



C/2024/5439

6.9.2024

Publication of an application for the approval of a non minor amendment to a product specification pursuant to Article 50(2), point (a), of Regulation (EU) No 1151/2012 of the European Parliament and of the Council on quality schemes for agricultural products and foodstuffs

(C/2024/5439)

Within 3 months from the date of this publication, the authorities of a Member State or of a third country, or a natural or legal person having a legitimate interest and established or resident in a third country, may lodge, in accordance with Article 17 of Regulation (EU) 2024/1143 of the European Parliament and of the Council ⁽¹⁾, an opposition with the Commission.

APPLICATION FOR APPROVAL OF AN AMENDMENT TO THE PRODUCT SPECIFICATION OF PROTECTED DESIGNATIONS OF ORIGIN/PROTECTED GEOGRAPHICAL INDICATIONS WHICH IS NOT MINOR

Application for approval of an amendment in accordance with the first subparagraph of Article 53(2), of Regulation (EU) No 1151/2012

‘Espárrago de Huétor-Tájar’

EU No: PGI-ES-0056-AM01

Submitted on 18.10.2019

☐ PDO ☒ PGI

1. Applicant group and legitimate interest

Name of the applicant group:

Consejo Regulador de la Indicación Geográfica Protegida ‘Espárrago de Huétor-Tájar’ [‘Espárrago de Huétor-Tájar’ PGI Regulatory Board]

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Composition or legal form:

The Regulatory Board for the PGI ‘Espárrago de Huétor-Tájar’ is a not-for-profit public-law corporation, recognised as the PGI management body by the competent authority in the Member State. It represents the interests of the sectors involved in producing the protected asparagus: growers (farmers) and processors (fresh asparagus handling and canning plants). It is governed democratically and on the principle that the economic and industry interests that constitute it, and minority interests in particular, should be equally represented, and this is indeed the case. Furthermore, the Regulatory Board has the legal capacity to submit this application for amendment in accordance with national legislation, specifically Article 13(2)(a) of Government of Andalusia Law 2/2011 of 25 March 2011 on fisheries and food quality.

2. Member State or Third Country

Spain

⁽¹⁾ Regulation (EU) 2024/1143 of the European Parliament and of the Council of 11 April 2024 on geographical indications for wine, spirit drinks and agricultural products, as well as traditional specialties guaranteed and optional quality terms for agricultural products, amending Regulations (EU) No 1308/2013, (EU) 2019/787 and (EU) 2019/1753 and repealing Regulation (EU) No 1151/2012 (OJ L, 2024/1143, 23.4.2024, ELI: <http://data.europa.eu/eli/reg/2024/1143/oj>).

3. Heading in the product specification affected by the amendment(s)

- ☐ Name of product
- ☒ Description of product
- ☐ Geographical area
- ☒ Proof of origin
- ☒ Method of production
- ☒ Link
- ☒ Labelling
- ☒ Other (legal requirements and product specification compliance checks)

4. Type of amendment(s)

- ☒ Amendment to product specification of a registered PDO or PGI not to be qualified as minor in accordance with the third subparagraph of Article 53(2) of Regulation (EU) No 1151/2012.
- ☐ Amendment to product specification of a registered PDO or PGI for which a Single Document (or equivalent) has not been published not to be qualified as minor in accordance with the third subparagraph of Article 53(2) of Regulation (EU) No 1151/2012.

5. Amendment(s)

5.1. New definition of the botanical species of the local asparagus populations found in Huétor-Tájar and restructuring of sub-sections. Section B) DESCRIPTION OF PRODUCT

This amendment concerns the product specification in the first paragraph of Section B) DESCRIPTION OF PRODUCT. In addition, to make the whole of Section B) easier to understand, it has been restructured into three sub-sections: B.1. - Product definition; B.2. - Characteristics of the local variety; and B.3. - Standards for produce sold fresh or tinned.

Detailed description of the changes and reason for the amendment

The wording '*Asparagus officinalis* L. subespecie genéticamente tetraploide, similar...' has been replaced by 'local variety known as "Espárrago Verde Morado de Huétor-Tájar" or "Morado de Huétor" (*Asparagus maritimus* Mill. x *Asparagus officinalis* L.), known in Spanish as "espárragos trigueros", as they have similar characteristics...'. At the end of the second paragraph 'of the century' has been replaced by 'of the 20th century'.

The amendment concerns the new definition of the local Huétor-Tájar asparagus population, as laid down in this Section (B). The new definition results from the updated scientific knowledge about the product acquired over the last 20 years.

Genetic characterisation studies on 'Espárrago de Huétor-Tájar' by Córdoba University's Plant Genetics Department provide the scientific basis for this change. This research, involving DNA (microsatellite) analysis, shows that the local variety originated in the early 20th century from the natural hybridisation of the cultivated species *Asparagus officinalis* (diploid 2x) and the wild species *Asparagus maritimus* (hexaploid 6x), producing an interspecific cross. *Asparagus maritimus* Mill. is the more dominant species, accounting for two thirds (66,67 %) of the germplasm of 'Espárrago de Huétor-Tájar', while the species *Asparagus officinalis* L. represents only one third (33,33 %). This gives it unique phylogenetic characteristics which are described in the extensive scientific literature published on the genetics and phytochemistry of 'Espárrago de Huétor-Tájar'. The words 'of the 20th century' have been added to clarify that it refers to the 20th century.

5.2. Updating of the morphological and organoleptic characteristics, and removal of the cytological description and isoenzyme markers of the local Huétor-Tájar population. Section B) DESCRIPTION OF PRODUCT

This amendment affects the product specification in Section B) DESCRIPTION OF PRODUCT, 2nd to 10th paragraphs inclusive.

Detailed description of the changes and reason for the amendment

The second paragraph, 'The characteristics of the native populations are as follows:', has been replaced by:

B.2. - Characteristics of the local variety

The characteristics that differentiate the local variety of Huétor-Tájar from other commercial varieties of green asparagus found around the world are as follows:

In addition, the wording of the 3rd paragraph has been amended:

- *Appearance: The asparagus spears are purple, bronze-purple, bronze, green-purple or green in colour. They are thin (4-12 mm in diameter) and the tip is pointed or tapered and wider than the rest of the stalk. The spears have small 'spurs' under the bracts.*

The above has been updated as follows:

- *Appearance: Anthocyanin colouring — purple, bronze-purple, bronze, green-purple or green — can be found in both stalk and tip. The asparagus spears are straight and cylindrical. They range from thin to medium (generally between 4 mm and 16 mm in diameter), and the tip is pointed or tapered and wider than the rest of the stalk (spear-shaped). The spears have small 'spurs' under the bracts and faint lines may be visible on the skin.*

The physical description of the product has been expanded as a result of advances in the technical and scientific knowledge of 'Espárrago de Huétor-Tájar'. There is emphasis on the specific features that it derives from the species from which it originates, *Asparagus maritimus* Mill. The text now describes the asparagus spears as being straight and having a spear-shaped tip, which are characteristics that set it apart from commercial green asparagus varieties of the species *Asparagus officinalis* L. The fact that faint lines may be visible on the skin is also now mentioned. This descriptor is associated with different species of wild 'triguero' asparagus, including *A. maritimus* Mill. Another change to the description of the appearance is an increase in the upper value of the normal diameter range, which is now 4-16 mm instead of 4-12 mm. This change has come about because, as a result of the local farmers' hard work selecting the plants, it is now possible to obtain more uniform and vigorous asparagus plants from the 'Espárrago Verde Morado de Huétor-Tájar' population.

The wording of the 4th paragraph has been amended:

- *Organoleptic properties: The texture of the asparagus is tender, meaty and firm. It has a delicate bitter-sweet taste and an intense aroma that is reminiscent of wild 'triguero' asparagus.*

The above has been updated as follows:

- *Organoleptic properties: When fresh, the texture of the asparagus is tender, meaty and supple. The stalks are very flexible: depending on the diameter – the thinner the spear, the further it bends – some can be bent over 70 ° without breaking. The asparagus has a delicate bitter-sweet taste and an intense aroma.*

The organoleptic description has been extended as a result of information received about sensory testing of 'Espárrago de Huétor-Tájar' carried out at the University of Granada in 2003 (Department of Nutrition and Food Science, School of Pharmacy). In the description, 'firm' has been replaced by 'supple', a rheological parameter linked to firmness which, being cheaper and easier to measure, reduces certification costs. Measuring the firmness of asparagus requires a texture analyser, involving an expensive and complex testing process. By contrast, the suppleness of asparagus can be measured in its flexibility, i.e. how far it can be bent, which is easy, quick and very cheap to do. An objective and measurable parameter has been introduced for the rheological properties that are specific to 'Espárrago de Huétor-Tájar': it must be possible to bend the spears at least 70° without breaking them. This is a distinctive feature of wild *triguero* asparagus and the 'Espárrago de Huétor-Tájar' which is not found in the more rigid and fibrous garden asparagus (*Asparagus officinalis* L.). The words 'that is reminiscent of wild *triguero* asparagus' have also been removed from the organoleptic description, as this phrase provided no descriptive information at organoleptic level and the product's similarity with the *triguero* asparagus has already been mentioned in the product definition (sub-section B.1).

