
|  | 9- | presente | *present* | RHA 271 |

## Semilla: color principal *(38) (G)*

Seed: main colour

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | blanca | *white* |  |
|  | 2- | gris blancuzca | *whitish grey* |  |
|  | 3- | gris | *grey* | TRISUN 860 |
|  | 4- | marrón clara | *light brown* |  |
|  | 5- | marrón medio | *medium brown* | RHA 273 |
|  | 6- | marrón oscuro | *dark brown* |  |
|  | 7- | negra | *black* | HA 89 |
|  | 8- | purpura | *purple* |  |

## Semilla: estrías en el borde *(39) (G)*

Seed: stripes on margin

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | ninguna o muy débilmente definidas | *none or very weakly expressed* | RHA 273 |
|  | 2- | débilmente definidas | *weakly expressed* | H 52.9.1.1 |
|  | 3- | fuertemente definidas | *strongly expressed* | HA 89 |

## Semilla: estrías entre los bordes *(40) (G)*

Seed: stripes **between** margins

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | ninguna o muy débilmente definidas | *none or very weakly expressed* | RHA 273 |
|  | 2- | débilmente definidas | *weakly expressed* | RHA 293 |
|  | 3- | fuertemente definidas | *strongly expressed* | HA 89 |

# Características del pARENTAL masculino C\*

MALE PARENTAL line c Characteristics

|  |  |
| --- | --- |
| **Denominación** o **referencia del obtentor** del **parental masculino C**  Denomination or breeder's reference of male parental line C | ( ) |

## Hoja: color verde *(4) (G)*

Leaf: green colour

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | muy claro | *very light* |  |
|  | 2- | muy claro a claro | *very light to light* |  |
|  | 3- | claro | *light* | H 52.9.1.1 |
|  | 4- | claro a medio | *light to medium* |  |
|  | 5- | medio | *medium* | HA 821 |
|  | 6- | medio a oscuro | *medium to dark* |  |
|  | 7- | oscuro | *dark* | HA 303 |
|  | 8- | oscuro a muy oscuro | *dark to very dark* |  |
|  | 9- | muy oscuro | *very dark* |  |

## Hoja: abullonado *(5) (G)*

Leaf: blistering

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | ausente o muy débil | *absent or very weak* |  |
|  | 2- | muy débil a débil | *very weak to weak* |  |
|  | 3- | débil | *weak* | HA 342, RHA 273 |
|  | 4- | débil a medio | *weak to medium* |  |
|  | 5- | medio | *medium* | HA 291 |
|  | 6- | medio a fuerte | *medium to strong* |  |
|  | 7- | fuerte | *strong* | HA 303, RHA 361 |
|  | 8- | fuerte a muy fuerte | *strong to very strong* |  |
|  | 9- | muy fuerte | *very strong* |  |

## Hoja: dentado *(6)*

Leaf: serration

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | aislado o muy fino | isolated or very fine | HA 393 |
|  | 2- | muy fino a fino | very fine to fine |  |
|  | 3- | fino | fine | HA 124 |
|  | 4- | fino a medio | fine to medium |  |
|  | 5- | medio | medium | HA 2713 |
|  | 6- | medio a grosero | medium to coarse |  |
|  | 7- | grosero | coarse | RHA 299 |
|  | 8- | grosero a muy grosero | coarse to very coarse |  |
|  | 9- | muy grosero | very coarse |  |

## Hoja: aurículas *(9)*

Leaf: auricules

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | ausentes o muy pequeñas | none or very small | HA 290 |
|  | 2- | muy pequeñas a pequeñas | very small to small |  |
|  | 3- | pequeñas | small |  |
|  | 4- | pequeñas a medias | small to medium |  |
|  | 5- | medias | medium | HA 852 |
|  | 6- | medias a grandes | medium to large |  |
|  | 7- | grandes | large | HA 89 |
|  | 8- | grandes a muy grandes | large to very large |  |
|  | 9- | muy grandes | very large | HA 303 |

## Época de la floración *(14) (G)*

Time of flowering

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | muy temprana | *very early* | HA 302, RHA 381 |
|  | 2- | muy temprana a temprana | *very early to early* |  |
|  | 3- | Temprana | *early* | RHA 273 |
|  | 4- | temprana a media | *early to medium* |  |
|  | 5- | media | *medium* | RHA 274 |
|  | 6- | media a tardía | *medium to late* |  |
|  | 7- | tardía | *late* | RHA 271 |
|  | 8- | tardía a muy tardía | *late to very late* |  |
|  | 9- | muy tardía | *very late* | RHA 361 |

## Flores liguladas: densidad *(15)*

Ray florets: density

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | muy escasa | *very sparse* |  |
|  | 2- | muy escasa a escasa | *very sparse to sparse* |  |
|  | 3- | escasa | *sparse* | HA 385 |
|  | 4- | escasa a media | *sparse to medium* |  |
|  | 5- | media | *medium* | HA 89 |
|  | 6- | media a densa | *medium to dense* |  |
|  | 7- | densa | *dense* |  |
|  | 8- | densa a muy densa | *dense to very dense* |  |
|  | 9- | muy densa | *very dense* |  |

## Flor ligulada *(19) (G)*

Ray floret: colour

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | blanco amarillento | *yellowish white* |  |
|  | 2- | amarillo claro | *light yellow* |  |
|  | 3- | amarillo medio | *medium yellow* | HA 89 |
|  | 4- | amarillo anaranjado | *orante yellow* | RHA 361 |
|  | 5- | naranja | *orange* | CM 587, RHA 295 |
|  | 6- | púrpura | *purple* |  |
|  | 7- | marron rojizo | *reddish brown* |  |

## Planta: altura *(28) (G)*

Plant: natural height

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | muy baja | *very short* | HA 379 |
|  | 2- | muy baja a baja | *very short to short* |  |
|  | 3- | baja | *short* | HA 291 |
|  | 4- | baja a media | *short to medium* |  |
|  | 5- | media | *medium* | RHA 801 |
|  | 6- | media a alta | *medium to tal* |  |
|  | 7- | alta | *tal* | H 52.9.1.1 |
|  | 8- | alta a muy alta | *tall to very tall* |  |
|  | 9- | muy alta | *very tall* |  |

## Panta: ramificación (excluyendo la causada por el medio ambiente) *(29) (G)*

Plant: branching (excluding environmental branching)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | ausente | *absent* | HA 89 |
|  | 9- | presente | *present* | RHA 271 |

## Semilla: color principal *(38) (G)*

Seed: main colour

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | blanca | *white* |  |
|  | 2- | gris blancuzca | *whitish grey* |  |
|  | 3- | gris | *grey* | TRISUN 860 |
|  | 4- | marrón clara | *light brown* |  |
|  | 5- | marrón medio | *medium brown* | RHA 273 |
|  | 6- | marrón oscuro | *dark brown* |  |
|  | 7- | negra | *black* | HA 89 |
|  | 8- | purpura | *purple* |  |

## Semilla: estrías en el borde *(39) (G)*

Seed: stripes on margin

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | ninguna o muy débilmente definidas | *none or very weakly expressed* | RHA 273 |
|  | 2- | débilmente definidas | *weakly expressed* | H 52.9.1.1 |
|  | 3- | fuertemente definidas | *strongly expressed* | HA 89 |

## Semilla: estrías entre los bordes *(40) (G)*

Seed: stripes **between** margins

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1- | ninguna o muy débilmente definidas | *none or very weakly expressed* | RHA 273 |
|  | 2- | débilmente definidas | *weakly expressed* | RHA 293 |
|  | 3- | fuertemente definidas | *strongly expressed* | HA 89 |