Ref. Ares(2024)3820724 - 28/05/2024

# PRODUCT SPECIFICATION

## 1.1. Name

'Aydın Memecik Zeytini'

## 1.2. Description of the agricultural product or foodstuff

'Aydın Memecik Zeytini', a table olive, is the fruit of the Memecik variety of olive trees from the *Olea europeae* L. species. They have three primary colours and cover three variants: green, pink, and black olives.

It is widely grown in Büyük and Küçük Menderes valleys. Especially the olive trees of the Memecik variety grafted on Delice are long-lived. This type of tree can yield economically for about 80-100 years, and after this period, it is possible to get yield from these trees by applying appropriate pruning methods (rejuvenation pruning).

The trunk of 'Aydın Memecik Zeytini' tree is cracked and dark gray. Their leaves are wide. The upper part is dark green, while the lower part is hairy. Although it is generally used for oil, it is also consumed as green and black table olive when harvested early. The small protrusion at the tip of the fruit gives this variety its name (Figure 1).



Figure 1. 'Aydın Memecik Zeytini'

Morphological properties can vary depending on the periodicity and altitute. Some of the morphological poperties are as follows:

- Size : Large
- Shape : Oval
- Longitudinal Symmetry : Asymmetrical
- Transverse symmetry : Asymmetrical
- Widest Point : Near the middle

- Tip : Pointed bulge
- Fruit surface : Rough
- Fruit colour : Green to black, depending on the maturity index
- Minimum and maximum fruit length : 25,61- 27,04 mm
- Minimum and maximum Fruit width :.19,30-19,40 mm
- Minimum and maximum seed length :. 16-5-17,4 mm
- Minimum and maximum seed width : 7,5-8,7 mm
- Minimum and maximum fruit weight : 3,5-4.78 g
- Minimum and maximum fruit flesh content : 75-88%
- Minimum and maximum seed content : 12-15%
- Minimum and maximum flesh to seed ratio : 7,53-7,60
- Minimum and maximum oil content : 20,00-24.50%,
- The Minimum and maximum number of fruits in per kilogram: 200-230 pieces
- The fruit index (fruit length/fruit width) value : In the range of 1.4-1.5

When picking, the olive's ripeness distinguishes the green olives from the black ones. The degree of ripeness, together with the production method, particularly the flavouring, makes it possible to obtain three variants with the following characteristics:

1.Whole green

Olives picked before winter. They are harvested between 0 and 1 (skin color deep green and yellow-green) according to the maturity index accepted by the International Olive Oil Council.

Organoleptic characteristics:

Colour: green to yellowy-green of low intensity.

Aroma: intense vegetable (olive leaf) and mineral (brine).

Texture: firm to the touch and barely deformable. It is characterized by its high firmness, cohesion, and low friability in the mouth.

Flavour: intense; a balance between acid, salty and bitter flavours.

Sensations: marked astringency and spiciness.

Prolonged after-taste and pronounced astringency.

Biochemical characteristics:

Total sugar content (mg/100g): 4,75

Total organic acid content (mg/100g): 3146

2.Pink

Olives picked before winter. They are harvested between 2, 3, and 4 (skin color with half the fruit surface turning red, purple, and green flesh) according to the maturity index accepted by the International Olive Oil Council.

Organoleptic characteristics:

Colour: green to yellowy-green, turning red.
Aroma: intensely vegetable, with the aromatic plants (fennel) clearly identifiable and a light hint of chilli peppers.
Texture: soft to the touch, deformable and elastic, accentuating the irregular incision of the epicarp and mesocarp resulting from the bruising process. In the mouth, it is soft, unctuous and has average cohesiveness.
Flavour: intense, salty and bitter.
Sensations: pronounced astringency and spicy sensation.
After-taste: prolonged

Biochemical characteristics:

Total sugar content (mg/100g): 3,23

Total organic acid content (mg/100g): 4010

3.Natural black

These olives are picked later in winter. They are harvested between 5, 6, and 7 (skin color all purple or black with half the flesh turning purple) according to the maturity index accepted by the International Olive Oil Council.

Organoleptic characteristics:

Colour: dark brown, almost black.

Aroma: average intensity.

