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# Turkey

# Tree Nuts Annual

# Tree Nuts, Annual, 2011

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**Report Highlights:**

Weather conditions in MY 2011 for most tree nuts and especially for hazelnuts were devastating, and hazelnut production is predicted to decrease to 400,000 MT. MY 2010 was a great year for hazelnut exporters as exports reached 560,000 MT. Pistachio production tripled in MY 2010 compared to the previous year, because it was in an "on year" in the cycle.

## Executive Summary:

MY 2010 was a very good year for hazelnut exports as exports reached 560,000 MT.
The weather conditions for the MY 2011 crop were very bad and production of almost all tree nuts, and especially hazelnuts, was affected significantly. Hazelnut production decreased to 400,000 MT from 630,000 MT the previous year.

MY 2010 was "on-year" in the pistachio production cycle. Production tripled compared to the previous year and reached 110,000 MT. Pistachio production is predicted to return to 50,000 MT in MY 2011 mostly due to the natural production cycle and poor weather conditions.

Almond production was not affected much by the weather conditions; therefore production in MY 2010 was 15,000 MT and is not expected to change in MY 2011. Imports of almonds in MY 2011 are predicted to decrease slightly due primarily to high prices.

## Commodities:

Filberts, Inshell Basis

## Production:

Note: The conversion rate used for shelled to in-shell hazelnut calculations in this report is 1:2

Turkey is the world's leading hazelnut producer, accounting for about 75 percent of world supply. Although hazelnuts have been grown in more than 48 provinces around Turkey, production is primarily concentrated along Turkey's Black Sea coast.

The hazelnut yield depends heavily on the weather conditions between December and May. In MY 2010, production increased about 34 percent compared to the previous year, reaching 630,000 MT. This was greater than predicted. However, the weather conditions were not favorable between December 2010 and May 2011 and a result, industry sources estimate that MY2011 production will be just 400,000 MT. Weather in December 2010 and January 2011 was much warmer than normal in the hazelnut growing areas. This led to major problems with the pollination, and resulted in lower yields. The expected decrease in production in MY 2011 is also partly due to the fact that this marketing year was an "off year" in the production cycle.

The Black Sea region is divided into three distinct growing areas: (1) the hilly region from Ordu to Trabzon, centered around Giresun, which in a normal year produces about 55 percent of the crop, (2) the flatter, mixed farming region west of Ordu to Samsun, which produces about 15 percent of the crop, and (3) the area west of

Samsun, which produces the remaining 30 percent. Hazelnuts require relatively little effort to cultivate and inputs are low.

Turkish hazelnuts usually ripen between early and late August depending on the altitude of the orchard and climatic conditions. Turkish hazelnuts are hand-picked from the trees and dried in the sun.

Harvesting takes place during several weeks in August and September. Due to unusually high temperatures, the Turkish hazelnut harvest started one week earlier than normal at lower altitudes (0-250 m), towards the end of July. In the middle altitudes (250-500 m) harvesting started the first week of August and at higher altitudes (above 500 m) it started in the second week of August

There are two organizations that produce official hazelnut production forecasts. One is the Ministry of Food, Agriculture and Livestock (MINFAL) and the other is the National Hazelnut Council. MINFAL officers forecast hazelnut production by field trips and actual counting. National Hazelnut Council also relies on field trips of their staff as well as collection of market information.

## Consumption:

In MY 2010 the domestic hazelnut consumption was lower than usual and this was mostly due to a higher volume of exports. Actual domestic consumption in MY 2010 was 147,000 MT. In MY 2011 domestic consumption is predicted to be approximately 300,000 MT.

Although it is no longer in charge of purchasing hazelnuts, The Turkish Grain Board (TMO) was still quite active in the retail market in order to decrease its high amount of hazelnut stocks and increase consumption in general.

## Trade:

Hazelnut exports bounced back from MY 2009 level of 325,000 MT to 560,000 MT in MY 2010. This tremendous increase was mostly due to the high level of production and good prices.

EU countries continued to be the major destination for hazelnut exports. Italy, Germany and France are the top three destinations for Turkish hazelnut export. Hazelnuts primarily compete for market share with almonds in the EU chocolate manufacturing industry.

Due to efforts of the Hazelnut Promotion Group and the National Hazelnut Council, Asian and Middle Eastern countries also showed increased interest in Turkish hazelnuts in MY 2010.

## Stocks:

The Turkish Grain Board (TMO) had 425,000 MT of hazelnut stocks in MY 2009. In MY 2010 the stocks decreased to 350,000 MT and are predicted to decrease further in MY 2011 due to the low production estimate for this season. MY 2011 stocks are predicted to be 119,000 MT.