Paragraphs 5 to 9 have been deleted:

- *Cytology... (2n = 40)*
- *Isoenzymes... Euphytica 61: 169-179).*

The cytological description and the citation referring to isoenzyme markers included in the previous product specification have been removed because they are obsolete in view of the latest genetic research into the 'Espárrago de Huétor-Tájar'. Furthermore, genetic descriptors are not needed for standardising the 'Espárrago de Huétor-Tájar'. A description of the appearance and organoleptic properties is more than sufficient, and easier and cheaper to evaluate. These are also key differentiating factors, since there is a close and very marked correspondence between these markers and the genetics of the 'Espárrago de Huétor-Tájar' (*Asparagus maritimus* Mill. x *Asparagus officinalis* L.).

Paragraph 10 has been amended:

Thanks to these characteristics, the native asparagus of Huétor-Tájar can be easily told apart, in terms of both appearance and genetics, from other varieties of green asparagus sold around the world.

It has been updated as follows:

*Thanks to these characteristics, which are very clearly defined, the native asparagus of Huétor-Tájar can easily be told apart, in terms of both appearance and organoleptic properties, from other varieties of green asparagus sold around the world, all of them garden asparagus (botanical name *Asparagus officinalis* L.).*

There is emphasis on the major differences (in terms of appearance and organoleptic properties) between the 'Espárrago de Huétor-Tájar' and other commercial varieties of green asparagus currently available. The reason for these differences lies in the considerable genetic separation between the species *Asparagus officinalis* L. and *Asparagus maritimus* Mill. The latter is closely related to 'Espárrago de Huétor-Tájar'.

5.3. Updating of the classification and commercial standards for the products covered by 'Espárrago de Huétor-Tájar' PGI. Section B) DESCRIPTION OF PRODUCT

This amendment affects the specification as of the 11th paragraph of Section B) DESCRIPTION OF PRODUCT. It concerns updating of the technical information on the classification of products covered by the PGI and sold fresh or in tins. This is because commercial practices, inspection procedures and the compliance assessment of the certified products have been updated.

Detailed description of the changes and reason for the amendment

The structure of the sub-section and the wording of paragraph 11 have been updated:

The asparagus may be sold fresh or in tins. When sold fresh, the asparagus spears must be intact, fresh in appearance, fresh-smelling, healthy, unbruised, free from damage caused by pests, and free of external moisture that is not the result of the stalks having been moistened before being placed in the packaging. The asparagus ... and purples.

The above has been replaced by:

B.3. - Standards for produce sold fresh or tinned

The asparagus may be sold fresh or in tins.

Produce to be sold fresh

The sizing and classes described below are to be used to for asparagus to be sold fresh, which must be fresh in appearance and fresh-smelling, sound, unbruised, unbroken, free of damage from pests, rotting or deterioration, clean and free from abnormal external moisture when presented in any of the forms laid down for fresh produce. The asparagus ... and purples.

The wording of the 14th paragraph 14(a) "Extra" class' has been amended:

- (a) 'Extra' class: Asparagus in this class... small 'spurs' under the bracts. The apical bud should be closed, though some light feathering is permitted... the floral buds do not protrude from beneath the scale leaves. In this class, signs of woodiness at the base of the stem must be limited to no more than a quarter of the total length of the asparagus spear.

The above has been replaced by:

- (a) 'Extra': Asparagus in this class... small 'spurs' under the bracts. Faint lines may occasionally be visible on the skin. The apical bud should be closed, though some light feathering is permitted... the floral buds or axillary buds are only visible on the scale leaves of the asparagus tip. The cut at the base of the shoots must be straight, as proof of standardisation.

The wording of the paragraph 15(b) 'Class "I"' has been amended:

- (b) *Class I: Class-I asparagus spears... 'Extra' class,... the floral buds do not protrude from beneath the scale leaves, and woodiness at the base of the stem is permitted up to one third of the total length of the asparagus spear.*

The above has been replaced by:

- (b) *'I': Asparagus spears in this class... 'Extra'... the floral buds or axillary buds do not protrude beneath the scale leaves of the asparagus tip. The cut at the base of the shoots must be straight, though a straight cut made on top of a diagonal one made during harvesting, as proof of standardisation, will be accepted. A white butt at the base of the stem is permitted in this class provided that it measures no more than one eighth of the total length of the asparagus spear.*

The permitted amount of tip feathering is described more accurately, establishing a clearer difference between the requirements for the two classes. References to 'the woodiness at the bottom of the asparagus spear' have been deleted for both classes due to the technical difficulty of checking compliance with such requirements. In its place, a more objective and measurable requirement has been introduced: a white butt at the base of the stalk.

The wording of paragraphs 17 to 19, concerning 'Sizing', has been amended:

- (a) *The asparagus spears must be between 20 cm and 27 cm long. The maximum permitted variation in length within a single bundle is 5 cm.*
- (b) *The minimum diameter is 4 mm for both classes. There are two diameter categories: 4-10 mm, and 10 mm and over.*

The above has been replaced by:

Sizing by length is as follows:

- (a) *'Asparagus', 'whole asparagus' or 'long asparagus': The spears must be between 17 cm and 27 cm long. The maximum permitted variation in length within a single bundle is 5 cm.*
- (b) *'Short asparagus': The spears must be between 12 cm and 17 cm long. The maximum permitted variation in length within a single bundle or package is 4 cm.*
- (c) *'Asparagus tips': The spears must be between 7 cm and 12 cm long. The maximum permitted variation in length within a single bundle or package is 4 cm.*
- (d) *'Asparagus pieces': Asparagus spears cut crosswise into tender pieces of 2-7 cm in length.*

Produce presented in any of these length formats must be obtained from 'whole asparagus' or 'long asparagus' which has first been graded as 'Extra' or 'I'.

Sizing by diameter is as follows:

The minimum diameter is 4 mm for both categories. The difference in diameter between the thickest and thinnest spears in a single pack or bundle may not exceed 8 mm.

The wording of paragraphs 21 to 23, concerning 'Tolerances', has been amended:

Each package may contain a certain amount of produce not satisfying the quality and size requirements of the class in question, respecting the tolerance limits established below.

- (a) *Quality tolerances: Packages of 'Extra' class asparagus may contain up to 5 %, by number or weight, of produce that does not satisfy the requirements of that class but does meet the requirements for Class 'I' or, in exceptional cases, falling within the tolerances set for Class 'I'. Packages of Class 'I' asparagus may contain up to 10 %, by number or weight, of asparagus that does not satisfy the requirements of that class but does meet the requirements for Class 'II' produce set out in Commission Regulation (EC) No 2377/1999 of 9 November 1999.*
- (b) *Size tolerances: 10 %, by number ... applicable requirements.*

The above has been replaced by:

- (a) *Quality tolerances: Packages of 'Extra' class asparagus may contain up to 5 %, by number or weight, of produce that does not satisfy the requirements of that class but does meet the requirements for Class 'I' or, in exceptional cases, falling within the tolerances set for Class 'I'. Packages of Class 'I' asparagus may contain up to 10 %, by number or weight, of asparagus that does not satisfy the requirements of that class.*
- (b) *Size tolerances: Up to 10 %, by number ... applicable requirements.*

New paragraphs have been added describing the presentation of the end product in greater detail:

The asparagus may be presented in one of two ways:

- (a) *In securely tied bundles of up to 2 kg;*
- (b) *Loose or bundled in packs placed inside packages or boxes of up to 6 kg.*

The contents of each pack, box or package or of each bundle must be uniform, with asparagus of the same format, size ranges (length and diameter), weight and category.

The sizing requirements (both length and diameter), quality tolerances and product presentation rules have been adjusted to bring them into line, to a certain extent, with international rules on the marketing of fresh green asparagus and established commercial practices in the European Union. However, these sizing rules differ from the international standard because the ‘Espárrago de Huétor-Tájar’ is a local asparagus population affected by greater variation than commercial varieties of green asparagus, which originate from improved hybrids of *Asparagus officinalis* L. and are therefore more homogeneous in size and shape.

Finally, paragraph 24, on tinned asparagus, has been deleted:

Tinned asparagus may be either intact or cut into pieces and must be ‘Extra’ class or class ‘I’ produce.

The section on the rules for tinned asparagus has been rewritten.

New version:

Produce to be sold in tins

Tinned ‘Espárrago de Huétor-Tájar’ is traditionally preserved in either brine (water, salt and citric acid) or extra virgin olive oil. Other preserving liquids authorised for use in the food industry may also be used.

Tinned asparagus may be presented whole or in pieces, graded using the ‘Extra’ and ‘I’ quality classes established in this product specification. The formats available for sale are as follows:

- *‘Asparagus’ or ‘asparagus spears’: consisting of the tip and the stem and measuring at least 12 cm long;*
- *‘Short asparagus’: spears consisting of the tip and the stem and measuring between 7 cm and 12 cm long;*
- *‘Asparagus tips’: pieces consisting of the tip and part of the stem and measuring between 2 cm and 7 cm long;*
- *‘Asparagus pieces’: tender pieces of 2-7 cm in length, cut crosswise, with tips comprising at least 25 % of the drained weight.*

The asparagus must also be classified based on the diameter of a cross-section of the stalk, to give the product a uniform appearance within the following ranges:

Name of diameter category	Diameter in mm
Thin	under 9
Medium	9 to 11
Thick	11 to 14
Very thick	14 to 19
Extra thick	over 19

The following table establishes the quality parameter and permitted tolerances applicable to each of the two classes:

Quality parameter	'Extra' Class	Class 'I'
Feathering	The same as for asparagus sold fresh	The same as for asparagus sold fresh
Length uniformity	1,10	1,15
Cloudiness of preserving liquid, brine (Kertesz turbidity index) (*)	4	2
Size tolerance	5 %	10 %
Texture defects	5 %	10 %
Other defects	5 %	10 %

(*) The preserving liquid cloudiness requirement does not apply to produce preserved in extra virgin olive oil.

