Ref. Ares(2025)10753872 - 05/12/2025

PRODUCT SPECIFICATION

1.1. Name

'Manisa Sultani Çekirdeksiz Üzümü'

1.2. Description of the agricultural product or foodstuff

'Manisa Sultani Çekirdeksiz Üzümü' are sun-dried raisins obtained from Sultani Çekirdeksiz (*Vitis vinifera* L.), a seedless grape variety, with colours ranging from amber to dark brown, elastic, with a thin skin and a soft and fleshy texture, and with sweet taste accompanied with caramel and fruity flavour. When evaluated in terms of the perception of texture in the mouth, it has a soft texture that melts in the mouth, and its thin fruit skin makes it easier to chew. In drying conditions under the sun, 1 kg of raisins are obtained from an average of 4 kg of fresh grapes.



Figure 1. ‘Manisa Sultani Çekirdeksiz Üzümü’.

Some of the physical, chemical, and nutritional parameters of 'Manisa Sultani Çekirdeksiz Üzümü' are as follows;

- Energy (kcal) : Minimum 290
- Dietary fibre (%) : 3.5-5.6
- Moisture (%) : Maximum 16±1
- Protein (%) : 2,1-3,5
- Total dissolved dry matter (%): Minimum 75,0
- Ash (%) :2.2-9,2
- Fat (%) : 0,13-0,30
- Total sugar (%) : Minimum 65,0
- Potassium (mg/100 g) :470-1200
- Phosphorous (mg/100 g) : 240-1220

- Magnesium (Mg) (mg/100 g): 30-75
- Iron (Fe) (mg/100 g) : 2.0-8.5
- Sodium (Na) (mg/100 g) : 70-310
- Calcium (Ca) (mg/100 g) : 220-1270
- Titratable acidity (%) : 1,5-2,2
- Colour parametres
    - *L** (Lightness) : 22-41
    - *a** (+a/-a; red/green coordinates) : 4-8
    - *b** (+b/-b; yellow/blue coordinates) : 6-22
    - *C** (chroma, saturation value) : 7-22
    - *Hue* angle : 55-77

Manisa Sultani Çekirdeksiz Üzümü' can be classified as Extra Class, Class I and Class II (Table 1). Regardless of the class type all dried grapes must be uniform golden to amber colour, high degree of purity, suitable for immediate consumption as well as whole, sound and free from living insects, abnormal external moisture and foreign smell and taste.

Table 1. Classification of 'Manisa Sultani Çekirdeksiz Üzümü'.

	Extra	Class I	Class II
The number of pieces of stem per kg (maximum)	1	2	2
The percentage of capstem (by count))	4	5	5
The percentage of immature and/or underdeveloped berries (by weight)	2	3	4
The percentage of berries containing seeds in seedless types (by count)	0,1	0,5	1,0

In addition to the criteria mentioned above, each class can also be further categorized by size as follows: Jumbo size, up to250 berries per 100 grams; Standard size, between 251-360 berries per 100 grams; Medium size, between 361-500 berries per 100 grams; and Small size, between 501-600 berries per 100 grams. Berries that do not meet these size specifications are sold for use in the food industry.

1.3. Definition of the geographical area

Manisa province is surrounded by the provinces of Balıkesir in the north, Izmir in the west, Uşak and Kütahya in the east, Denizli in the southeast, and Aydın in the south. 54.3% of the geography of Manisa province consists of mountains, 27.8% of plateaus, and 17.9% of plains. The important mountains of Manisa province, located in the Aegean Region, are Spil Mountain, Yamanlar Mountain, Yunt Mountain, Bozdağ, Demirci Mountains, Çal Mountain, and Uysal Mountain. The height of Manisa city center from the sea is 71 m. The mountains lie perpendicular to the sea. Between these mountains are the Gediz Valley and other depressed plains. The most important rivers are the Gediz River and Bakırçay.

Although 'Manisa Sultani Çekirdeksiz Üzümü' can be produced within all province borders, economic production is concentrated in the Gediz Basin. The districts with the highest production in the Gediz basin are, respectively, Alaşehir, Salihli, Saruhanlı, Sarıgöl, Turgutlu, Şehzadeler, Ahmetli, Gölmarmara, Yunusemre and Akhisar.

Manisa province is located between 27°08' and 29°05' east longitudes and 38°04' and 39°58' north latitudes.



Figure 2. Map of production area, Manisa province.

Manisa province has a Mediterranean climate. Winters are cool and rainy, and summers are hot and dry. Meteorological data for many years (1930-2021) of Manisa province are given in Table 1 and Figure 3. As can be seen from the table and figure, the average temperature is 16.9°C, the average sunshine duration is 6.5 hours, and the average rainfall is 743.8 mm. July and August have the highest average temperatures (28.0 and 27.7°C) and the least precipitation (9.7 and 9.3 mm). Therefore, the relative humidity in the region is lowest in these months (RH<50%). In addition to these values, the insolation density is 325.1-350 Cal/cm², the soil temperature at a depth of 50 cm

is 17.2-18.5°C, the soil temperature at a depth of 100 cm is 17.1-18.6°C, and the vegetative heat resistance period is 90-120 days. The climatic values in July and August give the 'Manisa Sultani Çekirdeksiz Üzümü's characteristic features.

