

PRODUCT SPECIFICATION

1.1. Name

'Giresun Tombul Fındığı'

1.2. Description of the agricultural product or foodstuff

'Giresun Tombul Fındığı' is a hazelnut that belongs to the *Corylus avellana* L. species and is marketed as unshelled or shelled: unshelled, shelled raw, and shell roasted.

Unshelled, shelled raw and shelled roasted hazelnuts have the following characteristics:

The shell can be easily broken and its colour differs between light brown and typical hazelnut brown shade. The shell is usually shiny, lobed, and slightly hairy at the tip. The kernel is round, non-fibrous, has a light bright colour seed skin, testa does not penetrate into the kernel and can be peeled off easily, the nut flesh is white and bright. Maximum number of dried nuts per kilogram is 700. Total fat content of unshelled hazelnut is between 56.0% and 68.0%. Total protein content is between 14.0% and 21.0%. Total oleic acid contents ranges between 77.0 and 85.0 in g/100 g hazelnut oil. Minimum Vitamin E content is between 28.0 and 45.0 mg/100 g hazelnut oil. Shell roasted hazelnuts have the following characteristics; maximum moisture 3%, total fat range between 57.7-70.0%, blanching ratio range between 90-100%, and total protein range between 14.4-21.6%, respectively.

The Most important distinctive characteristics of 'Giresun Tombul Fındığı' are distinctive taste and aroma, high oil content, thickness of the shell, high kernel ratio, and peelability of the testa. These are due to both natural and human factors.

Table 1. Some physical properties of 'Giresun Tombul Fındığı'.

Specifications		Unshelled	Shelled raw	Shell roasted
Size (Latitude diameter, mm)	Large	16-18	13-15	13-15
	Medium	14-16	11-13	11-13
	Small	12-14	9-11	9-11
Moisture, %	max.	7	6	3
1kg/Number of dried fruit		-	500-700	-
Shell thickness (mm.)	min.- max.	0.70 - 1.25	-	-
Kernel ratio, %	min.- max.	47.5 - 55	-	-
Peelability of testa, %	min.- max.	-	-	90-100

Table 2. Some chemical properties of ‘Giresun Tombul Fındığı’.

Specifications		Unshelled	Shelled raw	Shelled roasted
Total fat ratio in fruit, %	min.- max.	56.0-68.0	56.0-68.0	57.0-70.0
Total protein ratio in fruit, % (Factor, N = 6.25)	min.- max.	14.0-21.0	14.0-21.0	14.4-21.6
Oleic acid, % (g/100 g oil)	min.- max.	77.0-85.0	77.0-85.0	-
Vitamin E (mg/100 g oil)	min.- max.	28.0-45.0	28.0-45.0	-

Organoleptic characteristics:

The taste, flavour, and aroma left by the raw and roasted forms of ‘Giresun Tombul Fındığı’ in the mouth are very intensive. The hazelnuts are easy to chew and do not leave a feeling of dryness in the mouth, and the oil of the nuts is felt. Additionally, it does not leave a bitter taste when swallowing.

1.3. Definition of the geographical area

The production area of ‘Giresun Tombul Fındığı’ covers the entire territory of the following municipalities provinces of Giresun and Trabzon listed below:

(a) in the province of Giresun: Piraziz, Bulancak, Dereli, Keşap, Espiye, Yağlıdere, Tirebolu, Güce, Doğankent, Görele, Çanakçı, Eynesil, Giresun.

(b) in the province of Trabzon; Beşikdüzü and Vakfıkebir.

All villages in these districts are included in the production area.

‘Giresun Tombul Fındığı’ production province is located 37 ° 50 ' and 39 ° 12' east corresponds between longitudes 40 ° 07 'and 41 ° 08' north latitudes. The altitude range in which 'Giresun Tombul Fındığı' is economically cultivated is between 0 and 750 meters.

Figure 1: The ‘Giresun Tombul Fındığı’ production area: The part of the municipalities of Giresun and Trabzon.



1.4. Proof of origin

The Republic of Turkey Ministry of Agriculture and Forestry Giresun and Trabzon Provincial Directorate of Agriculture and Forestry is responsible for checking the conformity of the product to the specified criteria. By the authorized bodies following actions should be taken:

- Compliance with the criteria specified in Article 1.2
- Determination of whether the product comes from the geographical area declared in Article 1.3.
- Whether the production methods are made according to Article 1.5
- Compliance of the labeling with the criteria specified in Article 1.8.
- Whether the traceability is provided with the one step forward-one step back principle mandated by the Turkish Food Codex.