Drained weight is determined by the type of packaging used. The drained-weight-to-volume ratio (g to cm³) is 0,50.

As well as meeting the requirements of current legislation and this product specification, the label must also state the drained weight, package capacity, asparagus spear size and the approximate number of spears to be found in each pack (this does not apply to the 'asparagus pieces' format).

The standards for tinned 'Espárrago de Huétor-Tájar' were not included in the previous product specification because it was considered that the product should simply comply with the national legislation applicable to tinned asparagus. However, that legislation applies to produce from the species *Asparagus officinalis* L. and, as we have shown, the 'Espárrago de Huétor-Tájar' does not belong to that botanical species but instead is a hybrid (*Asparagus maritimus* Mill. x *Asparagus officinalis* L.) not covered by national law on tinned asparagus, so new rules were needed. The text included in the product specification lays down the authorised preserving liquids, with brine (water, salt and citric acid) and extra virgin olive oil considered traditional, leaving open the possibility of using other preserving liquids that might be considered suitable in the future, provided that they are authorised for use in the food industry. Quality parameters are established for each class and preserving liquid, using the same class names as for the fresh product.

5.4. Updating of the name of one of the municipalities of the production area. Section C) GEOGRAPHICAL AREA

This amendment affects the product specification at the end of the first paragraph of Section C) GEOGRAPHICAL AREA.

Brief description and reason for the amendment

'Villanueva de Mesías' has been changed to "Villanueva Mesía".

The amendment consists of changing the name of one of the municipalities in the production area of the "Espárrago de Huétor-Tájar" PGI, which has been confirmed by the competent national authority.

5.5. Updating of the wording in the sub-section "Seed origin" for a more accurate description of the seed production system, and updating of the inspection responsibilities of the Regulatory Board. Section D) Proof that the product originated in the area

This amendment concerns the product specification, in the two paragraphs of the sub-section "Seed origin" of Section D) Proof that the product originated in the area.

Brief description and reason for the amendment

To improve the structure of the product specification, the heading of the sub-section "Seed origin" has been labelled D.1.

The wording of the “Seed origin” section has been revised, better defining the work of seed breeders and including the requirement that they be listed on the Register of Seed and Seedbed Supplier Beds as well as the compliance and control requirements to which they are subject. The reference to the Regulatory Board being responsible for monitoring the selection and propagation of plant material has been removed, as this is the responsibility of the body that checks compliance with the product specification. It is not the role of the Regulatory Board, which acts as the management body for the PGI.

5.6. *Updating of the wording in the sub-section “Product characteristics”. Section D) Proof that the product originated in the area*

This amendment concerns the product specification, in the paragraph of the sub-section “Product characteristics” of Section D) Proof that the product originated in the area.

Brief description and reason for the amendment

To improve the structure of the product specification, the heading of the sub-section ‘Product characteristics’ has been labelled D.2.

In the ‘Product characteristics’ section, the wording ‘indigenous nature of the plant material (cultivar or variety)’ has been removed and replaced by ‘indigenous nature of the plant material (local variety)’. This amendment has been made because the ‘Espárrago de Huétor-Tájar’ is not actually a cultivar (or variety) per se, but rather an asparagus population of local origin.

The following has also been removed: ‘... growing conditions and, in the case of tinned asparagus, processing conditions’. It has been replaced by ‘... growing, handling and processing conditions’. This change has been made because the text should cover both the handling of fresh asparagus and the industrial canning process.

5.7. *Updating of the wording in the sub-section ‘Checks and certification’. Section D) Proof that the product originated in the area*

This amendment concerns the product specification, in the paragraph of the sub-section ‘Checks and certification’ of Section ‘D) Proof that the product originated in the area’.

Brief description and reason for the amendment

The amendment concerns updating the wording of this sub-section. After 20 years, there are many obsolete concepts that have to be corrected in various paragraphs.

To improve the structure of the product specification, the heading of the sub-section ‘Checks and certification’ has been labelled D.3.

Item (a) has been revised to describe the various ways of propagating plant material (direct sowing of seeds, planting of seedlings and crowns, and cuttings from parent plants) in more detail. It is now made clear that seed supplier beds must be located within the production area, as the entire seed-breeding process is closely linked to the origin.

Item (b) has been revised and now more accurately describes the controls applicable to the selection of the asparagus genotypes for plant reproduction. This was not included in the previous version of the product specification. Responsibility for controls is no longer attributed to the Regulatory Board.

In item (c), the phrase “...and any applicable national and EU legislation” has been replaced with ‘...and any applicable legislation’.

The wording of the previous item (d) has been updated and incorporated into the new item (d), which covers all the checks on the production and sale process of plant material.

Item (e) – which has become item (d) – has been updated by removing obsolete and inconsistent information such as the involvement of the PGI management body (the Regulatory Board) in controls and adding a reference to seed packaging (not included in the previous version) alongside seed breeding and marketing. The text now also refers to a ‘supporting document’ which must be provided together with plant material in order to ensure traceability from the seed-supplying plant beds located in the production area.

Item (f) – which has become item (e) – has been expanded. It now mentions the ‘Register of Asparagus Beds’, in which asparagus farms must be listed, and makes it clear that the asparagus plant material must be controlled material of the local variety from seed-supplying parent beds.’

A new item (f) has been introduced. It lays down new checks to be performed when the asparagus is delivered from farms to fresh produce handling plants and canning plants.

Item (g) has been updated, deleting obsolete and incongruous information by replacing the phrase ‘...must be those established in the Regulation or recommended by the Regulatory Board, and practices will be monitored...’ with ‘...must be those established in the product specification, and practices will be monitored...’.

The wording in Section (i) has been updated. The words *The produce must be stored at fresh produce marketing centres or registered canning plants located within the production area* have been replaced by: *The produce must be stored at fresh produce handling plants or registered canning plants located within the production area and listed on the Register of Fresh Produce Sellers or the Register of Canning Plants, respectively.*

Item (j) has been updated, deleting obsolete and incongruous information. The following has been removed: *The Regulatory Board will monitor the handling, packaging, presentation, preparation, dispatch and transportation of asparagus and it may establish specific rules for each annual harvest.* It now says: *The handling, packaging, presentation, preparation, labelling and dispatch of asparagus will be monitored and must take place within the production area.* Transportation has been removed as the process of certification at origin ends when the product is dispatched. The end product is never transported between operators within the production area. Possible checks to be carried out by the Regulatory Board have been deleted, as the latter’s main responsibility is as management body for the PGI.

Item (k), whereby ‘*Both fresh and tinned produce must undergo physical and chemical testing (to check for plant protection product residues and nitrates) and sensory testing*’, has been deleted. Testing for plant protection product residues and nitrates in the asparagus are mandatory checks. They form part of broader legislation, and there is no additional requirement for inclusion in the product specification for this PGI. Organoleptic analyses are covered by the wording of the new item (k).

Finally, item (l) has been updated and has become item (k). It now states that, as well as the checks to be performed throughout the entire process, the end product is also subject to compliance checks with Section B.3. The reference to the management body (Regulatory Board) has also been deleted.

5.8. Updating of the wording of sub-section ‘Selecting the seed and planting the seedbed’, clarifying and expanding the information. Section E) HOW THE PRODUCT IS OBTAINED

This amendment concerns the product specification, in the paragraph of the sub-section ‘Selecting the seed and planting the seedbed’, in Section E) HOW THE PRODUCT IS OBTAINED.

Brief description and reason for the amendment

The amendment concerns updating the wording of this sub-section. After 20 years, there are many growing and checking practices that require greater clarification or more information.

To improve the structure of the product specification, the heading of the sub-section ‘Selecting the seed and planting the seedbed’ has been labelled E.1.

Sub-section E.1. (Selecting the seed and planting the seedbed) has been revised and expanded. Because the process of obtaining native plant material is very important for the PGI, the technical information in this sub-section – on the selection of parent seedlings, pollination, preparing fertilised seedlings in the summer and harvesting the seeds from the selected plants in the autumn – has been improved and expanded.

A certain degree of uniformity (selection criteria) is required of the asparagus plants (male and female) selected on a given parcel. They must be well formed, vigorous and isolated from other non-selected asparagus plants that are at the same flowering stage to prevent uncontrolled pollination. The new text describes the process of isolating the parent plants and the use of open pollination on the asparagus parcels themselves or managed pollination using pollen harvested from selected male asparagus, and protecting female plants with anti-insect nets.

The text now describes the process of collecting and preparing seeds. The information on sowing seedbeds has been revised, removing the sowing dates, the length of time the plants remain in the seedbed and the requirement to report to the PGI management body. Current techniques used to breed seeds in seedbeds under greenhouse conditions result in healthier, more uniform plants, so asparagus seedlings can be obtained outside the dates on which they were traditionally available.