Table 1. Long-term (1930-2020) Climatic data of Manisa Province.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
	Years from 1930 to 2022												
Average temp (°C)	6.6	7.9	10.5	15.1	20.3	25.2	28.0	27.7	23.3	17.8	12.2	8.1	16.9
Highest avg. temp. (°C)	10.8	12.7	16.2	21.5	27.1	32.1	35.0	34.9	30.7	24.4	17.6	12.3	22.9
Lovest avg. temp. (°C)	3.0	3.7	5.3	8.9	13.4	17.6	20.5	20.4	16.2	11.8	7.5	4.5	11.1
Average sunny duration (h)	2.7	3.7	5.1	6.1	8.2	10.1	10.8	10.2	8.6	6.2	3.9	2.3	6.5
Average rainy days	13.2	11.1	9,9	9.0	6.8	3.4	1.1	0.9	2.3	5.7	9.4	13.6	86.2
Monthly ave. precipit. (mm)	127.4	108.0	77.8	55.1	38.9	20.0	9.7	9.3	19.4	51.8	88.9	137.5	743.8

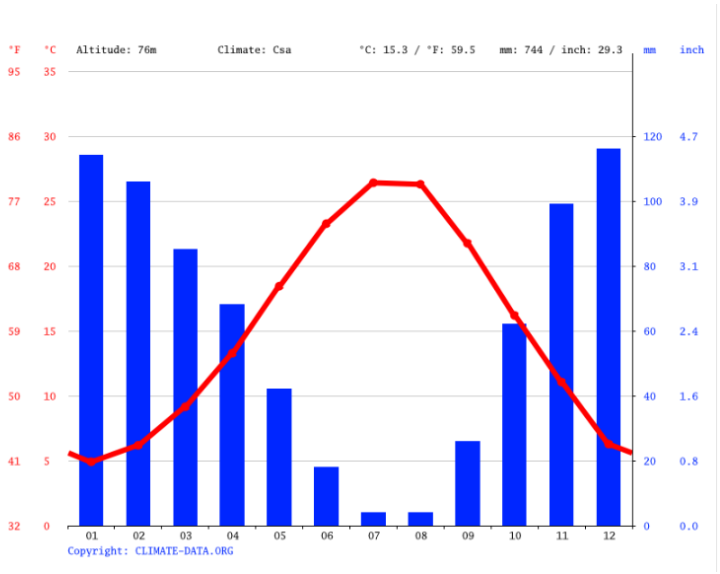


Figure 3. Precipitation and temperature changes in Manisa province by months.

The average wind speed in Manisa province is 1.9 m/s (Figure 4). The dominant wind direction of Manisa province is East, and the secondary dominant wind direction is East-Northeast, depending on seasonal changes (Figure 5).

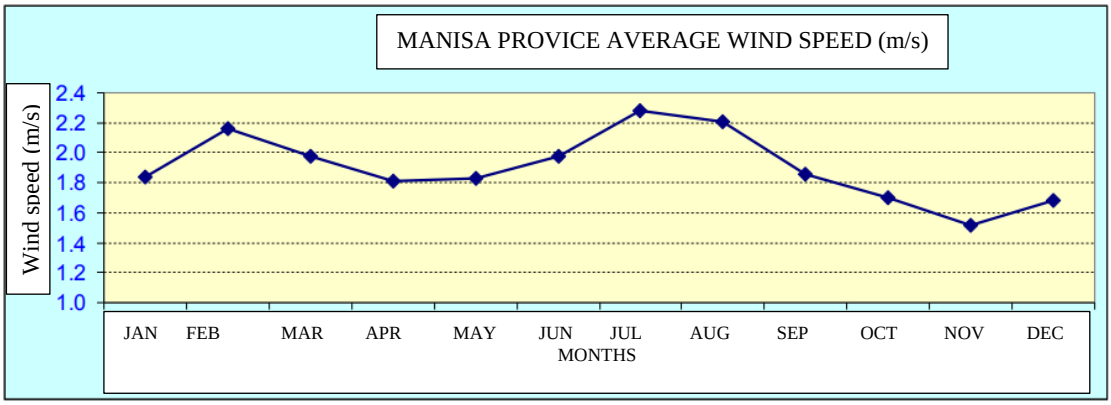


Figure 4. Changes in wind speed in Manisa by month.

