Ref. Ares(2020)3231782 - 22/06/2020

PRODUCT SPECIFICATION

‘Bayramiç Beyazı’

PDO (X) PGI ( )

1. TYPE OF PRODUCT

Class 1.6. Fruit, vegetables and cereals, fresh or processed

2. SPECIFICATION

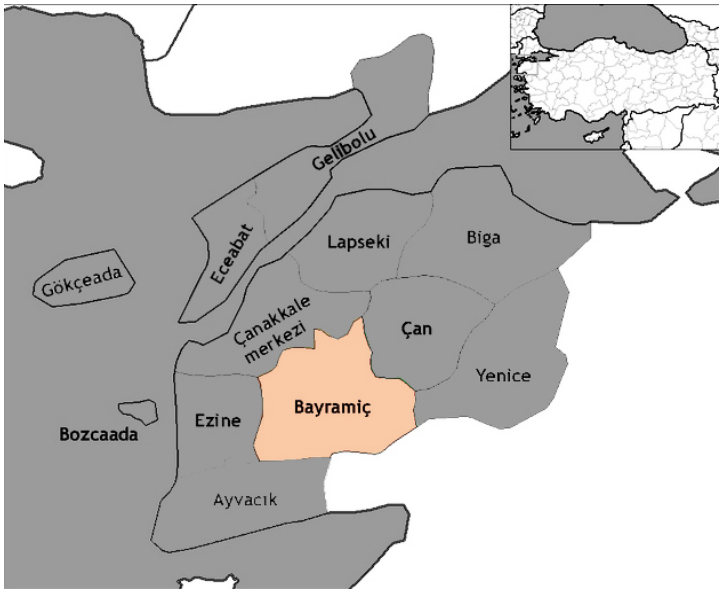
2.1 Name: Bayramiç Beyazı

2.2 Description: Bayramiç Beyazı is the fruit of local nectarine variety belonging to the species Prunus persica. The fruits have even, smooth shape and thin skin. The stones are attached to the flesh. It has a sweet, aromatic and slightly acidic taste.

The fruit has the following characteristics:

- Colour: From pale green to yellow on the outside and pulp colour from white to pale yellow. Skin colour is between Pantone 583-587 C values or L* a* b* values of 56 – 58, 15 -14 and 24 - 24,5 respectively.
- Weight and size of the fruit: 30-60 g in weight, 38-52 mm diameter, 36-42 mm length.
- Degrees Brix: minimum 9,5°
- Acidity (% malic acid): minimum 0,3 and maximum 0,5
- Fruit flesh firmness: minimum 5,0 and maximum 7,0 kg/cm2
- Aroma: Fresh and sweet with a blend of apricot, peach and plum

2.3 Geographical Area: The production area is situated in the province of Çanakkale and comprises the district of Bayramiç in northwest of Turkey. Bayramiç District has an area of 1284 km^2 and latitudes of 39˚, 49N and 26˚, 37E.



2.4 Proof of Origin: Bayramiç Beyazı is grown from seeds of fruits taken from trees in the geographical area that are selected in consideration of product quality and yield of previous years in terms of pomological characteristics in the product period.

Inspections on orchards shall be carried out by the competent authority twice a year, once during production and once during harvesting. In addition, in case of any complaint, the audit will be carried out.

The cultural procedures (seedling, pruning, irrigation, fertilization, combat operations, harvesting techniques, etc.) applied in the cultivation process shall be inspected taking into account the specifications of the product.
The maturity of the products harvested by the producer and the use of the logo shall be inspected, taking into account the above-mentioned principles.

The Bayramiç Beyazı logo (identified below) must be included on all labelling of the registered product name.

2.5 Method of Production:

Bayramiç Beyazı is grown from seeds in the geographical area. The seeds, taken from the trees, selected beforehand, with respect to the productivity and quality characteristics, after chilling need is completed in the winter period, sown to a nursery. An orchard is made via the saplings, completing one year. The planting interval is 4-5 m in the orchard facility and the cultural procedures (fertilization, irrigation, pruning, pest control etc.), done in fruit growing are applied exactly. The fruit production starts 3 years after the sapling is planted. The fruit is obtained economically after the year 4.

After planting the sapling, the shape of the tree is formed via canopy (goble/open center) shape pruning. The open center system is a shape containing 3-4 primary branches at different heights on the trunk, where the center of the canopy of the tree is open. In a normal season, the fruits may be harvested 65-75 days after full blooming. The harvest continues to the middle of August from the middle of July in Bayramiç District. Bayramiç Beyazı fruits are collected 2-3 times with 1 week intervals as selective harvest. The harvest time is the time when the color of the fruits starts turning into yellow from green. Fruit flesh firmness and water soluble dry matter measurements for harvesting time may also be used by the farmers.

The harvested fruits can be stored for 4 weeks at 0˚C temperature and 95-90% relative humidity in cold storage. If modified atmosphere system, created via special polyethylene bag or stretch film, is used in storage, this time can be extended to 6 weeks. The shelf life of the fruits stored in this way is 5-7 days. If it is given to the market directly without cold storage, the shelf life is 12-15 days.