Texture: the surface is smooth and irregular to the touch. In the mouth, the texture of the mesocarp is unctuous, soft and juicy, with low cohesiveness.

Flavour: intense, with balanced acidic and salty flavours.

Sensations: a slight bitterness and astringent note can be detected.

After-taste: average duration.

Biochemical characteristics:

Total sugar content (mg/100g): 3,76

Total organic acid content (mg/100g): 5315

'Aydın Memecik Zeytini' is a variety of olives that allows oil production besides being used as table olives. Table olives are classified as green, pale/pink, and black according to the degree of maturity of the raw olives, as fermented, naturally fermented, and blackened by oxidation according to processing methods. In natural fermented processing methods, olives are treated with dry salt, salt brine, or simply water, and in fermented methods, they are treated with alkaline solution. Then the bitterness is removed, and olives are left to ferment as required to

be flavoured and packed. Table olives processed this way should taste and smell as expected and be at their unique edible maturity.

'Aydın Memecik Zeytini' could not be consumed directly without processing due to its characteristics and bitterness. The oil ratio of olives is one of the crucial components in terms of the fatty acids they contain, in the emergence of the characteristic features of the fruit, and in determining the caloric value. The oleic acid in green, pink, and black maturity periods has the most fatty acids. During the ripening period on the tree, the fat content of olives increases while the sugar amount decreases, exhibiting a positive correlation between the total amounts of sugar and organic acid depending on ripening. 'Aydın Memecik Zeytini' is a nutritional and aromatic plant with biochemical elements that combine the olives' fat 20-25%, raw protein 1-2%, fiber 1-2%, ash (mineral substance) %<1, non-reductive sugar <0.3%, reduced sugar 3-6%, polyphenols 1-3%, organic acids, and salts 0.5-1%, pectinitic substances <0.6%, and other compounds 3-7%.

The amounts of luteolin-7-glycoside (1266,84 mg/kg), rutin (491,67 mg/kg), *trans*-cinnamic acid (1098,84 mg/kg), cyanidin-3-glycoside (212,73) and cyanidin-3-rutinoside (410,63 mg/kg), which are the phenolic components of olive, are high in Aydın Memecik Zeytini (Table 1).

Since 'Aydın Memecik Zeytini' is used for oil and pickling, harvest maturity and harvest period differ depending on the purpose of use (Figure 2). In this sense, fruit color, in other words, fruit maturity index, is taken into account. Generally, regarding the olives to be processed into the brine, green olives are harvested when the fruit reaches a yellowish-green color and in September-October. Pink olives are harvested when skin color with half the fruit surface turns red, purple, and green flesh. On the other hand, if the black olives are to be processed for brine and oil, the harvest starts in November-December since the color specific to the variety is expected to develop in these olives.



Figure 2. Color development of ‘Aydın Memecik Zeytini’ during maturation period.

Table 1:The Phenolic Compounds of 'Aydın Memecik Zeytini'

| Phenolic Compounds | Value (mg/kg) |
|---|---|
| luteolin-7-glycoside | 1266,84 |
| Rutin | 491,67 |
| *Trans*- cinnamic acid | 1098,84 |
| Cyanidin-3-glycoside | 212,73 |
| Cyanidin-3-rutinoside | 410,63 |

### 1.3. Definition of the geographical area

The geographical area where 'Aydın Memecik Zeytini' is produced is the borders of Aydın province (Figure 3).

Aydın province has 17 districts: Efeler, Bozdoğan, Buharkent, Çine, Germencik, İncirliova, Karacasu, Karpuzlu, Koçarlı, Köşk, Kuyucak, Kuşadası, Nazilli, Söke, Sultanhisar, Didim, and Yenipazar.




Figure 3. Map of Aydın Province.

The Mediterranean climate is dominant in Aydın. Summers are hot and dry, and winters are rainy. Snowfall is sporadic. The average temperature for many years is 17.6 °C. Annual precipitation is between 580-1000 mm. The average number of rainy days is 80.6, and the average precipitation is 677.5 mm/year.

Moreover, this value meets the annual precipitation demand of 'Aydın Memecik Zeytini'. In the province of Aydın, the air currents from the west are influential. The wind direction is mostly east-southeast, followed by southwest and west .