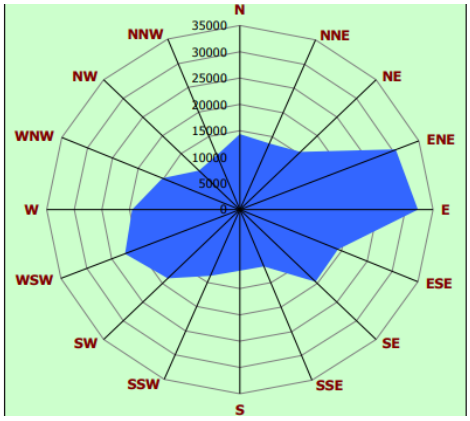


Figure 5. The direction of the winds in Manisa Province.

1.4. Proof of origin

Manisa Commodity Exchange keeps the records on the grape producers, production areas, industrial facilities, processing, packaging and storage. The Commodity Exchange also performs the duties of secretariat and coordinating the supervisory authority. Manisa Commodity Exchange. with the participation of experts from the Republic of Turkey Ministry of Agriculture and Forestry Manisa Provincial Directorate of Agriculture and Forestry, carries out the audits. Manisa Provincial Directorate of Agriculture and Forestry is an organization affiliated to the ministry and inspects the compliance of the use of geographical indications related to agriculture and food with the characteristics specified in the registration. Manisa Provisional Directorate of Agriculture and Forestry is obliged to make the necessary applications to take the necessary legal action against the persons and institutions that are found to be not complying with the procedure during the inspection.

The basic traceability system works as follows:

- The first important step of the traceability system is for the producers of 'Manisa Sultani Çekirdeksiz Üzümü' to be registered in the “Farmer Registration System”. The Farmer Registration System provides convenience in controlling the producer and production

follow-up within the borders of Manisa province. After the dried grapes are collected, they are transferred to a factory where they are sorted, cleaned and packaged. At this stage, the buyer of these products must fill out the “producer slip” indicating the producer and quantity.

- Each producers product is labelled as a separate batch and recorded.
- When the final product is delivered to the customer, producers are obliged to write an invoice that includes the product quantity and consumer information. In order to ensure traceability, producers are required to record the invoice along with the batch number. These documents must be kept as long as the processing facility is operating.

As for the audit, Manisa Provincial Directorate of Agriculture and Forestry, is responsible for ensuring physical and chemical analyses specified in 1.2, fulfilment of labelling criteria specified in 1.8. Audit criteria are as follows:

a) The geographical region where the dried grapes are supplied.

b) Production method

c) Physical, chemical, and sensory properties of the product

d) Packaging

e) Use of the PDO logo and the name 'Manisa Sultani Çekirdeksiz Üzümü'

1.5. Description of the method of obtaining the agricultural product or foodstuff

The production stages of 'Manisa Sultani Çekirdeksiz Üzümü' are as follows.

Planting:

Before planting seedlings, according to the location of the land, direction determination is carried out for good ventilation and ideal insolation. Saplings are planted in the north-south direction, where the best insolation is provided in flat and slightly sloping areas. Thus, while the saplings are provided with better sunlight in the east-west direction, they are also protected from the harmful effects of strong winds blowing in the north-south direction. In sloping areas, to reduce erosion and facilitate tillage, a vineyard garden is established so that the rows are parallel to the leveling curves.

The optimal space between rows is 3 meters, and the space between saplings on a row is 2 meters. Open-rooted saplings are planted in February-March, and tube (closed) saplings in June-July. Saplings are planted in pits with a depth of 40-50 cm and a width of 30-35 cm. In about three years from the planting, saplings begin to give yield.

The Sultani Çekirdeksiz grape is well adapted to slightly alkaline, sandy loam soils. For adequate vine growth, the mean annual temperature should exceed 10°C, and the cumulative thermal requirement is greater than 900°C in terms of growing degree days (GDD). In Manisa province, the accumulated GDD surpasses 6000°C.

Fertilizing

Fertilization is carried out according to soil analysis. Macro and micronutrients are applied according to the vine's needs before and after vegetation.

Irrigation

Although the vine needs water from the budburst period, the water needed during this period can be met by rainfall. Depending on the climatic conditions, the vines may need irrigation from mid-May (flowering period). Irrigation is stopped 2-3 weeks before harvest. More than 50% of the vineyard areas in Manisa province are irrigated with drip irrigation systems.

Pruning

Pruning of vines in the yield age is done during the winter months. In pruning, the shoots of the previous year are cleared by 80-85%. Depending on the development of the vines, an average of 14-15 nodes and 6-10 branches are left. In addition, as much as possible, a replacement branch with 2-3 nodes is left for each branch. Then, the branches left for production are wound and connected to the wires in the support system with a balanced distribution (Figure 6). Experts in this field do the pruning.



Figure 6. Winter pruning.

Green pruning is carried out from the bud bursting to harvest (Figure 7). It begins when the shoots reach 10-15 cm and then can be done several times, removing some fruitless shoots and leaves as needed.



Figure 7. Green pruning.

Both pruning methods aim to keep the vegetative growth of the vine under control, provide good ventilation, and an ideal environment for sunbathing and humidity.

Plant protection

Effective control of diseases and pests is an essential element in quality and yield. Agricultural control is carried out with plant protection products under the relevant legislation.