## Policy:

Turkish policies regarding hazelnuts did not change significantly in MY 2011. TMO started to procure hazelnuts in MY 2006 and continued in MY 2007 and MY 2008. TMO procured 694, 000 MT of hazelnuts altogether during this time and paid 2.83 billion TL for these stocks.

According to the hazelnut strategy which was published in the Official Gazette on July 15, 2009, licensed hazelnut producers received 1500 TL/ha income support in 2009, 2010 and 2011. Non-licensed producers received 3000 TL/ha in 2009 and 1500 TL/ha in 2010 and 2011 if they agreed to up-root hazelnuts and start producing alternative crops. This policy expired in MY 2011 and in the next season the hazelnut producers will not enjoy this support any more. As a result of this policy only a very minimal decrease in the number of orchards occurred and the vast majority of hazelnut producers did not agree to up-root their trees.

TMO has not been involved in the market since 2008 except for selling its stocks, although it has not sold any stock yet in MY 2011. Therefore, the price is currently set according to market forces.

## Marketing:

A Hazelnut Promotion Group, which was initiated by the government and the exporters, has made tremendous efforts towards promotion of hazelnuts both domestically and internationally.

The group was established in 1997 and since then they have launched activities, attended trade shows and produced advertisements in the United States, Japan, China, Russia and recently in India.

## Production, Supply and Demand Data Statistics:

| Filberts, Inshell Basis Turkey | 2009/2010 | | 2010/2011 | | 2011/2012 | |
|---|---|---|---|---|---|---|
| | Market Year Begin: Jul 2009 | | Market Year Begin: Jul 2010 | | Market Year Begin: Jul 2011 | |
| | USDA Official | New Post | USDA Official | New Post | USDA Official | New Post |
| **Area Planted** | 0 | | 0 | | | |
| **Area Harvested** | 0 | | 0 | | | |
| **Bearing Trees** | 340,000 | 340,000 | 0 | 340,000 | | 340,000 |
| **Non-Bearing Trees** | 17,000 | 17,000 | 0 | 17,000 | | 17,000 |
| **Total Trees** | 357,000 | 357,000 | 0 | 357,000 | | 357,000 |
| **Beginning Stocks** | 525,000 | 525,000 | 425,000 | 425,000 | | 350,000 |
| **Production** | 470,000 | 470,000 | 570,000 | 630,000 | | 400,000 |
| **Imports** | 1,600 | 1,600 | 2,000 | 2,000 | | 3,000 |
| **Total Supply** | 996,600 | 996,600 | 997,000 | 1,057,000 | | 753,000 |
| **Exports** | 325,000 | 325,000 | 350,000 | 560,000 | | 325,000 |
| **Domestic Consumption** | 246,600 | 246,000 | 297,000 | 147,000 | | 309,000 |
| **Ending Stocks** | 425,000 | 425,000 | 350,000 | 350,000 | | 119,000 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Total Distribution** | 996,600 | 996,000 | 997,000 | 1,057,000 | | 753,000 |
| | | | | | | |
| HA, 1000 TREES, MT | | | | | | |

## Commodities:

Pistachios, Inshell Basis

## Production:

There are three major regions where pistachios are grown in Turkey; Gaziantep, Sanliurfa and Siirt. In a normal year the Gaziantep region produces 40,000-45,000 MT of pistachios, the Sanliurfa region produces 35,000-45,000 MT and the Siirt region produces 10,000 MT-15,000 MT.

Gaziantep and Sanliurfa pistachio varieties are similar but the varieties grown in Siirt are different. Most Turkish pistachios are the Gaziantep type, thinner and smaller than the type of pistachios grown in Iran. Siirt pistachios, about 15 percent of the total production, are somewhere between Gaziantep and Iranian pistachios in terms of size. The Siirt type yields are not only higher but fluctuate less than the Gaziantep type. In Turkey, quality is directly related to size: 90 nuts or fewer per 100 grams is considered first quality, 90-100 nuts is second quality, 100-120 nuts is third quality, and more than 120 nuts is fourth quality.

As predicted, pistachio production increased significantly in MY 2010 compared to the previous year. MY 2010 was the “on” year in the natural production cycle and pistachio production tripled compared to MY 2009, reaching 110,000 MT. In MY 2011, however, the production is predicted to decrease again and is estimated at 50,000 MT.

With the increasing number of new sapling plantations in the Sanliurfa and Siirt regions, the production high quality pistachios is predicted to increase. Producers and researchers predict that as a result of better variety selection, the problem of “cycling” will not be seen in the future.

## Consumption:

Pistachios are widely eaten as a snack food and are used in the production of confectionary products, especially in desserts and bakery products.