Finally, the new version states that beds selected for seed breeding purposes must be listed in the Register of Seed and Seedbed Supplier Beds.

5.9. *Updating to the wording of sub-section 'Planting the asparagus crop', replacing obsolete references and expanding the information. Section E) HOW THE PRODUCT IS OBTAINED*

This amendment concerns the product specification, in the paragraph of the sub-section 'Planting the asparagus crop', in Section E) HOW THE PRODUCT IS OBTAINED.

Brief description and reason for the amendment

The amendment concerns updating the wording of this sub-section. After 20 years, there are many growing and checking practices that require greater clarification or more information.

To improve the structure of the product specification, the heading of the sub-section 'Planting the asparagus crop' has been labelled E.2.

This sub-section has been revised and made more accurate. Details are now given of the various traditional planting practices followed on the asparagus farms of Huétor-Tájar: planting crowns (plants), sowing seeds directly into the ground, or planting greenhouse-grown seedlings. The range of planting dates is now wider than under the previous version of the product specification, which only provided for the planting of crowns. Crowns can be planted from the winter to the late spring, while seed-sowing or seedling-planting may take place during the spring-summer period.

The text no longer states that 'A pre-planting soil study is conducted to gauge how suitable the soil is for growing asparagus and to calculate whether its mineral or organic content needs to be adjusted'. This is a recommendation for growing practices and not a requirement that needs to be included in a product specification. This is because it has been shown that asparagus can be grown in any of the wide range of soil types found in the Huétor-Tájar production area, and no soil type is excluded.

The new version specifies the procedure for sowing seeds directly into the ground, which was not covered in the previous product specification. The phrase '...and covered with a thin layer of loose soil' has been changed to '...and covered with a layer of soil'. The following phrase has been deleted: *The crown must be left to grow for one to two years, depending on soil quality, so that the rhizomes can produce viable buds capable of yielding good-quality asparagus spears*. The practice of leaving crowns to grow for two years is obsolete and not essential for plant quality. Now in disuse, this practice was followed because of the poor germination of seeds in the soil, the absence of fertigation techniques and the slow rate of growth of the native Huétor-Tájar plant material, which is less vigorous than other varieties of green asparagus, all of which necessitated a two-year crown-growing cycle. Modern systems used for producing crowns – and in particular 'forcing' seedlings in greenhouses – mean that crowns now need less than a year and seedlings between 3 and 4 months.

Finally, obsolete information in the last paragraph has been updated. Instead of 'For produce to be covered by the Designation, the asparagus bed from which it comes must be listed with the Regulatory Board in the winter before its first harvest', the sentence now reads 'For produce to be covered by the PGI, the asparagus bed from which it comes must be listed in the Register of Asparagus Beds before its first harvest'. Rather than stating that registration must take place in the winter, it is more accurate to state that it must be prior to harvesting, as asparagus harvests can sometimes begin in late January or early February in warmer years.

5.10. *Updating to the wording of the sub-section 'Growing the asparagus', replacing obsolete references, clarifying and expanding the information. Section E) HOW THE PRODUCT IS OBTAINED*

This amendment concerns the product specification, in the paragraph of the sub-section 'Growing the asparagus', in Section E) HOW THE PRODUCT IS OBTAINED.

Brief description and reason for the amendment

The amendment concerns updating the wording of this sub-section, removing recommendations for growing that are not among the aspects to be regulated in a product specification, or that are part of broader legislation. More specific growing and checking practices have also been detailed as necessary.

To improve the structure of the product specification, the heading of the sub-section “Growing the asparagus” has been labelled E.3.

The bulk of this sub-section has been revised. The outdated information from the first paragraph has been updated. Modern fertiliser application and watering techniques mean that young asparagus beds can develop perfectly over a one-year growing cycle and can therefore be harvested the next year, so there is no need to delay the harvest until the third year after sowing.

The description of ‘growing practices performed throughout the year’ included in the previous version of the product specification (pre-planting soil preparation, basal application and top-dressing, pre- and post-harvest application of plant protection treatments, irrigation, tilling and trimming the fronds in the autumn) has been removed entirely. Some of these cultivation practices are considered recommendations, and others are covered by more general legislation, so they are not considered essential cultivation requirements that need to be included in the product specification. However, there are two cultivation practices that are specific to the ‘Espárrago de Huétor-Tájar’ area, are decisive for product quality, and form part of the asparagus-growing tradition in this part of Granada province (linked to the human factor), namely:

- The specific planting pattern used when establishing and developing an asparagus crop, leaving 1.4-1.6 m between rows and 50-70 cm between plants.
- The practice of gradually earthing up the asparagus bed throughout its life cycle.

5.11. *Updating to the wording of sub-section ‘Harvesting, transporting and delivering asparagus to fresh produce plants’, replacing obsolete references, updating and clarifying practices, and establishing new requirements with a decisive impact on product quality. Section E) HOW THE PRODUCT IS OBTAINED*

This amendment concerns the product specification, in the paragraph of the sub-section ‘Harvesting, transporting and delivering asparagus to fresh produce plants’, in Section E) HOW THE PRODUCT IS OBTAINED.

Brief description and reason for the amendment

The purpose of the amendment is to update the information in this sub-section by detailing the handling practices for the raw material in the field, and how it is transported and delivered to fresh produce plants.

To improve the structure of the product specification, the heading of this sub-section has been labelled E.4.

Some of the paragraphs of this sub-section have been revised.

In the first paragraph, instead of ‘Harvesting begins in the second or third year after planting, lasting 15 or 30 days, and from the third year onwards it spans the entire season, from early March to mid-June’, it now says:

‘The crop may be harvested from the year after it is sown. The harvest start and end dates each year depend on weather conditions, generally taking place from early March to mid-June.’

For the same reasons given for the previous amendment in point 5.10 (modern fertiliser application and irrigation techniques), a one-year growth cycle is sufficient for young asparagus beds to reach perfect harvestable condition by the following harvest season. It is not necessary to wait for 2 or 3 years after sowing.

Moreover, the following sentence, which was obsolete and inconsistent under the current PGI scheme, has been revised: *Suitable methods must be used to transport the harvested asparagus to processing centres, complying with the rules laid down by the Regulatory Board for that year’s harvest.* It now reads: *Suitable methods must be used to transport the harvested asparagus to processing centres, taking care to avoid breaking the asparagus tips or letting the spears dry out at any point before delivery.*

The next paragraph has also been updated. The old text was: *Once delivered to fresh produce handling plants or canning plants, the asparagus must be chilled. It may be placed in trays containing water to moisten the base of the stems, keeping them fresh and plump. The asparagus must be conditioned within 24 hours of being harvested.* The new text is: *Once delivered to fresh produce handling plants or canning plants, the asparagus is placed in trays containing water to keep the stem bases moist and stored in hydrocoolers or refrigerators to keep it cool and plump until processing. The asparagus must be packaged within 24 hours of being delivered. It must be processed within 72 hours of delivery.*

Two other types of industrial treatment of asparagus on delivery have been introduced: hydrocooling and refrigeration. Moreover, in order to facilitate checks and certification, it is now specified that the asparagus must be conditioned within 24 hours of delivery, rather than of harvesting. It is easy to check the exact time the asparagus is delivered, as it is recorded electronically together with the weight of delivered batches and traceability information. The exact time of harvesting is very difficult to verify. An additional requirement has also been included: the asparagus must be processed within 72 hours of delivery.

A new paragraph has been added, listing the self-checks to be performed on the raw material on delivery to fresh produce handling plants or canning plants. For each aspect of the raw material to be assessed (confirming that the asparagus is of the native variety by its appearance and organoleptic characteristics, maximum and minimum spear length, amount of white butt at the base of the stem, checking for any feathering, soil or appearance defects), a detailed description of the checks and requirements is given, with the permitted ranges and defect tolerances. This control measure has been introduced because it is a key step in guaranteeing the quality of the end product (fresh and tinned asparagus).

The last paragraph – ‘In order to guarantee product quality, the Regulatory Board sets the end date for each harvest’ – has been deleted. This quality management concept is obsolete and is incompatible with the current certification structure of a PGI product specification.

Finally, a paragraph on overall control requirements at these stages of the process has been added at the end: *Checks must be in place to monitor the harvesting, transportation and delivery of asparagus to registered fresh produce handling or canning plants.*

5.12. *Updating to the wording of sub-section ‘Asparagus preparation and processing’, replacing obsolete references, updating and clarifying practices, and establishing new requirements with a decisive impact on product quality. Section E) HOW THE PRODUCT IS OBTAINED*

This amendment concerns the product specification, in the paragraph of the sub-section ‘Asparagus preparation and processing’, in Section E) HOW THE PRODUCT IS OBTAINED.

Detailed description of the changes and reason for the amendment

The amendment concerns updating the wording of sub-section ‘Asparagus preparation and processing’, updating and clarifying practices after 20 years. Furthermore, new requirements with a decisive impact on product quality have been established.

To improve the structure of the product specification, the heading of the sub-section has been labelled E.5. The title has been partially amended, with ‘Asparagus preparation and processing’ changed to: ‘E.5. Asparagus handling and processing’.