Harvesting:

The grapes are harvested by hand when it reaches 22-23% dry matter (on average in late August). The percentage of dry matter is measured with a refractometer or baumé meter. For the best quality, rotten and diseased bunches are selected when harvesting, avoiding mixing with the main crop. The harvested bunches are placed in smooth plastic baskets or crates (max. 25 kg) and transported to the dipping area, set up as close as possible to the vineyard to avoid damage during transportation.

Sun Drying

In the drying process of 'Manisa Sultani Çekirdeksiz Üzümü', a dipping solution is used to accelerate moisture loss by removing the waxy layer on fresh grapes and to create its distinctive color (amber to dark brown) (Figure 8). The speed of drying determines the color of the raisins. As the drying progresses, the sugar content in the grapes increases, which inactivates the enzymes that cause darkening during sun drying, and the darkening eventually stops. Since the dipping solution affects the drying speed, it also indirectly determines the color of the grapes.



Figure 8. Dipping step in the production of 'Manisa Sultani Çekirdeksiz Üzümü'.

The dipping solution generally consists of olive oil (1.0-1.5%), which is entirely natural and acidic (3<%) from the previous year's harvest, potassium carbonate (3-5%), and water. In preparing the dipping solution, potassium carbonate is first dissolved in water. Then, the olive oil, taken into another bowl, is first whisked vigorously by hand or with a mixer until its color turns white. A 'dipping' solution is obtained by adding the potassium carbonate solution to the whipped olive oil little by little. In the region, this solution is also called 'sherbet.'

After the grapes are placed into perforated plastic baskets, they are immersed in the dipping solution in the dipping containers (locally called lanca) and left for 3-5 seconds. This process is repeated twice, and then the grapes are moved to a drying area. A drying area is the flat area that sunbathes best during the day, does not retain moisture, and is closest to the dipping unit. The dipping solution is changed after approximately every 5 tons of grapes, when the waxy layer on the grapes is not cleaned sufficiently. Men usually do the dipping process.

The next step is to dry the grapes by exposing the bunches to direct sun (Figure 9).



Figure 9. Drying stage of 'Manisa Sultani Çekirdeksiz Üzümü'.

The bunches are laid so that they do not form a pile but provide insolation and ventilation. An average of 18-20 kg fresh grapes are laid on a square meter of drying area. Large bunches are divided into two parts from the trunk to improve sun contact. During drying, the bunches are turned gently after 3-4 days so a homogenous drying occurs. The drying process is mainly done on polypropylene covers laid at the drying site. Figure 10 shows the different stages of drying.



Figure 10. ‘Manisa Sultani Çekirdeksiz Üzümü’ at different drying stages.

The drying process is completed within 7 to 10 days in late August or early September. During this period, the relative humidity in the air is at its lowest. How to put an end to the drying process is traditionally decided. For this, some grapes are squeezed in the palms. If the squeezed raisins do not stick to each other, drying is stopped.

Dried grapes are collected when the dew is removed or in the cool of the evening. In the past, the dried grapes were separated from their dry stems and pedicels by rubbing them by hand. Then, these parts and dust were separated by blowing in the wind. However, today, these steps are done with machines. Following this process, the dried grapes are transported in sacks with a maximum capacity of 50 kg or directly on trailers to a cool, moisture-free storage area.

Storage of dried grapes:

'Manisa Sultani Çekirdeksiz Üzümü' is stored in 50 kg sacks or 400 kg plastic boxes indoors with cool (approx. 20-24°C) and relative humidity between 45% and 65%. Sacks should not touch the floor or wall.

1.6. Link

Specificity of the Geographical Area

Climate

Winters in Manisa province are slightly cold and rainy. Rains in winter increase the amount of mineral matter dissolved in the soil and support the preparation of the microbiological structure of the soil for the spring period (January: 129.0 mm, February: 107.7 mm). The most rainfall occurs in December (138.2 mm on average per month), accelerating post-harvest leaf fall. The coldest months are January (monthly average 6.6°C) and February (monthly average 7.9°C), which coincides with the need for an ideal pruning period. Snowfall rarely occurs, and a permanent snow cover does not form. Therefore, the harmony in the dormancy and yield cycles of the vine is not affected. If frost occurs in December, these branches are also eliminated during pruning since the frost-damaged branches are weak.

After the transition from dormancy, the average temperatures between March (10.5°C) and June (25.2°C) are ideal for the reawakening, bud bursting, flowering, and green growth of the vine. Summers in Manisa province are hot and dry. The lowest rainfall is in July (average 9.7 mm per month) and August (average 9.3 mm per month), which corresponds to the healthy ripening stage of the bunches, providing on the sun and soil. August conditions with low rainfall and high sunshine duration (the average monthly is 10.3 hours) correspond to the final stage of maturation. At this stage, exposure to sunlight is necessary because of its effect on air and soil temperature and photosynthesis, which are determinants of sugar content and nutritional values of fruits.