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

In Giresun and Trabzon provinces, hazelnuts have mostly been cultivated using multiple trunk system and bushy habit of the trees (ocak) for many years and propagated by sucker methods. Suckers used in propagation should be between 1-3 years old, well matured, healthy, 1-1.5 m tall and have good root formation. Young hazelnut plants should be planted from leaf fall to February-March. As a rule, planting distances between multiple trunk systems are 6-7 m on fertile soil and 4-5 m on infertile soil. 4-6 shoots are planted in 100 cm deep planting pits that are dug at least 1 month beforehand in 1-1.20m diameter, at 10cm span from the periphery of the pit with 45-50 cm between shoots. Before planting, damaged and unhealthy roots are cleaned from plants and 45-50 cm is cut from the top of the plant. Suckers formed in multiple trunk systems are pruned each year after planting.

Hazelnut belongs to moist and mild climate and coastal side of Black Sea Region in Turkey has the most appropriate climatic circumstances for hazelnut cultivation. In hazelnut, duration of flowering and pollination is quite long. Flowering season starts by the end of November and the beginning of December and it lasts until the mid March. Climatic conditions, altitude and annual changes can be effective in the date and duration of flowering process. Pollens are pretty sensitive against high temperature and low moisture. Pollination is carried out by the help of winds.

There is a sporophytical incompatibility (incompatibleness between pollens and stigma) in hazelnut. This is the reason why determining the pollinator in hazelnut orchards is important, and compatible combinations should be chosen while building a hazelnut orchard. In the geographical area specified in article 1.3, the cultivar Giresun Tombul Fındığı should represent at least 90 % of the selection at the farm with cultivars 'Kalınkara Fındık', 'Palaz Fındık' (as a pollinator) and 'Sivri Fındık' permitted up to a maximum 10 %.

There is a mode of production that is distributed at almost the same rate of different varieties except for the places specified in 1.3 in Turkey.

Within the scope of care operations in hazelnut, cultural processes such as weed control, fertilization, pruning and harvesting are essential.

Since hazelnut orchards in Turkey mostly established on sloping areas and soil cultivation are mostly done using hoes, in other words, hand tools. It is necessary to leave soil surfaces weedy on steep slopes in Giresun to prevent erosion in hazelnut orchards in the rainy season. During this period, weed control is not critical as there is so no water shortage. However, as there is water shortage during summer areas between rows are grubbed 2-3 times for weed control with hand tools (such as sickle and scythe) and motor scythe.

Hazelnut is a species that can grow on the mild acidic soils. However, the lime application is sometimes required to keep the soil from becoming too acidic. On the other hand the farmers apply fertilizers containing nitrogen, phosphorus, and potassium to increase yield in hazelnuts.

Hazelnut plants in Giresun are pruned twice a year, in autumn or winter and in spring or early summer. In autumn and winter pruning, dried, dense, unproductive and unnecessary shoots, branches and suckers are removed. In spring and early summer pruning, very young shoots are removed.

The harvest of 'Giresun Tombul Fındığı' in Giresun and Trabzon Province generally continues from early August to beginning of the September and the harvest time varies according to the altitudes. The easy and noticeable symptoms in the determination of the harvesting time in the hazelnuts are the yellowing of husks, browning (reddishing) of $\frac{3}{4}$ of a nutshell, development of aroma and taste specific to cultivar and the fall of clusters. Another harvest criterion is that the moisture content of hazelnuts should fall below 30%. Harvest is done by shaking the branches and picking the nuts from the ground or hand picking the nuts from shoots. Nuts are harvested with husks and laid on threshing fields and they are dried until water content reaches 12%. And then nuts are separated from husks by threshing machines and continue drying until water content falls below 6% for kernels. The producers of Giresun Tombul Fındığı have continued these harvesting processes for hundreds of years and use new technologies (such as husk separation) only if they do not affect the properties of the fruit.

During and after the drying process, farmers separate the damaged and rotten hazelnuts that they can see with their own eyes. Then they fill the sturdy and quality hazelnuts in sacks and take them to the market.

All processes including sapling planting, fertilization, pruning and harvesting should be in the geographical region specified in Article 4.

1.6. Link

The area for the production, sapling planting, fertilization, pruning, harvesting, husking and drying and calibration of 'Giresun Tombul Fındığı' lies within the territory of the cities of the provinces of Giresun and Trabzon listed below:

(a) in the province of Giresun: Piraziz, Bulancak, Dereli, Keşap, Espiye, Yağlıdere, Tirebolu, Güce, Doğankent, Görele, Çanakçı, Eynesil, Giresun.