1.1 Link:

Specificity of the geographical area

Natural Factors

Bayramiç District is made up of lowlands and plateaus at 500-1000 m elevations near Kaz Mountain, the biggest mass of the Biga Peninsula. High level of sunshine due to elevation increases photosynthesis, giving Bayramiç Beyazı a sweeter taste. High temperature during day (monthly average temperature 32-34 °C for July) and low temperature during night time

(monthly average temperature 12-15°C for July) during the ripening period due to elevation, are dominant in the district. Because of this pattern, the fruit firms up during the night, resulting in higher fruit firmness. Research also indicates a higher fruit firmness, total soluble sugar content, total acidity and skin colour brightness for Bayramiç Beyazı nectarines grown in the geographical area

Table 1. Some quality parameters of Bayramiç Beyazı fruits in different districts and comparison of these parameters with other nectarine variety

Districts	**Nectarine Varieties**	**Fruit Firmness (kg)**	**Total Soluble Solids Content (%)**	**Titratable Acidity (%g)**	**Skin Color Brightness (L)**	**Skin Color (Hue^0 value)**
Bayramiç	Bayramiç	6.36	9.60	0.40	57.68	124.13
Havran	Bayramiç	6.30	9.20	0.38	57.44	122.66
Edremit	Bayramiç	6.10	10.8	0.39	56.20	116.56
Bayramiç	Fantasia	2.35	13.75	0.37		
Bayramiç	Armking	3.20	15.21	0.35		

District of Bayramiç has loamy soil, rich with nutrients with plenty of streams and springs and precipitation amount up to 600 – 700 mm which makes ideal conditions for cultivating fruit and vegetables. The pH value of the soil is between 6 and 7 in Bayramiç District. This pH value is the most suitable for trees to take up mineral elements as ions from the roots. In this way, the mineral elements dissolved in the groundwater are taken up by the plants to produce firm fruits. The region is also very rich in insect fauna and apiculture which results in more efficient pollination and stronger fruits. The underground water level is approximately 2 m in the area which is too deep for plant roots to reach and does no cause root flooding that decreases the quality of fruit.

Human Factors

One of the essential element in the production of ‘Bayramiç Beyazı’ is the skill of the local producers, particularly during pruning and harvest. During pruning the trees are given canopy shape to ensure that more light and air reach the fruits. This increases photosynthesis, carotenoid production and other metabolic activities which results in sweeter taste, pronounced skin colour and stronger aroma. The harvest relies on the farmer to judge the right time to harvest the nectarines. The nectarines are handpicked for 2-3 times for each tree. Hand picking ensures better protection of the crops and prevents any damage.

Specificity of the product

Bayramiç Beyazı is a local nectarine genotype which has thrived in the natural conditions of Bayramiç District over the years. It is characterized by its strong aroma. Numerous studies have confirmed that ‘Bayramiç Beyazı’ grown in the geographical area have higher volatile components compared to the ones grown in other districts. The specific aroma and smell of the fruits are characterized especially by 2-Hexenal, Hexenal and (E)-2-Hexenal which were found to be higher in ‘Bayramiç Beyazı’ grown in Bayramiç district than in other Turkish areas.

Table 2. C6 components in total concentration of Bayramiç Beyazı fruits harvested in Bayramiç and different districts (%)

C6 Components	Bayramiç Centrum	Bayramiç Pınarbası	Havran Centrum	Edremit Centrum
(Z)-3-Hexen-1-ol	2.80	2.34	1.64	1.27
Hexenal	21.44	21.41	19.19	18.94
(E)-2-Hexenal	2.49	2.85	1.67	1.70
Total	41.98	40.10	40.66	39.17

Causal Link

The environmental conditions (High level of sunshine, high temperature during day, and low temperature at night and high precipitation), the special pruning of trees to allow strong sunshine during ripening, affect the outer colour, the sweetness and firmness of the Bayramiç Beyazı grown in the area.

Many springs and rich water sources in the area provide sufficient irrigation, mineral rich soil together with its diverse insect fauna and the tradition of apiculture creates ideal conditions for fruit growth which results in desirable fruit size and shape. The pH of the soil is ideal for the roots of the trees to take up minerals which result in firmer fruits.

Factors other than natural conditions adding to the specificity of the product include the heritage of local producers. The skill of determining the right time to harvest and hand picking the fruit from the same tree in 2-3 instances relate to the know-how in the area. Because the fruits in each tree does not ripen at the same time, this method of harvesting is used to provide uniform fruit with similar skin color, size, dry matter and aroma. Hand picking also prevents any damage to the fruit.

2. **Responsible Department in Turkey**

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3. Applicant Group

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COMPOSITION: Bayramiç Chamber of Agriculture is a nongovernmental organization formed by agriculturists in Bayramiç District. The chamber arranges the relations of the producers with the state and ministry, trade agricultural goods that are produced in the district and provides consultancy service to the producers. Producers of Bayramiç Beyazı are members of this chamber.

4. Authorities or bodies verifying compliance with the provision of the specification [Article 11/*R.510*]

Coordinator : Bayramiç Ziraat Odası (Bayramiç Chamber of Agriculture)

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