### SINGLE DOCUMENT

# 'ESTEPA'

EU No: ES-PDO-0105-01321 - 12/03/2015

# $PDO(X) \qquad PGI()$

#### 1. NAME

'Estepa'

# 2. MEMBER STATE OR THIRD COUNTRY

Spain

### 3. DESCRIPTION OF THE AGRICULTURAL PRODUCT OR FOODSTUFF

# 3.1. Type of product

Class 1.5. Oils and fats (butter, margarine, oil, etc.)

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

Extra virgin olive oil obtained from the fruit of the varieties of olive tree (Olea europaea, L.) named below. There are four types of oil:

- Hojiblanca, Arbequina, Manzanilla, Picual and Lechín de Sevilla.
- Hojiblanca and Arbequina.
- Hojiblanca.
- Arbequina.

All the extra virgin olive oils must be obtained solely by mechanical or physical means that do not impair the oil, so they conserve the taste, aroma and characteristics of the fruit from which they are produced.

The olives must be of the authorised varieties, harvested directly from the tree when they have reached the degree of ripeness that will give fruity oils with the requisite characteristics.

Physical, chemical and organoleptic characteristics of the oils:

Median score for fruitiness:  $\geq 4.5$ 

Median score for bitterness:  $\geq 3$  and  $\leq 6$ .

Median score for pungency:  $\geq 3$  and  $\leq 6$ .

Acidity (%):  $\leq 0.3$ .

Peroxide value (mEq O2/kg):  $\leq$  15.

 $K_{270}$ : < 0.18.

The colour of the oil on the BTB scale may vary in the range: 2/3 - 3/3 - 2/4 - 3/4 - 2/5 - 3/5.

Polyphenols:  $\geq 405$  ppm for all the oils, except the Arbequina monovarietal oil, for which the requirement is  $\geq 250$  ppm.

Oxidative stability:  $\geq$ 43.6 h at 100 °C and  $\geq$  7 h at 120 °C.

Tocopherols  $\geq$  261.1 ppm.

Methods of analysis.

Polyphenols: liquid chromatography with ultraviolet diode array detection (ppm caffeic acid).

Oxidative stability: Rancimat value with an air flow of 10 l/h at 110 °C and 120 °C (hours).

Tocopherols: liquid chromatography with fluorescence detection (ppm).

As a result of early harvesting these oils have a fruitiness reminiscent of olives between green and ripe, with the characteristic of the green olive predominating.

The characteristics of the oils vary according to the olives used:

Hojiblanca, Arbequina, Manzanilla, Picual and Lechín de Sevilla.

Oil made from:

- Minimum 15 % Arbequina.
- Minimum 35 % Hojiblanca.
- Minimum 5 % the other varieties.

This type of oil has the fruitiness of green rather than ripe olives with a medium intensity. It has the bitterness and pungency on the palate typical of oils obtained at the beginning of the season.

- Hojiblanca and Arbequina.

Oil made from between 20 % and 80 % Hojiblanca and 80 % and 20 % Arbequina.

This type of oil has the fruitiness of green rather than ripe olives. It has the bitterness and pungency on the palate typical of oils obtained at the beginning of the season.

Hojiblanca.

100 % Hojiblanca, i.e. oil made solely from Hojiblanca olives.

This type of oil has the fruitiness of green rather than ripe olives. It has the bitterness and pungency on the palate typical of oils obtained at the beginning of the season.

- Arbequina.

100 % Arbequina, i.e. oil made solely from Arbequina olives.

The 'Estepa' Protected Designation of Origin Arbequina monovarietal extra virgin olive oil has the fruitiness of green rather than ripe olives, with balanced bitterness and pungency on the palate.

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

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

Production and processing.

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

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# 3.6. Specific rules concerning labelling of the product to which the registered name refers

The words Denominación de Origen Protegida 'Estepa' must appear on the labels and secondary labels.

The commercial labels of each registered operator must be approved by the Regulatory Board. All packaging in which the oil is released for consumption must carry a guarantee seal and a numbered label or secondary label issued by the Regulatory Board, in accordance with the Quality and Procedures Manual, affixed at the registered warehouse, mill or packing plant in such a way that they cannot be reused.