The wind speed of Manisa province varies between 1.4-2.3 m/s. Manisa's light wind conditions are essential during pollination and fertilization and have a direct impact on ideal cluster formation and fruit development. In June, July, and August, relatively strong winds have a cooling effect. The wind speed drops in September and contributes to drying.

Humidity

The average annual relative humidity of Manisa province is 62.5%. Relative humidity decreases parallel with bunch formation (March: 70%, June: 48%). Low relative humidity in August is an average of 45% per month. This ratio supports the distinctive biochemical structure of the grapes, protects the bunch from diseases, and improves the quality of the drying process in the production of raisins.

Soil

33.29% of the agricultural soils of Manisa province were sandy loam, 62.20% were slightly alkaline, 94.36% were salt-free, 33.57% were medium calcareous, 64.88% had low organic matter content, 28.21% were low, 25.39% were very high, absorbable phosphorus and 94.07% were high potassium. Regarding microelements, 67.84% of the soils contain iron, and 95.35% contain copper (Figures 11-23).

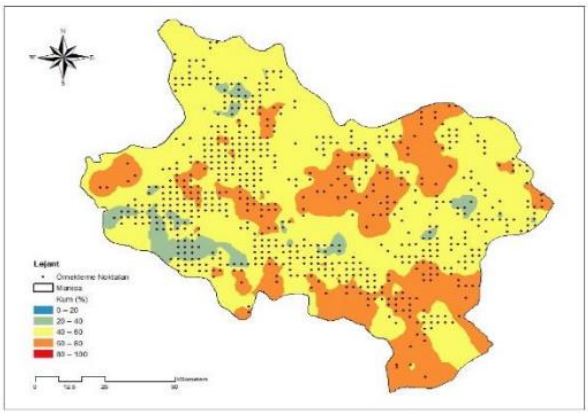


Figure 11. Map of the sand levels of Manisa agricultural lands.

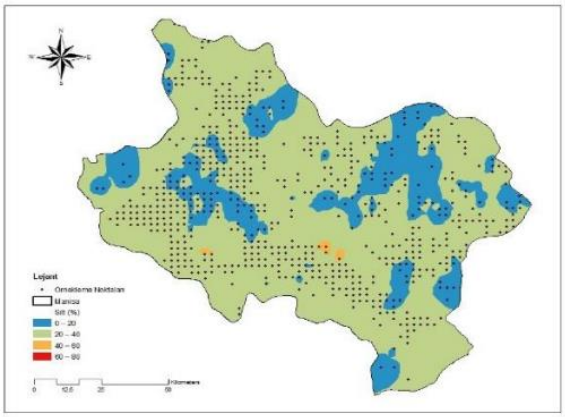


Figure 12. Map of the silt levels of Manisa agricultural lands

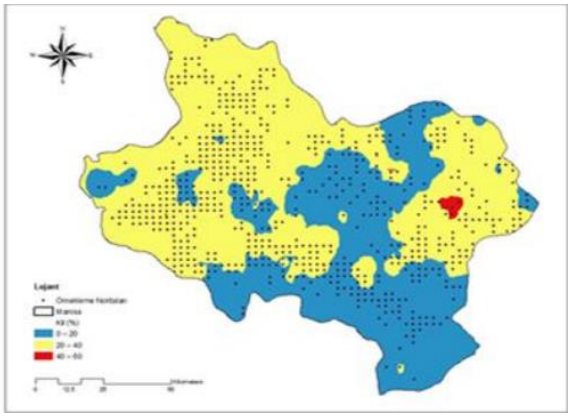


Figure 13. Map of the clay levels of Manisa agricultural lands.

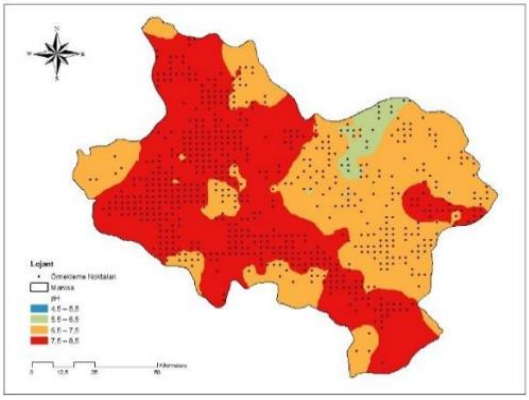


Figure 14. Map of the pH levels of Manisa agricultural lands

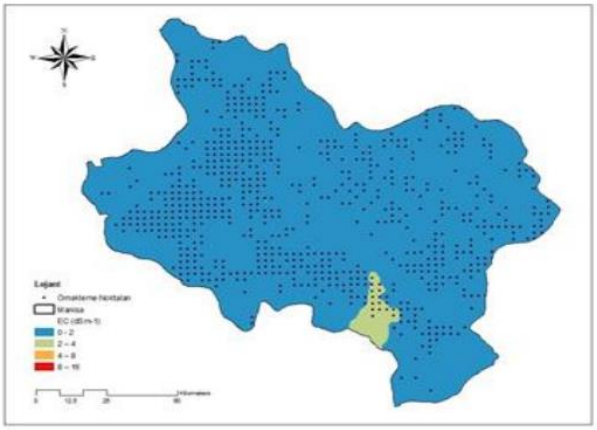


Figure 15. Map of the EC levels of Manisa agricultural lands.