Regarding climatic conditions and topographic structure, there are two different plant communities in Aydın: maquis and forest. Olives, figs, chestnuts, and citrus fruits are among the main agricultural products. In the rural area, there are pine and similar species.

There are fertile plains in the central and western parts of Aydın province, and it is on the Büyük Menderes Basin, surrounded by mountains to the north and south. The province is established on an area of 8007 km2. Since the Büyük Menderes valley opens towards the sea, the winds that bring the warm effect and precipitation from the sea can easily reach the interior regions. Regarding landforms, 21% of the province area is formed by plains, 15.6% by plateaus, and 63.4% by mountains.

The largest river within the provincial borders of Aydın is the Büyük Menderes River, which originates in Afyon and empties into the Aegean Sea from Aydın. Besides the Akçay and Çine tributaries, there are also many streams with varying flow rates in summer and winter. The largest lake in the province is Lake Bafa, located in the southeast of the Büyük Menderes delta.

### 1.4. Proof of origin

Aydın Provincial Agriculture and Forestry Office under the Republic of Turkey Ministry of Agriculture and Forestry will check whether ‘Aydın Memecik Zeytini' meets all of the product features specified in Article 1.2 of the disclosure letter and also the product comes from the geographical area specified in Article 1.3 of the specification and is produced according to the method specified in Article 1.5 of the specification and finally check that the labelling conditions specified in Article 1.8 of this specification are also met. This will include the “one step forward-one step back” tracebility technique, where the supplier, quantity and origin of all batches of raw material and/or products received will be linked to the recipient, quantity and destination of products supplied.

Aydın Commodity Exchange have applied to have 'Aydın Memecik Zeytini' registered as PDO. It keeps track of the producers of 'Aydın Memecik Zeytini' and monitors their members.

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

Propagation of 'Aydın Memecik Zeytini' is done by the grafting method. It is usually grown from the seed of wild olive trees (descendants) for use as rootstock. In addition, registered seedling rootstocks used in producing Memecik olive saplings in Turkey are the Frantoio, Leccino, Arbequina, and Uslu varieties. Wild olives or the Uslu variety 'Aydın Memecik Zeytini' are used as rootstock for propagation due to the high percentage of germination of the seeds, the ease of grafting as rootstock, and the high success of grafting.

'Aydın Memecik Zeytini' tree needs nutrients in March-May, the beginning of the development and flowering period, and in July, when the seed hardens. For this reason, it should be fertilized in February-March. Although the most needed period for irrigation is between the end of flowering and the stages of fruit color transformation, there is little irrigation opportunity in the region's olive groves.

Pruning is done for different purposes, including shaping, cropping, and rejuvenation pruning. Shaping is performed to enable the sapling to be shaped and developed quickly and bear fruit. Olives are usually shaped with a single stem and 3-4 main branches. Cropping is carried out

every year or every two years before the yield year. Rejuvenation pruning is performed by reshaping the crown on lignified, elongated trees with a small amount of product.

'Aydın Memecik Zeytini' should be harvested from the Memecik olive variety grown in the designated areas. Harvesting methods are generally divided into two, which are traditional and mechanized. Traditional harvesting methods are picking from the ground, picking by hand from the tree, and pole harvesting. Beating the branches of the trees with poles in harvesting poles causes branches to be broken and consequently increases the severity of periodicity. Therefore, machine harvesting is recommended for 'Aydın Memecik Zeytini.'

After harvesting, 'Aydın Memecik Zeytini' Table Olive production continues with selection, separation, cleaning, adding brine, fermentation, aeration, and packaging.

The natural fermentation of 'Aydın Memecik Zeytini' (fermentation that takes place by directly putting the olives in brine to eliminate bitterness) lasts 4-6 months. In this method, the olives are taken directly into the brine. The salt used in brine has a chemical structure consisting of 39.3% sodium and 60.7% chloride. The water to be used in the fermentation process of 'Aydın Memecik Zeytini' must be of drinking and utility water quality. The water to be used in the brine should not be cloudy, contain harmful chemicals, be free from disease-causing microorganisms, and have a temperature of 19-20°C. The pH value of the water to be used should be in the range of 6.5-7.