As a result of high production levels, domestic consumption of pistachios increased from 60,000 MT in MY 2009 to 80,000 MT in MY 2010. With the support of the high stocks left from MY 2010, domestic consumption is not expected to drop significantly in MY2011 despite lower production. High prices of pistachios affect not only confectionary producers but also baklava (special Turkish dessert) producers as well.

## Trade:

The EU countries continued to be the major export destinations for Turkish pistachios in MY 2010. After a dramatic decrease in MY2009, Turkish pistachio exports picked up in MY 2010 and reached 1,000 MT. Exports are predicted to decrease to 700 MT in MY 2011 due to a low level of production.

## Stocks:

Pistachio stocks vary considerably from year to year in line with cyclical production. In MY 2010 stocks were recorded to be 52, 000 MT. As a result of low production in this season the stocks are expected to go down to 24, 000 MT in MY 2011.

## Policy:

The government stopped giving direct support to pistachio farmers several years ago, and since 2004, GUNEYDOGUBIRLIK has not announced any procurement prices for pistachios. GUNEYDOGUBIRLIK is the Union of Agricultural Sales Cooperatives operating in the south eastern part of Turkey. This sales cooperative markets pistachios, hot peppers, grapes and olive oil.

There is, however, a government support of 300 TL/ha for the establishment of new orchards if they are planted with certified seedlings.

There are no subsidies, taxes or other restrictions on pistachio exports. Pistachio imports to Turkey have not been possible in the past mostly due to high tariff and seasonal bans until this year. There is some evidence that Iranian pistachios enter Turkey and are exported with labels indicating they are Turkish products.

## Marketing:

The Pistachio Promotion Council targets Germany, Italy, England, Spain and Russia to increase pistachio sales. Due to more limited budgets, the Pistachio Promotion Council has not been as active as the Hazelnut Promotion Council.

The Antep Pistachio Promotion Group was established in January 2006. The Aegean, Southeast Anatolian and Istanbul Exporters Unions each have two members on the Board of Directors. The Ministry of Economy names one additional member. The goal of this group is to organize and manage research and marketing activities to increase the consumption and export of Antep pistachios.

GUNEYDOGUBIRLIK, which is located in Gaziantep Province, is the only sales cooperative union for pistachios. This sales cooperative follows domestic and foreign trade issues, provides information, conducts market research and sponsors promotional events.

*Note*: PSD production estimates are based on in-shell nuts with a conversion factor of 1:2

## Production, Supply and Demand Data Statistics:

| Pistachios, Inshell Basis Turkey | 2009/2010 | | 2010/2011 | | 2011/2012 | |
|---|---|---|---|---|---|---|
| | Market Year Begin: Aug 2009 | | Market Year Begin: Aug 2010 | | Market Year Begin: Aug 2011 | |
| | USDA Official | New Post | USDA Official | New Post | USDA Official | New Post |
| **Area Planted** | 0 | | 0 | | | |
| **Area Harvested** | 0 | | 0 | | | |
| **Bearing Trees** | 29,000 | 29,000 | 0 | 29,000 | | 29,000 |
| **Non-Bearing Trees** | 14,000 | 14,000 | 0 | 14,000 | | 14,000 |
| **Total Trees** | 43,000 | 43,000 | 0 | 43,000 | | 43,000 |
| **Beginning Stocks** | 45,449 | 45,449 | 23,157 | 23,159 | | 52,000 |
| **Production** | 38,000 | 38,000 | 110,000 | 110,000 | | 50,000 |
| **Imports** | 58 | 60 | 100 | 100 | | 100 |
| **Total Supply** | 83,507 | 83,509 | 133,257 | 133,259 | | 102,100 |
| **Exports** | 350 | 350 | 1,000 | 1,000 | | 700 |
| **Domestic Consumption** | 60,000 | 60,000 | 80,000 | 80,259 | | 77,400 |
| **Ending Stocks** | 23,157 | 23,159 | 52,257 | 52,000 | | 24,000 |
| **Total Distribution** | 83,507 | 83,509 | 133,257 | 133,259 | | 102,100 |
| | | | | | | |
| HA, 1000 TREES, MT | | | | | | |

## Commodities:

Almonds, Shelled Basis

## Production:

Almonds were considered a minor crop and were not cultivated commercially in Turkey until recently. There are several rural development projects to increase almond production, although commercial investment in almond orchard is very limited.

Although almonds are grown throughout Turkey, commercial production is concentrated in the Aegean, Marmara, and Mediterranean Regions.

Weather conditions for most tree nuts were unfavorable for the MY 2011 crop, however almond production is estimated to be the same as in MY 2010, 15,000 MT.