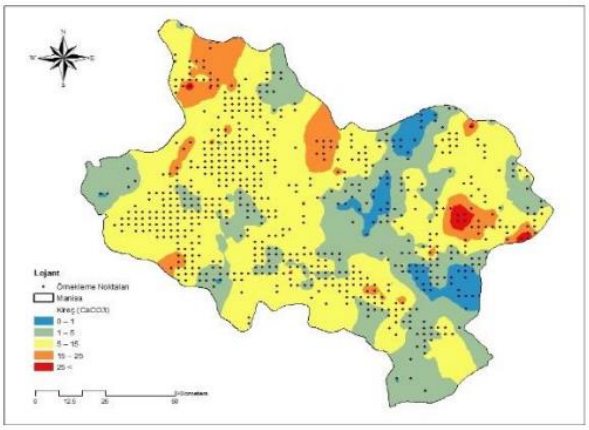


Figure 16. Map of the lime ($CaCO_3$) levels of Manisa agricultural lands

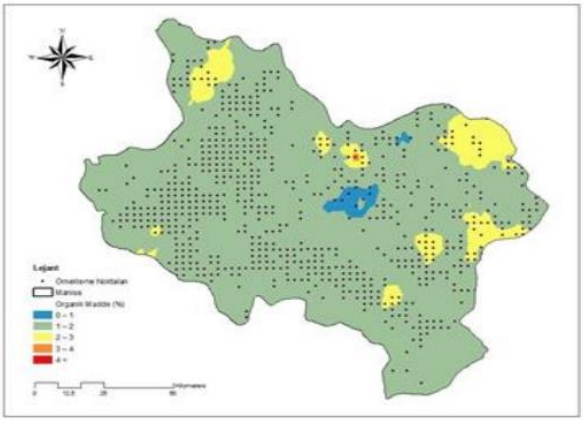


Figure 17. Map of the organic matter levels of Manisa agricultural lands.

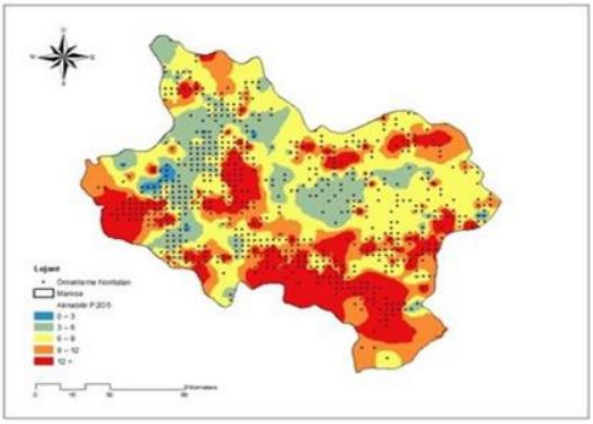


Figure 18. Map of the available phosphours levels of Manisa agricultural lands

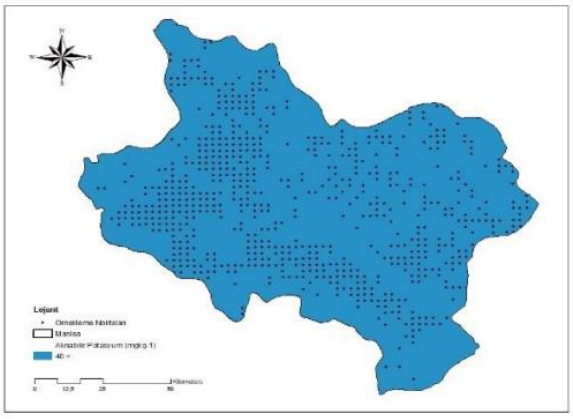


Figure 19. Map of the available potassium levels of Manisa agricultural lands.