(b) in the province of Trabzon; Beşikdüzü and Vakfıkebir.

All villages in these districts are included in the production area.

Natural Factors

Among the factors that influence 'Giresun Tombul Fındığı' characteristics climate is the most important. They influence the thickness of the shell, the high yield of shelling (high kernel ratio) and the easy peelability of the testa when roasted in oven.

Climate and Growing Conditions

The most important factor that restricts hazelnut cultivation is the **temperature**. Differing from other fruit species, growing in mild climate, blooms in winter. Female flowers and pollens in anthesis, can be damaged from -8 °C, and can be dead by the temperatures starting from -16 °C. Vegetative buds of hazelnut also are damaged at temperatures lower than -14 °C, and are dead at temperatures lower than -22 °C. Particularly, after exfoliation, spring frosts in March can give an enormous harm to hazelnut. Chilling requirement of a cultivar is expressed by the sum of hours passed between 0 °C and 7 °C and it is an important factor on determining if a cultivar can be grown successfully in an ecology. Chilling requirement for leaf buds is 350-550 hours for Tombul. Hazelnut requires high-level moisture by the time of growing. Hazelnut can be properly grown up in the regions, which have 13-16 °C yearly mean temperatures. Besides, in these regions, it is a must to have -8, and /or -10 °C as lowest temperature, 36-37 °C as highest temperature, to have more than 700 mm yearly precipitation, and to have proper distribution of rainfall by months. Furthermore, proportional moist should not go under 60% in June and July.

Climate and Wind

The 'Giresun Tombul Fındığı' production area climate has a humid subtropical climate with warm and humid summers and cool and damp winters, and has some differences compared to other hazelnut production regions in Turkey (number of rainy days and hours of sunshine per day). The annual average temperature in Giresun province is 14.1 °C with averages falling 7.1-11.3 °C between January and April, and reaching 20.1–23.2 °C between June and August. These temperatures are optimal of for the blossoming of hazelnut trees and for the development and maturation of 'Giresun Tombul Fındığı'. The average annual wind speed of the Giresun region

is 4.3 km/hr. **Wind and temperature** is particularly important during pollination and fertilization, and has a direct effect of nut set and fruit development.

The average number of **rainy** days in Giresun 160,6 with an average of 1401 mm rain a year and hours of **sunshine** per day 2.6-3.4 between June and August. It is observed that these values has been also available on records of meteorological datum of Giresun province for long years.

This amount of rainfall and hours of sunshine per day are sufficient for the nuts to reach the minimum appropriate weight and fat ratio and fatty acids composition respectively. The sunshine hours ensured the high oleic acid, vitamin-E content and aroma.

Humidity

The relative humidity of the air is 76-76,3 % within the period of fruit development and maturation. This relative humidity also impacts the hazelnut quality as the fruits create their biochemical structures (fat, protein, flavor) during the period. Thanks to this particular air humidity rate Giresun Tombul Fındığı shells become thinner and accordingly, they may be easily peeled.

Soil

The Giresun region soil characteristics have the minimum conditions for hazelnut cultivation. Hazelnut plants grow best on deep, fertile, well-drained soil with a pH between 6.0-7.5 and suitable soil types include loamy, sand-clay and soil that rich in organic matter. pH should be increased by liming in soils which has low level pH, since they are restricted in gaining some crucial nutrients. The properties of the soil affect the size of the ‘Giresun Tombul Fındığı’ kernel and thickness of the shell. Because of the climate and soil characteristics of the above mentioned production region, Giresun Tombul Fındığı has these specific features explained.

Human Factors

Growing of hazelnuts in Giresun and Trabzon Province dates back to ancient times. Farmers have long been selecting and vegetatively propagating (by own-rooted suckers method) the genotypes with high yielding potential. Therefore, hazelnuts grown in the Giresun and Trabzon have been selected from varieties that are best adapted to local conditions and therefore display superior and specific common qualities of taste. In this way, hazelnut producers are successful in achieving and sustaining the said characteristics by having clonally increased with own-rooted suckers and varieties of hazelnut that fruit thickness is over, fruit quality is good and tree productivity is high.

Harvest

The easy and noticeable symptoms in the determination of the harvesting time in the hazelnuts are the yellowing of husks, browning (reddishing) of $\frac{3}{4}$ of a nutshell, development of aroma and taste specific to cultivar and the fall of clusters. Another harvest criterion is that the moisture content of hazelnuts should fall below 30%. Hazelnut harvest is done by shaking the branches and picking the nuts from the ground or hand picking the nuts from shoots.