The term *elaboración* (‘preparation’) has been replaced by *manipulación* (‘handling’) in the first paragraph (the section heading). It is a more precise term in the context of the handling of fresh vegetables. Certain industrial processes, previously described as manual, have been updated to also cover the possibility of automation. The wording ‘... hand-sorted on conveyor belts’ has been expanded to ‘... hand- and/or machine-sorted on conveyor belts, with the help of mechanised cutters...’.

A new paragraph has been added to the section ‘Preparation for marketing as fresh produce’: *Produce to be marketed fresh may not be subjected to a second handling process.* The practice of repackaging fresh asparagus has had to be prohibited due to the significant loss of quality caused to the product. Asparagus is a highly perishable vegetable. It is very fragile and delicate, with a high risk of bruising and broken tips. It can also dry out when removed from the cold chain, quickly becoming limp.

The sentence which read 'The asparagus is then gathered into uniform bundles of ½ kg, 1 kg or 2 kg and placed in crates' is unnecessary. It has been deleted, as this information was already included in Section B.3. (Standards for produce sold fresh or tinned).

The last paragraph previously read: *The Regulatory Board monitors the delivery, handling, presentation and dispatch of fresh asparagus, which, after undergoing quality controls, is released under the protected name.* It has been changed to: *Checks must be conducted on the delivery, handling, presentation, labelling and dispatch of fresh asparagus covered by the PGI.* The change is self-evident under the new organisational structure of the Regulatory Board, which is the management body and does not have to have control duties.

Finally, the wording describing the stages in the 'Canning' process has been simplified, and now reads as follows:

Industrial processing consists of the following stages: hydration, trimming the base of the stems, washing the asparagus, and a second trimming to container length. In automatic processing, the asparagus are received already trimmed to container length, then blanched, cooled, given a post-blanching wash, hand-sorted by size to remove any defective spears and hand-packed into tins to which preserving liquid (brine, extra virgin olive oil or others) is then added; the tins are then preheated, seamed, appertised, cooled, stored, labelled/boxed, stored once again and dispatched. The use of an exhaust system may replace the pre-heating stage. The stage consisting of storing the end product for a second time may also be omitted.

Appertisation may consist of either sterilisation or pasteurisation by acidification. The latter is a traditional method of preparing tinned 'Espárrago de Huétor-Tájar'.

The description of the canning process is now simpler in order to facilitate product checks. The text now also covers new ways of working in the industry suitable for inclusion in the product specification, including automated processes, specifying types of preserving liquid, and allowing flexibility with regard to labelling/boxing/further storage of the final product.

Furthermore, as well as the traditional (pH-neutral) sterilisation that was covered by the previous version, the new product specification also mentions pasteurisation by acidification, a traditional system that has been used for canning wild *triguero* asparagus and 'Espárrago de Huétor-Tájar' since 1970. Pasteurisation by acidification is a more gentle heat process than sterilisation. It helps to keep 'Espárrago de Huétor-Tájar' intact while maintaining its delicate meaty and supple texture. The process also helps to stabilise a natural antioxidant found in tinned asparagus, known as rutin (quercetin-3-O-rutinoside), which has significant health benefits.

Finally, the last paragraph – 'The Regulatory Board monitors and assigns quality scores to all of these processes – delivery, preparation, packaging and certification of the end product' – has been revised to read 'Checks must be performed throughout the entire process of delivery, preparation, packaging, labelling, storage and dispatch of the end product'. The change is self-evident under the new organisational structure of the Regulatory Board, which is the management body and does not have to have control duties.

5.13. Addition of an introductory paragraph and restructuring of sub-sections in Section F) LINK WITH THE LOCAL AREA

This amendment consists of the addition of an introductory paragraph and restructuring and renumbering in the specification of the sub-sections of Section F) LINK WITH THE LOCAL AREA.

Brief description and reason for the amendment

The sub-sections of the 'Link with the local area' section have been restructured and numbered to make them easier to read and to follow the structure of Regulation (EU) No 1151/2012: characteristics of the geographical area / characteristics of the product / relationship between the two.

The 'History' sub-section has been replaced by one entitled 'Reputation'. There is a new text introducing the 'Link with the local area', describing the most important aspect linking the product to its natural environment for the purposes of Regulation (EU) No 1151/2012. This new version of the specification establishes 'various specific product characteristics that can be ascribed to the specific agricultural environment' as the most important aspect of the link between the product and the local environment; secondly, to complement the previous point, the relationship with the product's origin, or 'reputation' is described.

5.14. *Change of title and updating of the content of the 'History' sub-section. Section F) LINK WITH THE LOCAL AREA*

The amendment concerns the change of the title of the sub-section 'History' to 'F.1. - Reputation' and the updating of the information in it. This amendment affects the product specification, in the 'History' sub-section of Section F) LINK WITH THE LOCAL AREA.

Brief description and reason for the amendment

The title of the 'History' sub-section has been replaced by 'F.1 - Reputation'. The wording in F.1. 'Reputation' (formerly entitled 'History') has been updated, as the bibliographic and scientific information on 'Espárrago de Huétor-Tájar' has been updated in the last 20 years.

The new version introduces references to historical literature supporting the claim that wild-growing *triguero* asparagus has been known and valued since ancient times, and – as the previous product specification already described – how it is different from the garden asparagus (*Asparagus officinalis* L.). The historical information from the 1930s and 40s is now supported by testimonials from Huétor-Tájar's farmers included in publications released by the 'Espárrago de Huétor-Tájar' PGI's own Regulatory Board in 2000. (Publication *El arte culinario del «Espárrago de Huétor-Tájar» [The culinary art of 'Espárrago de Huétor-Tájar']*). In the discussion of the product's historical reputation, the new text describes how the cooperative sector grew up in the town of Huétor-Tájar in the 1980s thanks to the cultivation of this native variety, allowing Huétor-Tájar to make a name for itself as one of Europe's main asparagus-growing areas. Between 1996 and 2003 a number of publications emerged that discussed the socio-economic impact of the cultivation of 'Espárrago de Huétor-Tájar' in the production area, supporting the view that this Granada town was an 'important asparagus-growing area in Spain and in Europe as a whole'.

The text now also includes a historical description of how the canning industry was set up in Huétor-Tájar in the 1970s, with the 'Espárrago de Huétor-Tájar' sought out by Spain's tinned asparagus pioneer, José Redondo Fúnez, because of its similarity to the wild *triguero* asparagus. The 'Los Monteros' trademark was the first Spanish brand under which Mediterranean asparagus was first packaged in 1970, followed by the 'Espárrago de Huétor-Tájar' in the early 1980s, because of its great similarity to the wild *triguero* asparagus.

5.15. *Change of title and updating of contents in the sub-section 'Nature' (Landscape, Soils, Climate and Hydrography). Section F) LINK WITH THE LOCAL AREA*

The amendment concerns the change of title of the sub-section 'Nature' to 'F.2. - Specific characteristics of the production area', as well as the updating of the information in the sub-section, and corrects misprints and errors in the sections on Landscape, Soils, Climate and Hydrography. The sub-section has been restructured into two headings: 'Natural factors' and 'Human factors'. The information under the heading 'Natural factors' has been updated, and a new heading, 'Human factors', added as an essential part of the new sub-section of the specification 'F.2. - Specific characteristics of the production area' (formerly entitled 'Nature').

These amendments affect the product specification, in the 'Nature' sub-section of Section F) LINK WITH THE LOCAL AREA.

Detailed description of the changes and reason for the amendment

The title of the 'Nature' sub-section has been replaced by 'F.2. - Specific characteristics of the production area', in line with the new structure for the revised 'Link with the local area' section, as described in amendment 5.13. This will make the text easier to read and will follow the structure of Regulation (EU) No 1151/2012.

Under the heading 'Landscape', the upper altitude limit for growing asparagus in the production area has been updated. The wording *The crop is grown at altitudes of between 450 and 650 metres above sea level* has been changed to: *The crop is grown at altitudes of between 450 and 1 100 metres above sea level*. The traditional asparagus-growing areas of the PGI production area are generally low, fertile plains near the basin of the River Genil and its tributaries, located at altitudes between 450-650 m. As the crop has become farmed more widely, this area has spread towards the edges of the plains and the adjacent foothills forming part of the production area, reaching altitudes of up to 1 100 m.

Misprints and errors have been corrected under the 'Soils' heading. The wording 'The geological context of the production Area is...' has been replaced by 'The geological context of the production area...'. Changes have been made to the sentence *The soil textures in which asparagus is grown are clay-loam, sandy-clay loam and, to a lesser extent, sandy loam and silt loam* to make it more grammatically correct in Spanish (correcting adjectival endings).

Finally, the third paragraph has been made more accurate. It now states that anthocyanin pigmentation is commonly found in the asparagus (tip and stem) because the crop is grown in the limestone/marl-based soils that are typical of the production area, and a distinguishing feature of these soils is that they are phosphorous-poor and magnesium-rich. The wording *The fact that the soils are phosphorus-poor and magnesium-rich is what gives the asparagus its intense pigmentation, with a deeper green in the stem and more purple in the tip* has been changed to: *The limestone/marl-based soils that are typical of the production area are phosphorus-poor and magnesium-rich, resulting in intense anthocyanin pigmentation (purple colouring in the tip and stem).*

Misprints and errors have been corrected under the 'Climate' heading. Misprints have been corrected in the first paragraph, and the temperature values are now rounded off to one decimal place rather than two. Instead of *...the average temperature is 16,3 1 C, averaging 7,14 1 C in the winter and 26,41 1 C in summer*, the text now reads *...the average temperature is 16,3 °C, averaging 7,1 °C in the winter and 26,4 °C in summer.*

Clarifications have been made in the third paragraph, improving the description of the high thermal gradient found in the area and how this helps to prevent tip feathering. The phrase 'moderately high during the daytime to low at night' has been extended by adding '(major daily swings in temperature of up to 22 °C)' afterwards.