Unlike natural fermentation, the production of 'Aydın Memecik Zeytini' as fermented black olives takes place by applying partial or complete debittering with an alkaline solution. First, 10% brine is prepared, and when fermentation begins, lactic or citric acid is added to prevent pH rise. The ambient temperature should be sufficient to allow the growth of lactic acid bacteria. The suitable fermentation temperature is 20-26°C. At this temperature, fermentation is completed in 1-3 months. In the preparation of 'Aydın Memecik Zeytini' as green table olives, 5-6% brine is used.

'Aydın Memecik Zeytini' should be clean and intact and not contain foreign tastes and odors while packaging. According to the processing characteristics, it should be at the proper eating maturity and quality. It should not be dirty, stinky, lost in properties, wormy or moldy. It must not contain any parasites, insects, or parts thereof. There should be no visible foreign matter; harmless foreign matter should not exceed one piece per 1 kg.

The salt content and pH level of 'Aydın Memecik Zeytini' should be at the following values. Aydın Memecik Olive's salt content and pH level comply with the Turkish Food Codex Communiqué on Table Olives.

The storage process of the product varies according to the evaluation of the product as a table or oil. 'Aydın Memecik Zeytini,' intended for table use, is stored at approximately 7-10°C and 80-85% humidity conditions. 'Aydın Memecik Zeytini,' which have reached maturity for eating, are washed before packaging, and the sorting process is repeated. The purpose is to eliminate the softening, color losses, and defects that may be overlooked in the first selection that may occur during fermentation.

## 1.6. Link

***Specificity of Geographical Area***

The Mediterranean climate is dominant in Aydın. Summers are hot and dry, and winters are rainy. Snowfall is sporadic. The average temperature for many years is 17.6 °C. Annual precipitation is between 580-1000 mm. The average number of rainy days is 80.6, and the average precipitation is 677.5 mm/year.

Moreover, this value meets the annual precipitation demand of 'Aydın Memecik Zeytini.' In the province of Aydın, the air currents from the west are influential. The wind direction is mostly east-southeast, followed by southwest and west winds.

The climatic characteristics of the region, the soil structure, the appropriate pH level, and the rich vegetation of the mountains surrounding this region ensure that 'Aydın Memecik Zeytini' has its characteristics. The agricultural land is suitable for producing olives. Generally, olives are cultivated in plains and mountainous areas. Those to be used as table olives have to be harvested by hand, especially in mountainous areas, which allows the selection of the ideal olives. There, the only water supplied is rainwater.

Although olives are not very selective regarding soil requirements, they prefer soils with lime-sand, rich in nutrients and pH of 6-8. Since the olive-growing soils of the Aydın region usually have these features, Memecik olives can have the positive quality characteristics mentioned above, such as size, color, fat ratio, and content of phenolic compounds.

The bitter substance in olive fruit, its fat content, and its low sugar content mainly allow 'Aydın Memecik Zeytini' to be separated from other olive varieties. It can not be consumed without processing due to its bitter taste caused by phenolic compounds. The phenolic content of 'Aydın Memecik Zeytini', which is significantly associated with bitterness, remains higher than that of other olives even after sweetening and fermentation process.

For olives of the Memecik variety, the only rootstock used is from wild olive trees, which are ideal because of their excellent hardiness, and they grow wild in Aydın, which makes them perfectly adapted to the environment.

***Human Factors***

Historically, olive producers in Aydın have worked to convert existing wild trees into Memecik olive varieties by making graft labours in wild olive trees, especially in mountainous areas. The farmers' specific knowledge covers grafting onto wild olive trees and harvesting the fruit by hand at the optimum ripening point for each of the variants. This hand-picking makes it possible to determine the ideal time for picking the olives, directly affecting two compound types: the phenols and the volatile compounds, giving the olives their characteristic flavour and aroma.

The flavouring technique, closely linked to the geographical area, comes from the producers' know-how. The operators' expertise, handed down orally in most cases, comes from the cultivation and processing of olives.