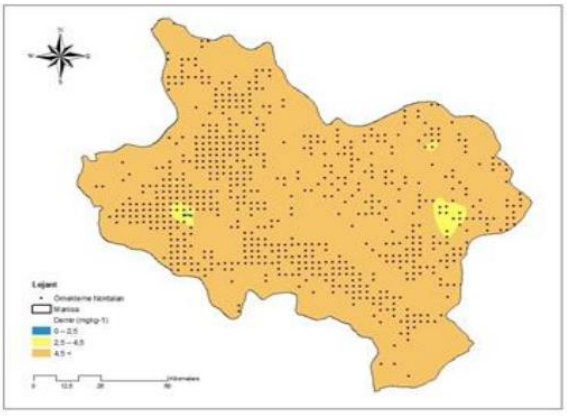


Figure 20. Map of the iron levels of Manisa agricultural lands

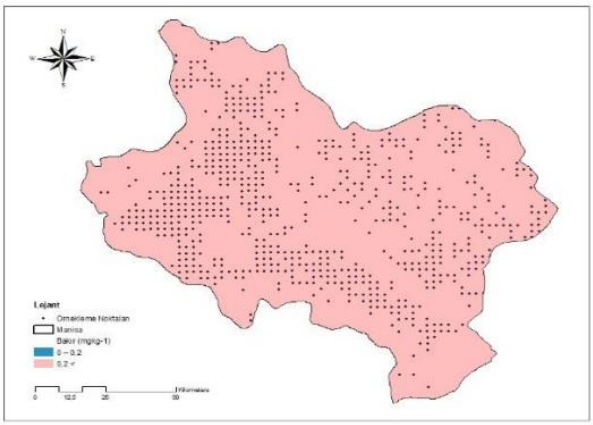


Figure 21. Map of the copper levels of Manisa agricultural lands.

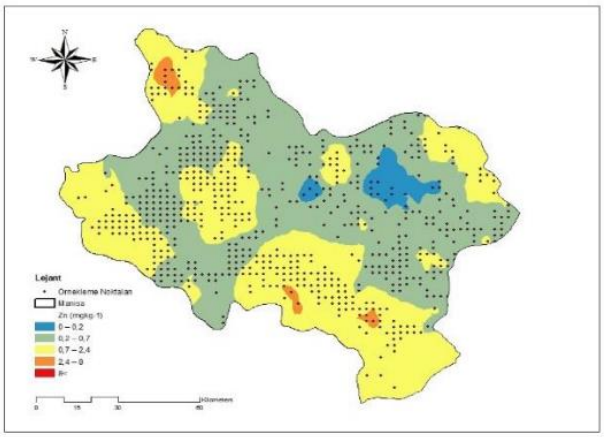


Figure 22. Map of the zinc levels of Manisa agricultural lands

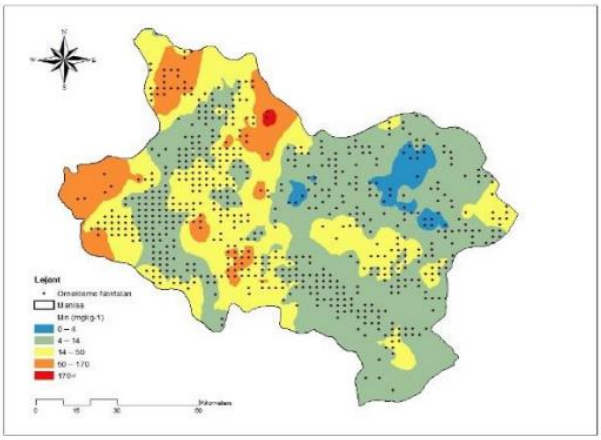


Figure 23. Map of the zinc levels of Manisa agricultural lands.

In addition, a large part of the fertile alluvial plain of the Gediz River (Gediz Plain) is within the area of Manisa province. It is rich in plant nutrients with deep humus, topsoil, and subsoil layer structure. The deep layer profile balances the need for precipitation in winter with the

need for moisture in summer. It ensures the widespread use of high-quality groundwater in summer when needed. These soil characteristics provide optimum conditions for the cultivation of Sultani Çekirdeksiz.

Human Factors

The production of 'Manisa Sultani Çekirdeksiz Üzümü' is a labor-intensive business. In general, tasks such as pruning, irrigation, dipping (pre-drying treatment), and transportation are carried out by men, whereas harvesting, laying out the fresh grape bunches, and collecting the dried grapes are carried out by women. The knowledge and skills of grape growers are used to realize the following operations.

- Determination of the orientation of the location of the land in order to provide good ventilation, proper humidity, protection against strong winds, ideal insolation, and a healthy rooting environment for sapling,
- Planting seedlings, pruning of vines starting from the first year,
- Determination of the best shoot, which is allowed to grow in the second year of planting seedlings and forms the main stem in the coming years,
- During the yield period, decide on the number of branches to leave on the vine for the vegetative growth stage, winter pruning,
- Preventing an undesirable vine architecture in all pruning periods, green pruning,
- Irrigation time and amount (starting from the spreading period until harvest) in order to balance the water need and humidity in maintaining the ideal ripening time and quality against diseases that may be caused by moisture and humidity,
- The use of pesticides that protect against diseases according to seasonal conditions, especially in conventional production, and making final checks before harvest,
- Deciding the harvest maturity to collect the bunches without damaging the fruits,
- Ensuring suitable transportation and storage conditions,
- The practice of dipping the grapes in an alkaline solution before they are dried determines in large measure the characteristic colour of the final product The dipping solution is used to accelerate moisture loss by removing the waxy layer on fresh grapes and to create its distinctive colour (amber to dark brown). The speed of drying determines the colour of the raisins. As the drying progresses, the sugar content in the grapes increases, which inactivates the enzymes that cause darkening during sun drying,

and the darkening eventually stops. Since the dipping solution affects the drying speed, it also indirectly determines the colour of the grapes.