The phrase *Temperatures range from 14 1 C in March to 19,2 1 C in June* has been replaced by *Average harvest temperatures range from 14 °C in March to 19,2 °C in June.*

It is therefore now made clear that the average temperature is 14 °C and '°C' has been inserted where it was missing.

The wording under the heading 'Hydrography' has been made clearer. The opening sentence now refers to 'The production area...', which is the more precise term and is defined in the product specification. The phrase 'The River Genil and... traverse the area from east to west' has been changed to 'The River Genil and... traverse the production area from east to west'.

There is an entirely new sub-section on 'Human factors'. This will make it easier to understand the specific factors of the production area (natural and human) and how they are linked to the product characteristics as described in the sub-section on the correlation (F.4. Correlation between natural and human factors and product quality or characteristics).

The new sub-heading 'Human factors' reads as follows:

Human factors

Selection of plant material and cultivation practices

The 'Espárrago de Huétor-Tájar' can be considered an ecotype associated with the town of Huétor-Tájar (the 'Morado de Huétor' population), the result of a process of cross-breeding and massal genetic selection by the town's farmers since the 1930s. Human and natural factors in the production area have played a major role in the development of this plant material.

*The crossing of the species *Asparagus maritimus* Mill. and *Asparagus officinalis* L. to form a natural hybrid and the ensuing selection process from the mid-20th century onwards constitute a major achievement in Spanish horticulture, directly associated with Huétor-Tájar. There is no other known species of cultivated asparagus – traditional or commercial – anywhere in the world that is based on a botanical hybrid of this kind.*

The parent plants and seeds used to grow Huétor-Tájar's native asparagus are selected using the traditional practices followed in this Granada town since the early 20th century and passed down from one generation to the next.

The specific cultivation practices followed – such as leaving significant distances between asparagus plants (1,40-1,60 m between rows and 50-70 cm between plants), the gradual earthing-up of plant beds and harvesting efficiently and meticulously with the use of traditional techniques developed in Huétor-Tájar – are ideal for obtaining a high-quality raw material.

Canning methods

Tinned 'Espárrago de Huétor-Tájar' is prepared using a special technique. The recipe can be traced back to canning entrepreneur José Redondo Fúnez, who was among the first to preserve and sell wild 'triguero' asparagus in Spain in the early 1970s and later, around 1982, transferred the method to the 'Espárrago de Huétor-Tájar' which replaced wild asparagus as the raw material due to its similarity to the wild species. The most important part of the asparagus-canning process is pasteurisation by acidification.

- 5.16. Inclusion of a new sub-section 'F.3. - Specific product characteristics' in order to bring the specification into line with the new Regulation (EU) No 1151/2012. Section F) LINK WITH THE LOCAL AREA

The amendment concerns the inclusion of sub-section 'F.3 - Specific product characteristics' which summarises the main qualities of 'Espárrago de Huétor-Tájar' described in Section B) with a decisive impact on product quality. This new sub-section is required for new specifications, bringing them into line with Regulation (EU) No 1151/2012. This amendment affects the specification in the Section F) LINK WITH THE LOCAL AREA.

New version:

F.3. - Specific product characteristics

The variety of asparagus grown as 'Espárrago de Huétor-Tájar' gives it certain specific characteristics (appearance, organoleptic properties and unique genetics) that are typical of the wild Mediterranean asparagus (*Asparagus maritimus* Mill.) from which it originates, crossed with *Asparagus officinalis* L.

Whether fresh or tinned, the asparagus has certain characteristics that show the significant influence of both environmental and human factors (how the crop is grown and the products are handled) on its appearance, organoleptic characteristics and phytochemical composition.

The specific characteristics that 'Espárrago de Huétor-Tájar' derives from its unique genetic profile can be summarised as follows:

— Appearance:

- Anthocyanin tones (stalk and tip): ranges of purple, bronze-purple, bronze, green-purple and green
- Asparagus spear shape: straight and cylindrical, ranging from thin to medium (4-16 mm), the tip is pointed or tapered and wider than the rest of the stalk (spear-shaped).
- Skin and bracts: the spears have small 'spurs' under the bracts and faint lines may be visible on the skin

Organoleptic (assessment of fresh asparagus):

- Texture: tender, meaty and supple. The stalks are very flexible. Depending on the diameter – the thinner the spear, the further it bends – some can be bent over 70° without breaking.
- Flavour: bitter-sweet
- Aromas: intense aroma.

All of these physical and organoleptic characteristics can also be found in other wild-growing species of asparagus (*Asparagus albus*, *Asparagus aphyllus*, *Asparagus acutifolius*, *Asparagus horridus*, *Asparagus maritimus*, etc.) known in southern Spain as 'espárragos trigueros'.

In addition, the specific characteristics of 'Espárrago de Huétor-Tájar' associated with agri-environmental factors are:

A well-shaped spear and tip, and anthocyanin or violet colouring of the asparagus, especially the tip. The farmer's expert crop-tending and product-handling, combined with the area's good farming and climate conditions, give a high-quality raw material – a very straight asparagus spear with a well-formed violet-coloured tip.

- 5.17. Inclusion of a new sub-section 'F.4. - Correlation between natural and human factors and product quality or characteristics' in order to bring the specification into line with the new Regulation (EU) No 1151/2012. Section F) LINK WITH THE LOCAL AREA

The amendment concerns a new sub-section added to explain a connection not explicitly covered in the previous version of the product specification: F.4 - Correlation between natural and human factors and product quality or characteristics. This new sub-section is required to bring the new product specification into line with Regulation (EU) No 1151/2012. New text has been written for this sub-section, making use of some passages – on 'growing conditions', 'tending the crop' and 'harvesting' – from the previous version of the product specification. This amendment affects the specification in the Section F) LINK WITH THE LOCAL AREA.

New version:

F.4. - Correlation between natural and human factors and product quality or characteristics

The product characteristics are linked to the natural factors as follows:

Specific farming and environmental conditions:

The specific farming and environmental conditions in the production area are conducive to growing very straight asparagus spears with well-formed, closed tips and intense anthocyanin pigmentation, which generally occurs throughout the harvesting period, the reason why the native asparagus of Huétor-Tájar is also known as 'green-purple asparagus'.

The fact that the limestone/marl-based soils typical of the Vega Baja del Genil area of Granada are phosphorus-poor and the major swings in temperature between day and night are conducive to intense anthocyanin pigmentation in the asparagus spear. The high potassium content of the production area's clay-loam soils enhances asparagus quality, giving the spears a well-formed tip.

The winds are gentle in the production area, as the adjacent mountain ranges act as a barrier. This is good for asparagus-growing, especially at harvest time, because the asparagus spears are not bent over as they grow, giving very straight spears.

Temperatures during harvesting are ideal for growing good-quality asparagus, fluctuating from moderately high during the daytime to low at night (major daily swings in temperature of up to 22 °C), allowing the spears to grow in the central part of the day and avoiding tip feathering at night. These large temperature fluctuations also favour anthocyanin pigmentation in the asparagus spear.

The high intensity of the anthocyanin or violet colouring of the asparagus spears is genetic, accentuated by environmental factors that increase the levels of certain pigments – the anthocyanins – in the skin. The 'Espárrago de Huétor-Tájar' also contains very high levels of another related polyphenol, known within the asparagus world as rutin (quercetin-3-O-rutinoside). A member of the flavonoid family, rutin is responsible for the greyish precipitates that are typically found in tinned 'Espárrago de Huétor-Tájar'. It belongs to a well-known family of phytochemicals, the polyphenols, and is a health-giving antioxidant.

The product characteristics are linked to the human factors as follows:

Specific growing conditions:

The human-influenced aspects of cultivation are the way in which the plant material is obtained and the specific growing and harvesting techniques, which contribute to the production of well-formed, high-quality asparagus.

** How the plant material is obtained*

To obtain native plant material, it is first necessary to conduct a precise selection of parent plants. Since the 1930s, Huétor-Tájar's farmers have carried out this process with experience and dedication, providing the basis for the development of the local 'green-purple Huétor-Tájar' variety, also known in the literature as the 'Morado de Huétor' population.

This ecotype associated with the town of Huétor-Tájar is result of a process of cross-breeding and massal genetic selection by the town's farmers since the early 20th century. The 'Espárrago de Huétor-Tájar' is considered an ecotype that is a close phylogenetic relative of the species *Asparagus maritimus* Mill., from the same botanical family as the 'espárrago triguero', which is the name traditionally used in southern Spain to refer to several species from the genus *Asparagus* (*Asparagus albus*, *Asparagus aphyllus*, *Asparagus acutifolius*, *Asparagus horridus*, *Asparagus maritimus*, etc.) that form part of typical Mediterranean plant life. These species are very different from the common cultivated species *Asparagus officinalis* L., which includes the current commercial cultivars and varieties produced around the world.