The flavouring technique, closely linked to the geographical area, comes from the producers' know-how. The operators' expertise, handed down orally in most cases, comes from cultivating and processing olives for centuries, ensuring their quality. Thus, for example, some suitable cultivation methods, resulting from the farmer's experience, make it possible to reduce and avoid flawed olives unsuitable for production. Furthermore, a producer's sound knowledge of olives makes avoiding fermentations and other alterations in the olive possible. All of this is achieved by adapting the processing and environmental conditions and those of the workers and installations to the characteristics of the olives.

***Causal link***

The olive tree is a tree that adapts to the environmental conditions in which it is grown and to how it is grown. This means these olives are linked to their geographical area and have distinctive characteristics due to the area's terrain, soil, climate, the farmers' experience, and the historical tradition of olive growing.

The ideal conditions for the wild propagation of the rootstock in the geographical area gave rise to the Memecik olive variety, which, with the method of cultivation and ancestral production techniques, has led to today's olive with its distinctive quality. This distinctive quality is caused by four factors that define the causal relation between the geographical area and the characteristics of the product: the climate and soil, the specific genetic characteristics, the agronomic resources, and the distinctive production method.

The air currents from the west are especially effective in Aydın. The wind direction is mostly east-southeast, followed by southwest and west winds. Aydın province is on the Büyük Menderes Basin. Since the Büyük Menderes valley opens towards the sea, the winds that bring the warm effect and precipitation from the sea can easily reach the interior regions. These winds give 'Aydın Memecik Zeytini' distinctive organoleptic properties and protect the olives against the olive fruit fly during ripening.

The harvesting in stages, before winter for the whole green and pink olives and after winter for the natural black olives, means that the olives ripen on the trees, which gives each of these three variants their typical organoleptic characteristics. Hand-picking by experienced farmers makes it possible to ensure optimal organoleptic characteristics and is responsible for the characteristic firmness of all the olive variants.

The bitter substance in olive fruit, its fat content, and its low sugar content mainly allow olives to be separated from other fruits. It can not be consumed without processing due to its bitter taste caused by phenolic compounds. According to the maturity of the Memecik olive variety, there are classical table olive processing methods worldwide. Therefore, fortunately, the producers in the region can determine the appropriate maturity periods according to their processing techniques. Because of its sensory properties, olives reveal the sensory character of table olives after and before processing.

Sensory properties affecting consumption in untreated olives and processed table olives first affect the consumer with their color and texture properties. It is seen that the bitter taste of olives is related to phenolic compounds. During sweetening and fermentation to relieve this bitterness, the sensory properties of the final product emerge in this way by acquiring acidic, salty, metallic, and alkaline flavors and different smells of olives. By the way, it could be stated that the sensory properties of 'Aydın Memecik Zeytini' arise with natural conditions and human activities, such as producers applying cultural processes early or sufficiently and determining the appropriate harvest time.

## 1.7. CONTROLS

**AYDIN COMMODITY EXCHANGE**
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Aydın Commodity Exchange keeps records on farmer information, production areas, fruit growth, industrial facilities, processing, packaging, and storage. Aydin Commodity Exchange also performs the duties of the secretariat and coordinating the supervisory authority. The basic principle here is to establish a product tracking and traceability system and to carry out periodic inspections and surveillance.

'Aydın Memecik Zeytini' is a high value-added product, necessary information is made to farmers, in particular and other concerned in production chain such as buying, selling, manufacturing, storage, marketing, sales and sales places in order to ensure its production in compliarce with the national and international quality criteria in force and compliance is tracked.

Aydın Commodity Exchange generally tracks tree and fruit growth of the product and gives advice to farmers before and after harvest. Aydın Commodity Exchange will work together with Provincial Directorates of Agriculture and Forestry of Aydın on making an inspection in each year for once. The inspection of 'Aydın Memecik Zeytini' will procures to make Memecik variety much value.

**REPUBLIC OF TURKEY MINISTRY OF AGRICULTURE AND FORESTRY, AYDIN PROVINCIAL DIRECTORATE OF AGRICULTURE AND FORESTRY -(Control Authority)**

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Aydın Provincial Agriculture and Forestry Office under the Republic of Turkey Ministry of Agriculture and Forestry will check whether 'Aydın Memecik Zeytini ' meets all of the product features specified in Article 1.2 of the disclosure letter and also the product comes from the geographical area specified in Article 1.3 of the specification and is produced according to the method specified in Article 1.5 of the specification and finally check that the labelling conditions specified in Article 1.8 of this specification are also met.