- To provide an effective drying, the grape bunches are laid so that they do not form a pile but provide insolation and ventilation. Large bunches are divided into two parts from the trunk to improve sun contact. During drying, the bunches are turned gently after 3-4 days so a homogenous drying occurs.

Causal Link

'Manisa Sultani Çekirdeksiz Üzümü' is a distinctive product, whose characteristics (colour and sweetness) derive from the soil and climatic conditions prevailing in Manisa province.

The calcareous soils that are common in Manisa support healthy plant growth, early crop production, and high-quality fruit, as the fruit contains more sugar. The limited rainfall and extended sunshine during July and August, when grapes are ripening, positively influence the sugar concentration.

The hot, dry weather and extended hours of sunshine turn the white-fleshed grapes from golden to brown. The combination of heat, dryness, light wind, and the practice of dipping grapes in an alkaline solution before drying leads to rapid water loss, which increases the sugar content. This process halts the activity of enzymes responsible for darkening and helps prevent the raisins from darkening. After this process, the raisins acquire its soft, elastic and fleshy texture.

The low relative humidity during the summer months discourages the development of fungi on the grapes and as a result the final product is free of ochratoxins and other mycotoxins.

1.7. CONTROLS

MANİSA COMMODİTY EXCHANGE
MANİSA TİCARET BORSASI
Adress: Ege Mahallesi Borsa Caddesi No.20 Şehzadeler - MANİSA
Pbx: +90 (236) 231 00 78
Fax: +90 (236) 231 15 32
URL: https://manisatb.org.tr
E-mail: info@manisatb.org.tr
Tax Office and Tax No: Mesir V.D/ 6120014753

REPUBLIC OF TURKEY MINISTRY OF AGRICULTURE AND FORESTRY, MANİSA PROVINCIAL AGRICULTURE AND FORESTRY DIRECTORATE
(Audit Body)
Contact Information
Adress: II. Anafartalar Mahallesi, 1519 Sokak, No. 3., Şehzadeler/Manisa/TÜRKİYE
Pbx : + 90 236 231 4605
Fax : + 90 236 231 4642
E-mail : manisa@tarimorman.gov.tr

Turkish Republic of Ministry of Agriculture and Forestry, Manisa Provincial Directorate of Agriculture and Forestry, whether the 'Manisa Sultani Çekirdeksiz Üzümü' has the characteristics specified in Article 1.2 and whether it comes from the geographical region specified in Article 1.3 and the production method specified in Article 1.5. Furthermore, it finally checks whether it complies with the labeling requirements set out in Clause 1.8.

1.8. Labeling

In addition to the compulsory information provided for by legislation on the labelling and presentation of foodstuffs, labels must include the following:

-The name of the designation ‘Manisa Sultani Çekirdeksiz Üzümü’,

-Trade name and address or short name and address or registered mark of the producer,

- European Union PDO logo

-The following logo

2. APPLICANT GROUP

MANİSA TİCARET BORSASI
Adress: Ege Mahallesi Borsa Caddesi No.20 Şehzadeler - MANİSA
Pbx: +90 (236) 231 00 78
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Tax Office and Tax No: Mesir V.D/ 6120014753

Manisa Commodity Exchange was established in 1925 as a non-profit semi-public organization in its region based on Article 28 of Commercial Law No. 5174. As a professional organization, it was established to deal with the purchase and sale of goods placed on the market in Manisa and the determination, registration, and explanation of the prices of these goods in the market. Among the conditions of membership in the articles of association, the members must have been engaged in agricultural products. Among its members, some produce grapes using the name 'Manisa Sultani Çekirdeksiz Üzümü' and then export this product.

Manisa Commodity Exchange may make proposals, petitions, and applications to the relevant public institutions on issues within its field of activity. Manisa Commodity Exchange has the right to file a lawsuit on behalf of these members or on its behalf if some or all of its members have an interest. It also provides monitoring and reporting to the relevant authorities of practices that may distort competition through agreements, decisions, or consistent activities.

Manisa Commodity Exchange has 231 members consisting of merchants and industrialists. It is a professional organization established to facilitate the professional activities of its members and to help them in terms of business development and target market.

Manisa Commodity Exchange has applied for the PDO registration of 'Manisa Sultani Çekirdeksiz Üzümü'. The institution follows the producers of 'Manisa Sultani Çekirdeksiz Üzümü' and observes the activities of its members.

3. TURKISH REGISTRATION OF ‘MANİSA SULTANİ ÇEKİRDEKSİZ ÜZÜMÜ’

It was announced in the Official Geographical Indication and Traditional Product Name Bulletin of the Turkish Patent and Trademark Office of the Republic of Turkey, dated 01 March 2019 and numbered 48, that 'Manisa Sultani Çekirdeksiz Üzümü' was registered as PDO.

https://ci.turkpatent.gov.tr/cografi-isaretler/detay/38399