The main organoleptic quality common to the various species of wild 'triguero' asparagus is their slightly bitter or bitter-sweet taste, a quality also found in 'Espárrago de Huétor-Tájar'. The 'Espárrago de Huétor-Tájar' gets its bitterness from another specific biomarker of this asparagus population: sarsasapogenin, a member of the genins, a phytochemical group. This substance is not found in the common cultivated varieties of asparagus, all of which belong to the species *Asparagus officinalis* L.

The close phylogenetic proximity between 'Espárrago de Huétor-Tájar' and the wild species *Asparagus maritimus* Mill. – together with other common botanical, organoleptic and phytochemical characteristics – links the two. It also differentiates 'Espárrago de Huétor-Tájar' from other commercial varieties of garden asparagus, which come from the species *Asparagus officinalis* L.

* Planting the asparagus and crop development

The planting pattern is a specific characteristic of the native asparagus of Huétor-Tájar, as it is a very long-lived variety. Plants are placed further apart, leaving 1,4-1,6 m between rows and 50-70 cm between plants.

* Tending the crop

Earthing-up is important for obtaining good quality in this variety. The process consists of gradually piling soil up onto the ridge throughout the life of the bed, helping to prevent the asparagus from getting smaller or tending towards feathering. Care – requiring the farmer to be very experienced – must however be taken to ensure this is a gradual process, as too much soil could cause root suffocation in wetter years.

* Harvesting:

The crop is usually harvested early in the morning so that the asparagus is not exposed to the midday sun. An initial selection is performed directly on the parcel, discarding any asparagus that are open, twisted, pest-damaged, etc. The asparagus is gathered into bundles and placed carefully in the vehicle, a job which requires skill and experience to ensure that the delicate asparagus spears are not broken during transportation to the handling or processing centre.

Successful harvesting relies on technique and experience passed down from one generation to the next.

Specific canning conditions

Finally, specific processing conditions such as 'pasteurisation by acidification' help to maintain 'Espárrago de Huétor-Tájar' intact and preserve its delicate meaty and supple texture, as well as maintaining stable concentrations of a health-giving antioxidant that is typical of tinned 'Espárrago de Huétor-Tájar', namely rutin (quercetin-3-O-rutinoside), which can be found as a greyish precipitate at the bottom of the tin. Rutin is found in much higher concentrations in asparagus from the Huétor-Tájar area due to agri-environmental factors.

- 5.18. The provisions relating to the Inspection Body have been replaced by new systems for product specification compliance checks. Section G is no longer entitled 'INSPECTION BODY' but rather 'PRODUCT SPECIFICATION COMPLIANCE CHECKS'

The amendment concerns updated information about the competent authority and a link to its website, which has details of the compliance assessment body. This is to bring the text into line with the requirements on product specification compliance checks established in Regulation (EU) No 1151/2012. Section G is no longer entitled 'INSPECTION BODY' but rather 'PRODUCT SPECIFICATION COMPLIANCE CHECKS'. This amendment affects the specification in the Section F) LINK WITH THE LOCAL AREA.

5.19. *Updating of PGI logo and wording of Section H) LABELLING*

The amendment consists of updating of the PGI logo and wording, replacing 'management body' with 'Regulatory Board', along with some aspects of the labelling formats for the plant material. This amendment concerns section H) LABELLING of the product specification.

Brief description and reason for the amendment

Throughout the text the term 'Specific Designation' has been replaced with 'PGI' and 'management body' with 'Regulatory Board'. 'Seedlings' has been added to the types of plant material listed in the second paragraph, and green (Pantone 576) has been established as the only secondary label colour to be used for plant material (seed, seedlings or crowns).

The PGI logo has been updated, as follows:



A new paragraph has been added at the end of Section H) to allow botanical information about 'Espárrago de Huétor-Tájar' to appear on the labels.

The following may, optionally, appear on the labelling of both plant material and the products covered:

'Variedad tipo espárrago triguero "Asparagus officinalis L. x Asparagus maritimus Mill."'

5.20. *Section I (LEGISLATIVE REQUIREMENTS) has been deleted*

This section has been deleted as it is no longer a requirement for product specifications under Regulation (EU) No 1151/2012.

5.21. *The figures (maps) have been deleted*

The graphics (maps) have been removed from the end of the product specification as they did not add any useful information.

SINGLE DOCUMENT

Regulation (EU) No 1151/2012 of the European Parliament and of the Council on quality schemes for agricultural products and foodstuffs

'ESPÁRRAGO DE HUÉTOR-TÁJAR'

EU No: PGI-ES-0056-AM01

PGI (X) PDO ()

1. **Name(s)**

'Espárrago de Huétor-Tájar'

2. **Member State or Third Country**

Spain

3. Description of the agricultural product or foodstuff

3.1. Type of product

Class 1.6. Fruit, vegetables and cereals fresh or processed

3.2. Description of the product to which the name in (1) applies

The name 'Espárrago de Huétor-Tájar' denotes green-purple, tender, healthy, clean asparagus spears from the local variety known as 'Espárrago Verde Morado de Huétor-Tájar' or 'Morado de Huétor' (*Asparagus officinalis* L. x *Asparagus maritimus* Mill.), known locally as 'espárragos trigueros'.

The characteristics that differentiate the 'Espárrago de Huétor-Tájar' from other commercial varieties of green asparagus are as follows:

- Appearance: The asparagus has anthocyanin colouring in ranges of purple, bronze-purple, bronze, green-purple or green. The spears are straight and cylindrical. They range from thin to medium (between 4 mm and 16 mm in diameter), and the tip is pointed or tapered and wider than the rest of the stalk (spear-shaped). The spears have small 'spurs' under the bracts and faint lines may be visible on the skin.
- Organoleptic properties: When fresh, the texture of the asparagus is tender, meaty and supple. The stalks are very flexible: depending on the diameter – the thinner the spear, the further it bends – some can be bent over 70°. The asparagus has a delicate bitter-sweet taste and an intense aroma.

The asparagus may be sold fresh or in tins.

Asparagus sold fresh is graded by spear length and diameter into two classes: 'Extra' and 'T'. The requirements and defect tolerances for these classes are laid down in the product specification.

The minimum diameter for asparagus sold fresh is 4 mm for both classes ('Extra' and 'T'). The difference in diameter between the thickest and thinnest spears in a single pack or bundle may not exceed 8 mm.

The fresh asparagus may be presented in one of the following ways:

In securely tied bundles of up to 2 kg;

Loose or bundled in packs placed inside packages or boxes of up to 6 kg.

Tinned 'Espárrago de Huétor-Tájar' is preserved in any of the preserving liquids authorised by current legislation. Brine (water, salt and citric acid) and extra virgin olive oil are particularly common. It is graded using the 'Extra' and 'T' quality classes. The requirements and defect tolerances for these classes are laid down in the product specification.

3.3. Feed (for products of animal origin only) and raw materials (for processed products only)

Tinned produce:

- Asparagus from the native Huétor-Tájar population, grown and harvested within the production area.
- Preserving liquids authorised by current legislation on preserved vegetables.

3.4. Specific steps in production that must take place in the identified geographical area

The following steps must take place within the production area: seed selection and production, planting and crop development, harvesting, delivery, preparation, storage and handling of the asparagus in fresh produce plants, and canning.

3.5. Specific rules concerning slicing, grating, packaging, labelling etc. of the product the registered name refers to

The product, in both fresh and tinned form, must be packaged within the production area in order to preserve the quality of the product from start to finish. Asparagus is a very perishable product, with a high water content (over 90 %) and can become dehydrated quickly. The spear tips are very fragile and cannot come into contact with water before the product is prepared for sale (as the tips may rot). Local experience acquired in the 'Espárrago de Huétor-Tájar' handling/canning industry is key to preserving the quality of the product up to packaging.

Produce to be marketed fresh may not be subjected to a second handling process.

The labels must include the phrase *Indicación Geográfica Protegida 'Espárrago de Huétor-Tájar'* ['Protected Geographical Indication "Espárrago de Huétor-Tájar"'] or the following registered logo:



A numbered secondary label controlled by the PGI management body must be attached to all packaging used for plant material (seeds, seedlings or crowns) or for fresh or tinned asparagus covered by the PGI.

The following may, optionally, be mentioned on the labelling:

'Variedad tipo espárrago triguero "*Asparagus officinalis* L. x *Asparagus maritimus* Mill."

4. Concise definition of the geographical area

The production area is located in the 'Vega Baja del Genil' area in the west of the province of Granada, between two mountain ranges: the Subbaetic System to the north and the Penibaetic System to the south. It comprises the municipalities of Huétor-Tájar, Illora, Loja, Moraleda de Zafayona, Salar and Villanueva Mesía and spans an area of approximately 78 000 hectares.

5. Link with the geographical area

The most important aspect of the link between the product and the local environment has been established as 'various specific characteristics of the asparagus that can be ascribed to the specific agricultural environment'; secondly, to complement the previous point, the relationship with the product's origin, or 'reputation'.