**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 good- ‘Aydın Memecik Zeytini’,

— Trade name and address or short name and address or registered mark of the company/producer

— European Union PDO logo

## 2. APPLICANT GROUP

**AYDIN COMMODITY EXCHANGE**
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Tax Office and Tax No: Güzelhisar – 1150083762

Aydın Commodity Exchange was established on October 10th, 1956, following the 28th article of the Code on Chambers, Stock Exchanges and Unions with the series number 5174 in the province of Aydın, on a half-official and non-profit basis. It was established to deal with the sales and purchase of the goods presented to the market in Aydın and the determination of the prices of such goods in the market, their registration, and descriptions. Among the conditions for membership in its articles of association, the members should be engaged in agricultural products. Amongst its members, some produce olives by using the name 'Aydın Memecik Zeytini' and then exporting this product.

Aydın Commodity Exchange could make offers, present petitions, and undertake applications before the relevant public authorities in the subjects of its field of activity. In case some or all of its members are interested, Aydın Commodity Exchange has the right to file cases on behalf of these members or in its name. It also has services such as following up on implementations that could upset competition through agreements, decisions, or coherent activities and reporting them to the relevant authorities.

Aydın Commodıty Exchange was established in 1956 and has 496 members consisting of merchandisers and industrialists. It is an occupational organization established to facilitate occupational activities of its members and help them in business development and target market. Most members are companies engaged in the processing and marketing of agricultural products.

Aydın Commodity Exchange has applied for the PDO registration of 'Aydın Memecik Zeytini.' This institution follows 'Aydın Memecik Zeytini' producers and observes the activities of their members.

T.R. Aydın Commodity Exchange has appointed Elif Benan Güven and/or Huriye Kayabaşı (ÖZENER TRADEMARK & PATENT CONSULTANCY OFFICE ) to apply for the registration of 'Aydın Memecik Zeytini' for a PDO. Here is the General Power of Attorney;

## 3. TURKISH REGISTRATION OF 'AYDIN MEMECIK ZEYTINI'

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 17 May 2021 and numbered 101, that 'Aydın Memecik Zeytini' was registered as PDO.

https://online.turkpatent.gov.tr/trademark-search/pub/#trademark_result_detail

ÖZENER
MARKA & PATENT DANIŞMANLIK OFİSİ
Her Marka Tescil, Her Tescil Bir Danışman İster ...

GENERAL POWER OF ATTORNEY

I have appointed Elif Benan GUVEN , the Trademark and Patent Attomey and/or Huriye KAYABASI who are located in OZENER TRADEMARK &PATENT CONSULTANCY OFFICE (ÖZENER MARKA PATENT DANIŞMANLIK OFİSİ ) established in accordance with the Turkish govemmental laws, with the adress of a Balgat Mah. Ziyabey cad. Fen Apt. No:32/7 Postal Code: 06520 Çankaya/Ankara/TURKEY, to apply for the registration of my own industrial designs, trademarks, patents, utility models,desginations of origin and geographical indications to Turkish Patent and Trademark Agency and the European Commission, to engage with the interested parties in appropriate consultations and/or to reach an agreement with the interested parties within the – limit set if an abjective to the proposed registration is found admissible by the Commission, to object to the registrations, published in the Official Journal European Union, which jeopardise the existence of my own industrial desgins, trademarks, patents, utility models, desginations of origin and geographical indications by lodging a duly substantiated statement with the Commision within the time-limiting set permitting objection, to do the necessary updates of the registrations of my products, to make the necessary changes of my title, adress band etc.. to pay the fees for submission, application, registration and the other procedures, to be authorized to follow all the process and procedures of transfer operations granted or recieved with the approval of notary by me about the registrations of industrial design, trademark, patent and utility models, to ask the restrictions on the list of goods and services related to the trademark registrations, to apply for international registrations and to follow all the operations about the proposed international registrations, to ask cancelling, to be authorized to follow and do all the transactions related to the notary, to be authorized to sign and notify all necessary documentations, declarations, letters of application and forms which are lodged with Turkish Patent and Trademark Agency, European Patent Office, European Commision, the other international Patent Institutes and WIPO, to apply the related Turkish competent authorities and official departments to protect my rights and to be authorized to depute the others to do all the issues concerned above …./…./2019