In harvesting processes as in every stage of production there is a lot of human labour. The hazelnut are traditionally collected from the orchards with their husks and shells under the trees and poured into the blend. And then the nut is given the haymaker to separate from the husk.

Separated nuts are laid in the blend to be dried. Usually, grass or concrete blend is used. Nuts are dried the humidity drops until 6%. Dried fruits are stored in jute sacks that can take air. Storage is done in jute bags or as bulk.

History and Culture

Approximately 22% of the land is used for crop production in Giresun province, 79% of the agricultural lands of Giresun consists of hazelnut gardens. The total area where Giresun Tombul Fındığı is produced is about 110 thousand hectares according to 2019 data. Nearly 85000 families are engaged in the production of Giresun Tombul Fındığı.

Buying and selling hazelnuts as a commercial item in the Eastern Black Sea Region has a history of approximately 600 years. The first written document showing the sale of hazelnut as an international trade good belongs to the year 1403. Turkish historian and poet Şakir Şevket wrote in his book published in 1877 that hazelnuts were grown in Vakfikebir, Tirebolu, and Giresun and that plenty of hazelnuts were exported from Giresun port to European countries. 'Giresun Tombul Fındığı' has been defined as "Giresun Quality" in domestic and foreign markets and has become the most preferred Turkish Hazelnut variety. For this reason, Giresun has also become the center of official organizations related to hazelnut agriculture. Firstly in the Giresun, FİSKOBİRLİK was established on November 2, 1938, and then Hazelnut Research Institute was established in 1936. A number of scientific congresses related to hazelnut agriculture were also held in Giresun. For example, the second national hazelnut congress was held between 7-10 November 1955 in Giresun. At the congress, reports prepared on subjects such as production, combating hazelnut pests, standardization in hazelnut production, and sales problems were discussed.

Within the study named "Turkish Hazelnut Cultivars" all the characteristics of the hazelnut genotypes cultivated in Turkey has been presented. In the same study, it was stated that 76% of the hazelnut farming lands were covered with Tombul tree were substantial and approximately 57.000 tons of Giresun Tombul Fındığı were produced in Giresun Province in 1984.

Hazelnuts divided into two categories in Turkey: Giresun Quality and Levant Quality. Only hazelnuts grown in the geographical area specified in Article 1.3 are defined as Giresun Quality and are purchased from the farmer at a higher price. The nuts are grown in other parts of Turkey, it is defined as Levant Quality.

Hazelnut festivals are organized by various institutions and organizations in Giresun and its districts before and after the hazelnut harvest.

1.7 CONTROLS

S.S. HAZELNUT AGRICULTURAL SALES COOPERATIVES AND ASSOCIATIONS (FİSKOBİRLİK)

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FİSKOBİRLİK keeps records on farmer information, production areas, fruit growth, industrial facilities, processing, packaging, and storage. FİSKOBİRLİK 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.

Since 'Giresun Tombul Hazelnut' is a high value-added product, necessary information is made to farmers, in particular and other concerned in production chain (buying/selling, manufacturing, storage, marketing, sales, and sales places, etc.) in order to ensure its production in compliance with the national and international quality criteria in force and compliance is tracked.

FİSKOBİRLİK generally tracks tree and fruit growth of the product and gives advices to farmers before and after harvest.

FİSKOBİRLİK will work together with Provincial Directorates of Agriculture and Forestry of Giresun (for the areas specified in subparagraph 1.3 a) and Trabzon (for the areas specified in subparagraph 1.3b) on making physical and chemical analyzes specified in 1.2, fulfillment of labeling criteria specified in 1.8.

The three most important factors in determining the fruit quality characteristics 'Giresun Tombul Fındığı' are thickness of the shell, shelling yield of nut, and peelability of the testa (blanching ratio). These three features are determined as inspection criteria controlled in laboratories accredited by TÜRKAK and authorized by the Republic of Turkey Ministry of Agriculture and Forestry.

THE HAZELNUT RESEARCH INSTITUTE (Control Authority)

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Hazelnut Research Institute is going to check that it has been produced with the production method that has been mentioned within article 1.5 and will closely monitor the natural and human factors outlined in 1.6. of the letter of specification.