5.1. Specificity of the geographical area

Natural factors

The production area is located in the Vega Baja del Genil region, a river valley lying in the western part of the province of Granada. It is a broad and very fertile valley, with an altitude of 450 m at its lowest point, where asparagus cultivation began around 1930. The crop now covers terraces of the Vega Baja del Genil almost as far as the Baetic System (1 100 m in altitude).

The crops are planted in limestone/marl-based and clay-loam soils, typical of the Vega Baja del Genil region of Granada, low in phosphorus and high in potassium.

The mountain ranges adjacent to the river areas, where most of the asparagus cultivation is concentrated, act as a barrier to the winds.

The large daily swings in temperatures during harvesting – up to 22 °C – are typical of the production area of 'Espárrago de Huétor-Tájar'.

Human factors

The 'Morado de Huétor' population can be considered an ecotype associated with the town of Huétor-Tájar, the result of a process of cross-breeding and massal genetic selection by the town's farmers since the 1930s. Human and natural factors in the production area have played a major role in the development of this plant material.

The crossing of the species *Asparagus maritimus* Mill. and *Asparagus officinalis* L. to form a natural hybrid and the ensuing selection process from the mid-20th century onwards constitute a major achievement in Spanish horticulture, directly associated with Huétor-Tájar.

The specific cultivation practices followed – such as leaving significant distances between plants (1,40-1,60 m between rows and 50-70 cm between plants), the gradual earthing-up of plant beds and harvesting efficiently and meticulously with the use of traditional techniques developed in Huétor-Tájar – are ideal for obtaining a high-quality raw material.

Tinned 'Espárrago de Huétor-Tájar' is prepared using a special technique. The recipe can be traced back to canning entrepreneur José Redondo Fúnez, who was among the first to preserve and sell wild-growing Mediterranean asparagus (*espárragos trigueros*) in Spain in the early 1970s and later, around 1982, transferred the method to the 'Espárrago de Huétor-Tájar' which replaced wild *triguero* asparagus as the raw material due to its similarity to the wild variety. The most important part of the asparagus-canning process is pasteurisation by acidification.

5.2. Distinguishing features of the product

'Espárrago de Huétor-Tájar' has specific characteristics (appearance and organoleptic properties) that are typical of the wild Mediterranean asparagus (*Asparagus maritimus* Mill.) from which it originates, cross-bred with *Asparagus officinalis* L.

Appearance

Anthocyanin tones (stalk and tip): ranges of purple, bronze-purple, bronze, green-purple and green

A well-shaped spear: straight and cylindrical, ranging from thin to medium (between 4 mm and 16 mm in diameter), and the tip is pointed or tapered and wider than the rest of the stalk (spear-shaped).

Skin and bracts: the spears have small 'spurs' under the bracts and faint lines may be visible on the skin.

Organoleptic (assessment of fresh asparagus):

Texture: tender, meaty and supple. The stalks are very flexible. Depending on the diameter – the thinner the spear, the further it bends – some can be bent over 70° without breaking.

Flavour: bitter-sweet

Aromas: intense aroma.

5.3. Causal link between the geographical area and the quality or characteristics of the product (for PDO) or a specific quality, the reputation or other characteristic of the product (for PGI)

The product characteristics are linked to the natural factors as follows:

— Specific farming and environmental conditions

The specific farming and environmental conditions in the production area favour the growth of very straight asparagus spears with well-formed, closed tips and intense anthocyanin (violet) pigmentation, which is the reason why the 'Espárrago de Huétor-Tájar' is also known as 'green-purple asparagus'.

The low phosphorus content of the limestone/marl-based soils and the major swings in temperature between day and night (up to 22 °C) in the production area are conducive to intense anthocyanin pigmentation in the asparagus spear. Associated with this, we also find high concentrations of the flavonoid rutin (quercetin-3-O-rutinoside) that are much higher than those found in other types of green asparagus.

The high potassium content of the production area's clay-loam soils produces a well-formed tip and reduces feathering. The adjacent mountain ranges act as a barrier to the winds, reducing the tendency of asparagus spears to bend over as they grow, thereby giving very straight spears. The significant diurnal temperature fluctuations during the harvest result in well-shaped spears as they only grow during the day.

Finally, the product characteristics are linked to the human factors as follows:

— Specific growing conditions

* How the plant material is obtained: it requires a precise selection of parent plants. Since 1930, Huétor-Tájar's farmers have carried out this process with experience and dedication, providing the basis for the development of the local 'Morado de Huétor' population.

The close phylogenetic proximity between 'Espárrago de Huétor-Tájar' and the wild species *Asparagus maritimus* Mill. species links the two. It also differentiates 'Espárrago de Huétor-Tájar' from other commercial varieties of garden asparagus, which come from the species *Asparagus officinalis* L. The main organoleptic quality common to the various species of wild asparagus is its slightly bitter or bitter-sweet taste, a quality also found in 'Espárrago de Huétor-Tájar'. The 'Espárrago de Huétor-Tájar' gets its bitterness from a specific biomarker of this asparagus population: sarsapogenin, a member of the genins, a phytochemical group. This substance is not found in other varieties of asparagus obtained from the species *Asparagus officinalis* L.

* Planting the asparagus and crop development The spaced-out planting pattern used – due to the fact that this is a very long-lived variety – is a specific feature of Huétor-Tájar asparagus cultivation.

* Tending the crop In growing the 'Espárrago de Huétor-Tájar', gradual earthing-up is important for obtaining a well-formed product (closed tip and wider spear diameter). This technique requires the farmers of Huétor-Tájar to be very experienced, and has been passed down from generation to generation since 1930.

* Harvesting: Successful harvesting relies on technique and experience, which are key to obtaining a fresh, high-quality product. The practices used to harvest the asparagus were established in Huétor-Tájar long ago and have been passed down through from generation of farmers to the next.

— Specific canning conditions

Finally, specific processing conditions such as 'pasteurisation by acidification' help to maintain 'Espárrago de Huétor-Tájar' intact and preserve its delicate meaty and supple texture, as well as maintaining stable concentrations of a health-giving antioxidant that is typical of tinned 'Espárrago de Huétor-Tájar', namely rutin (quercetin-3-O-rutinoside), which can be found as a greyish precipitate at the bottom of the tin. Rutin is found in much higher concentrations in asparagus from the Huétor-Tájar area due to agri-environmental factors.

— Reputation

It is known that the municipality of Huétor-Tájar, in the Vega de Granada area, was among the first areas where garden asparagus was grown, around 1930, as stated in the publication that emerged from the second 'Technical Conference on Asparagus' (Zoilo Serrano, *II Jornadas Técnicas del Espárrago* (1988), Navarre, volume I, page 53).

The agricultural cooperative movement in Huétor-Tájar, closely linked to the Mediterranean *triguero* asparagus, was consolidated around 1980, launching the fresh produce onto markets throughout Spain and Europe, meaning that consumers began to identify the product in connection with its place of origin as the 'Espárrago de Huétor-Tájar' (J. Menor Torivio, *La Vega de Granada: Transformaciones agrarias recientes en un espacio periurbano* [The Plains of Granada: Recent farming developments in a peri-urban area]. Monográfico Tierras del Sur. Universidad de Granada-Instituto de Desarrollo Regional, 2000). The German geographer Andreas Voth (University of Vechta) describes the asparagus-growing area of Huétor-Tájar as a reference model in the EU's PGI/PDO scheme, and stating that the 'green-purple asparagus of Huétor-Tájar' (*grün-violetter Spargel bei Huétor-Tájar*) is a 'triguero-type asparagus' (*Triguero-Spargel*) that is highly appreciated in Andalusia. (Voth, A. 2002: *Innovative Entwicklungen in der Erzeugung und Vermarktung von Sonderkulturprodukten – dargestellt an Fallstudien aus Deutschland, Spanien und Brasilien* [Innovative Developments in the Production and Marketing of Speciality Crops – using case studies from Germany, Spain and Brazil]. Vechtaer Studien zur Angewandten Geographie und Regionalwissenschaft, volume 24, Vechta, 340 pp., post-doctoral thesis).

'Espárrago de Huétor-Tájar' has been mentioned in Wikipedia since 2008.

'Espárrago de Huétor-Tájar' had a starring role in the 9th European Asparagus Congress (Euro Asper 2012), held in Granada (21 to 23 March 2012).

International scientific publications published between 1992 and 2019 provide proof of the unique nature of 'Espárrago de Huétor-Tájar' (L. Amian, et al., 2018, 'Introgression of wild relative *Asparagus* spp. germplasm into the Spanish landrace "Morado de Huétor"'). *Acta Hort.* 1223. ISHS 2018. DOI 10.17660/ActaHortic.2018.1223.5)

The fact that the local 'Morado de Huétor' variety has been grown in the town since the 1930s means that Huétor-Tájar has now made a name for itself as one of the EU's best-known asparagus-growing regions.

Reference to publication of the product specification

(the second subparagraph of Article 6(1) of this Regulation)

The full text of the product specification can be found at:

<https://lajunta.es/4n5kp>

or through the website of the Regional Ministry of Agriculture, Fisheries, Water and Rural Development (<https://lajunta.es/3w3lc>) by clicking on:

'Temas'/'Industrias, Innovación y Cadena Agroalimentaria'/'Calidad'/'Denominaciones de Calidad'/'Frutas y Hortalías'; the specification is located under the name of this quality designation.