The Regulatory Board's actions regarding the use of these seals, labels and secondary labels must never discriminate against any operator who complies with the specification.

# 4. CONCISE DEFINITION OF THE GEOGRAPHICAL AREA

The area comprises eleven municipalities in the province of Seville: Aguadulce, Badolatosa, Casariche, Estepa, Gilena, Herrera, Lora de Estepa, Marinaleda, Pedrera, La Roda de Andalucía and El Rubio, and one municipality in the province of Córdoba: Puente Genil, specifically the area known as Miragenil.

### 5. LINK WITH THE GEOGRAPHICAL AREA

### Specificity of the geographical area

The limestone soil, the scarcity of water and the continental climate with mild summers and cold winters are all factors that accelerate the ripening of the olives.

In this geographical environment, where a significant proportion of the olive groves produce table olives – around 30 % of total olive production is for the table olive industry – the harvest traditionally begins very early. This is the result, firstly, of natural factors, as the soil and climatic conditions cause the fruit to ripen more quickly, and, secondly, of the practice of uninterrupted harvesting, as the harvesting of the table olives that begins in September overlaps or is followed by the harvesting of the olives used for olive oil production.

These practices help to produce oils with distinctive chemical and organoleptic characteristics.

# **Specificity of the product**

- 'Estepa' PDO olive oils have a pronounced bitterness, with a median score of between 3 and 6.
- Minimum fruitiness of 4.5.
- They are richer in phenolic compounds than oils obtained from other varieties and from the same varieties grown elsewhere.
- High oxidative stability.
- High content of the pigments found in olive oil, specifically chlorophylls and carotenes (BTB scale).

# Causal link between the geographical area and the characteristics of the product

There are two factors: natural factors (the ecosystem) and human factors. These agrological factors explain why the oils obtained have a higher polyphenol and tocopherol content, as laid down in the specification.

The region's soil is poor in organic matter and the landscape predominantly limestone. This determines the choice of crops – olive trees and certain tough, resistant varieties of plant, which are adapted to these conditions better than any other. In the *comarca* of Estepa 95 % of farmland is planted with olive trees.

The fact that many of the olive trees, especially Hojiblanca but also the other authorised varieties, are planted on limestone soil explains why, given the particular characteristics of these varieties, the oils obtained have distinctive organoleptic qualities and are much more fruity than other oils.

Studies show that this limy type of soil promotes higher levels of antioxidants that are of particular interest from a nutritional standpoint: tocopherols.

Another natural factor that has a decisive impact on our oils is the local climate, in that the water stress caused by the scarcity of water in the *comarca* of Estepa gives the oils a more pronounced bitterness than is found in oils produced elsewhere, including those obtained from the same varieties of olive.

Also, the low rainfall together with the fact that the summers are milder than in neighbouring areas, a typical feature of continental climates, accelerates the ripening of the olives and so they are harvested early.

Lastly, the human factor is of decisive importance. The fact that a significant proportion of the olive groves in the *comarca* of Estepa produce table olives – around 30 % of total olive production is for the table olive industry – means that the harvest traditionally begins earlier than in any other part of the world. This is the result, firstly, of natural factors, as the soil and climatic conditions cause the fruit to ripen more quickly, and, secondly, of the practice of uninterrupted harvesting, as the harvesting of the table olives that begins in September overlaps or is followed by the harvesting of the olives used for olive oil production. These practices help to produce oils with distinctive chemical and organoleptic characteristics.

# **Publication reference of the specification**

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

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

http://www.juntadeandalucia.es/export/drupaljda/PliegoEstepamodificado.pdf

or via the homepage of the Consejería de Agricultura, Pesca y Desarrollo Rural http://www.juntadeandalucia.es/organismos/agriculturapescaydesarrollorural.html, by following the navigation pathway:

'Industrias Agroalimentarias'/ 'Calidad y Promoción' / 'Denominaciones de Calidad' / 'Aceite de Oliva Virgen Extra'. The specification can be found under the name of the Quality Designation.