Nesrin BULUM
Genel Sekreter

Fevzi CONGUR
Yönetim Kurulu Başkanı

| | |
|---|---|
| Title of the Company | : AYDIN TİCARET BORSASI / AYDIN COMMODITY EXCHANGE |
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## 4. PROOF OF PROTECTION IN THE COUNTRY OF ORIGIN



TÜRK PATENT

TÜRK PATENT VE MARKA KURUMU

# COĞRAFİ İŞARET TESCİL BELGESİ

**No:749 - Menşe Adı**

**AYDIN MEMECİK ZEYTİNİ**

Tescil Ettiren

**AYDIN TİCARET BORSASI**

Bu coğrafi işaret, 6769 sayılı Sınai Mülkiyet Kanunu kapsamında
16.07.2019 tarihinden itibaren korunmak üzere
07.05.2021 tarihinde tescil edilmiştir.

**Prof. Dr. Habip ASAN**
**Başkan**

(TURKISH PATENT AND TRADEMARK OFFICE)

**REGISTRATION CERTIFICATE**

**FOR GEOGRAPHICAL INDICATION**

**No: 749 – Origin Name**

**AYDIN MEMECİK ZEYTİNİ**

**(AYDIN MEMECİK OLIVE)**

Registrant:

**AYDIN TİCARET BORSASI**

**(AYDIN COMMODITY EXCHANGE)**

This geographical indication has been registered on 16/07/2019 in order to be protected as of 07/05/2021 in the scope of Intellectual Property law no. 6769.

(signed)

Prof. Dr. Habip ASAN

President

## REFERENCES


Arıcı, Ö., & Aktan, N., 1997. The effect of differen brinnig methods applied to Memecik and Ulsu black olives on the organoloeptic properties. *Gıda*, 22 (2): 147-154.

Çetin, Ö., Nurengin, M. E. T. E., Şahin, M., Sefer, F., Hülya, K. A. Y. A., Güloğlu, U.,Hakan, M., & Uluçay, N. (2016). Memecik x Uslu melezi (F1) zeytin genotiplerinin pomolojik özellikleri.*Zeytin Bilimi*,*6*(1), 9-14.

ÇOLAK, A., & SAÇILIK, K. Zeytinin Olea europaea L. cv. Memecik Sürtünme Katsayılarının Belirlenmesi. *Journal of Agricultural Sciences*, *8*(02), 114-118.

Çolakoğlu, C. A., & Tunalıoğlu, R., 2010. Aydın ilinde zeytin üretimi ile iklim verileri arasındaki ilişkilerin belirlenmesi. ADÜ Ziraat Fakültesi Dergisi, 7(1): 71-77.

Dikmelik, Ü., 1984. Farklı Yaşlardaki Memecik Zeytin Ağaçlarında Dane ve Budama Artıkları ile Topraktan Kaldırılan Azot, Fosfor ve Potasyum Miktarlarının Saptanması. Zeytincilik Araştırma Enstitüsü, Bornova, İzmir.

Diraman, H., Karaman, H. T., Sefer, F., Ersoy, N., Arsel, A. H., & Özahçi, E. (2016). Yerli Zeytin Çeşitlerinde Islah Çalişmalari: Memecik Ve Gemlik Çeşidi Melez Bireylerde Triaçilgliserol Düzeyleri. *Gıda*, *41*(1), 23-30.

Ertem, E., & Akkuzu, E. (2021). Kısıtlı Sulama Koşullarında Zeytin Ağaçlarında Özsu Akışı ve Stoma İletkenliğindeki Değişimin Belirlenmesi. *Adnan Menderes Üniversitesi Ziraat Fakültesi Dergisi*,*18*(1), 21-28.

Gündeşli, K. T., & Küden, A. B. (2020). Determination of the chilling requirements and fruit quality characteristics of some local and foreign olive cultivars. *Anadolu Tarim Bilimleri Dergisi*, *35*(3), 285-291.