PROVINCIAL DIRECTORATE OF AGRICULTURE AND FORESTRY (Control Authority)

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Republic of Turkey Ministry of Agriculture and Forestry, Giresun and Trabzon Provincial Directorate of Agriculture and Forestry controls whether Giresun Tombul Fındığı' has the characteristics specified in Article 1.2 and whether it comes from the geographical area specified in Article 1.3 and whether it is produced according to the production method specified in Article 1.5. and finally checks whether it complies with the labeling requirements specified in Article 1.8.

1.8. Labelling

The following information must be written or printed legibly and in an indelible manner on the packages of 'Giresun Tombul Fındığı'.

- trade name and address, short name and address, or registered trade mark of the company
- lot number
- name of the good- 'Giresun Tombul Fındığı'
- net weight
- following logo:



- Official hologram of authenticity

2. APPLICANT GROUP

S.S. HAZELNUT AGRICULTURAL SALES COOPERATIVES AND ASSOCIATIONS (FİSKOBİRLİK)

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Tax Office and Tax No: Giresun-3860008218

Fiskobirlik, with the aim of cultivating and marketing the most quality hazelnuts of the world in better conditions, is an association of Agricultural Sales Cooperatives established in 1938 by

the region hazelnut cultivators within a mutual assistance and cooperation. Another aim and goal are to create a sustainable and competitive Union and Cooperative structure to achieve the highest benefit in the production process and marketing of its partners. And today, the Union's number of producer partners is 143,496.

Fiskobirlik, like the other agricultural sales cooperatives and associations in the country, has been established in accordance with the 02/11/1935 dated and 2834 numbered legal provisions related to “Agricultural Sales Cooperatives and Associations” and with the main agreement prepared based on these provisions. Some legal amendments are realized during the time for having more active, productive, sustainable and autonomous structure and for a restructuring, and the main agreement prepared based on the 4572 numbered legal provisions about the “Agricultural Sales Cooperatives and Associations” published in 06/12/2000 date and 24270 numbered Official Gazette, became applicable with the approval of plenary committee held on 02/06/2001. With this main agreement, the name of Fiskobirlik is changed as “S.S. Fındık Tarım Satış Kooperatifleri Birliđi” by adding limited liability according to its autonomous and private structure.

S.S. HAZELNUT AGRICULTURAL SALES COOPERATIVES AND ASSOCIATIONS has appointed Elif Benan Güven and/or Huriye Kayabaşı (ÖZENER TRADEMARK & PATENT CONSULTANCY OFFICE) to apply for the registration of 'Giresun Tombul Fındıđı' “ for a PDO. Here is the General Power of Attorney (see enclosures in annex);

3. Turkish registration of 'GİRESUN TOMBUL FİNDİĐİ'

The Government accepted the proposal for recognizing ‘Giresun Tombul Fındıđı’ as a protected designation of origin and published in the Official Gazette of the Turkish Republic No 31 of 18 February 2001.

The changes made in the registration document were published in the Official Geographical Indication and Traditional Product Name Bulletin of the Turkish Patent and Trademark Office dated 02.05.2019 and numbered 52.

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



GENERAL POWER OF ATTORNEY

I have appointed Elif Benan GUVEN , the Trademark and Patent Attorney and/or Huriye KAYABASI who are located in OZENER TRADEMARK & PATENT CONSULTANCY OFFICE (ÖZENER MARKA PATENT DANIŞMANLIK OFİSİ) established in accordance with the Turkish governmental laws, with the address 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, designations 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, designations 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, address 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 17.08/2020

On behalf of..... (FOR COMPANY)

Title of the Company : Sınırlı Sorumlu Fındık Tarım Satış Kooperatifleri Birliği –FİSKOBİRLİK
Union Of Agricultural Cooperatives For The Sale Of Hazelnut

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4. PROOF OF PROTECTION IN THE COUNTRY OF ORIGIN


TURK
[PATENT]
TÜRK PATENT VE MARKA KURUMU

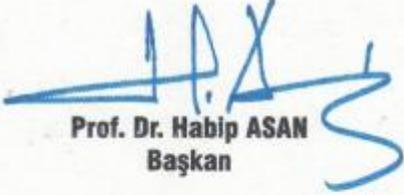
COĞRAFI İŞARET TESCİL BELGESİ

No:31 - Menşe Adı

GİRESUN TOMBUL FINDIĞI

Tescil Ettiren
S.S.FINDIK TARIM SATIŞ KOOPERATİFLERİ BİRLİĞİ

Bu coğrafi işaret, 6769 sayılı Sınai Mülkiyet Kanunu kapsamında
18.09.2000 tarihinden itibaren korunmak üzere
10.10.2001 tarihinde tescil edilmiştir.


Prof. Dr. Habip ASAN
Başkan

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