İlyasoğlu, H., 2009. *Ayvalı ve Memecik Zeytinyağlarının Coğrafi İşareteleme Amacıyla Karakterizasyonu*. Doktora Tezi. İstanbul Üniversitesi Fen Bilimleri Enstitüsü, Gıda Mühendisliği ABD, İstanbul. 171 s.

İlyasoğlu, H., & Özçelik, B. (2011). Memecik Zeytinyağlarinin Biyokimyasal Karakterizasyonu.*Gida/The Journal of FOOD*, *36*(1).

İrget, M. E., Kilıç C. C., Bayaz, M., & Özer K., 2007. Azotlu gübrelemenin zeytinde (*Olea eurapaea* L cv *Memecik* verim ve kaliteye etkisi. *ADÜ Ziraat Fakültesi Dergisi*, 4 (1-2): 27-33

Irmak, Ş., & Dıraman, H. (2021). Chemometric characterization of raw olives from important Turkish table olive cultivars Cvs. using HPLC–DAD method based on their biophenolic profiles. *Journal of Food Science and Technology*, 1-9.



Irmak, Ş., & Dıraman, H. (2021). Chemometric characterization of raw olives from important Turkish table olive cultivars Cvs. using HPLC–DAD method based on their biophenolic profiles. *Journal of Food Science and Technology*, 1-9.

Mete, N., 2009. *Bazı Zeytin Çeşilerinin Döllenme Biyolouisi Üzerinde Araştırmalar*. Yüksek Lisans Tezi. Ege Üniversitesi Fen Bilimleri Enstitüsü, Bahçe Bitkileri ABD, İzmir. 116 s.

Saçilik, K., & Çolak, A. Zeytinin Olea europaea L. cv. Memecik Bazı Çarpma Parametrelerinin Belirlenmesi. *Journal of Agricultural Sciences*, *8*(01), 7-14.

Sarı İ., 2021. *Comparison of fruit and oil characteristics of South Aegean Region Memecik olive.* MSc Thesis. Aydın Menderes University, Graduate School of Applied Science, Department of Horticulture, Aydın, Turkey. 124 p.

Sevim, D., & Tuncay, Ö., 2012. Ayvalık ve Memecik zeytin çeşitlerinin yaprağı ve meyvelerinin toplam fenolik madde miktarı ve antioksidan aktiviteleri, *Gıda,* 37(4), 219-226.

Şirin, S. 2013. *Effects of kaolin and glycine betaine applications on the yield and quality of memecik olive variety (Olea europaea L. CV. 'memecik')* MSc Thesis. Aydın Menderes University, Graduate School of Applied Science, Department of Horticulture, Aydın, Turkey. 113 p.

Özölcum, Ü., & Üner, K., 1985. *Aydın Yöresinde Ticaret Gübrelerinin Zeytin Ürününe ve Yapraktaik Bazı Besin Maddeleri Kapsamına Etkileri*. Menemen Bölge ToprakSu Araştırma Enstitüsü Müdürlüğü Yayınları, Genel Yayın NO: 115, Menemen, Aydın.

Tekin, A., Özcan, M. M., Poyrazoğlu, E., Yorulmaz, A., & Yavuz, H., 2009. Türk Zeytiyağlarının Fenolik Yapılarını ve Bazı Önemli Kriterlerinin Belirlenmesi. TÜBİTAK Proje No: 105-O-509, Ankara.

Tuncer, F., 2019. *Evaluation of alternate bearing of memecik olivevariety in terms of phenologicial, morphologicalandpomological characteristics.* MSc Thesis. Aydın Menderes University, Graduate School of Applied Science, Department of Horticulture, Aydın, Turkey. 68 p.

Ulubeli, B., 2019. *Determination of phenological pomological and some biochemical characteristics of Memecik olive varieties growing at different altitudes in Aydın*. MSc Thesis. Aydın Menderes University, Graduate School of Applied Science, Department of Horticulture, Aydın, Turkey. 71 p.

Unluturk, M. S., Kucukyasar, S., & Pazir, F. (2021). Classification of organic and conventional olives using convolutional neural networks. *Neural Computing and Applications*, 1-12.