There is no special organization supporting just almond producers, however TUKSIAD (Turkey Dried Fruit and Nut Traders and Businessman Association) is actively promoting almond orchard establishments in Turkey and some large companies have started to invest in almond orchards as a result. TUKSIAD established a demonstration orchard in Denizli province, and the almond orchard area increased significantly in Denizli and Mugla provinces as a result.

*Note*: PSD production estimates are based on shelled nuts with a conversion factor of 1:3.

## Consumption:

Turkey is an importer of almonds and the United States is the major almond supplier to the Turkish market. Due to high quality and competitive prices, there is high demand for imported almonds at the moment. Better marketing can increase almond imports even further in the future.

In MY 2010, almond imports increased to 17,000 MT and in MY 2011 they are expected to decrease slightly to 15,000 MT, mostly due to high prices.

U.S .exporters should not only target Turkey but also Middle Eastern countries through the Turkish marketing channel. There is an inward process regime and re-export opportunities under this regime should be evaluated by exporters.

Turkey primarily imports in-shell almonds and exports shelled almonds. There are many claims of illegal almond shipments entering across Turkey's eastern border. Not only almonds but also walnuts and pistachios enter illegally. At the moment it is very difficult to guess the amount of illegal tree nuts entering Turkey.

## Trade:

Turkey is an importer of almonds and the United States is the major almond supplier to the Turkish market. Due to high quality and competitive prices, there is high demand for imported almonds at the moment. Better marketing can increase almond imports even further in the future.

In MY 2010, almond imports increased to 17,000 MT and in MY 2011 are expected to decrease slightly to 15,000 MT, mostly due to high prices.

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## Production, Supply and Demand Data Statistics:

| Almonds, Shelled Basis Turkey | 2009/2010 | | 2010/2011 | | 2011/2012 | |
|---|---|---|---|---|---|---|
| | Market Year Begin: Aug 2009 | | Market Year Begin: Aug 2010 | | Market Year Begin: Aug 2011 | |
| | USDA Official | New Post | USDA Official | New Post | USDA Official | New Post |
| **Area Planted** | 0 | | 0 | | | |
| **Area Harvested** | 0 | | 0 | | | |
| **Bearing Trees** | 3,500 | 3,500 | 0 | 3,500 | | 3,600 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Non-Bearing Trees** | 850 | 850 | 0 | 900 | | 900 |
| **Total Trees** | 4,350 | 4,350 | 0 | 4,400 | | 4,500 |
| **Beginning Stocks** | 2,000 | 2,000 | 2,300 | 2,300 | | 2,300 |
| **Production** | 16,000 | 16,000 | 14,500 | 15,000 | | 15,000 |
| **Imports** | 15,600 | 15,600 | 12,000 | 17,000 | | 15,000 |
| **Total Supply** | 33,600 | 33,600 | 28,800 | 34,300 | | 32,300 |
| **Exports** | 3,700 | 3,500 | 3,700 | 4,000 | | 3,500 |
| **Domestic Consumption** | 27,600 | 27,800 | 24,600 | 28,000 | | 26,800 |
| **Ending Stocks** | 2,300 | 2,300 | 500 | 2,300 | | 2,000 |
| **Total Distribution** | 33,600 | 33,600 | 28,800 | 34,300 | | 32,300 |
| | | | | | | |
| HA, 1000 TREES, MT | | | | | | |

## Commodities:

Walnuts, Inshell Basis

## Production:

Production in MY 2010 compared to MY2009 did not change significantly. In MY 2010, walnut production decreased slightly to 85,000 MT compared to 88,000 MT the previous year. Production is predicted to decrease about 3 percent to 83,000 MT in MY 2011.

There are festivals around Turkey to promote walnut production and consumption. These include the Bitlis Province Adilcevaz Walnut Festival, the Kirsehir Province Kaman Walnut Festival, the Tokat Province Niksar Walnut Festival and the Giresun Province Sebinkarahisar Walnut Festival. Walnuts grow throughout the country and increased demand has encouraged walnut cultivation in recent years. The major producing areas are Karaman, Kastamonu, Hakkari, Bursa and Tokat.

The major problem for walnut producers in Turkey is low yields. There is great need for improved varieties. The Yalova Horticulture Research Institute, which is located in Yalova in the Marmara Region, is Turkey's leading walnut research facility and developer of new varieties. Commercial production of the varieties developed by the institute in underway in Balikesir, Denizli, Bursa and Kahramanmaras provinces.

Until 1970 walnuts had been propagated only by seeds and therefore until the last decade it was very difficult to find established orchards of standard cultivars. However, the importance of propagation by grafting and budding is now understood and as a result orchards established from standard cultivars are becoming increasingly widespread.

Almost all walnut trees in Turkey are grown without the use of pesticides and chemical fertilizers. This explains why, in recent years, organic walnut production has become popular in some areas.

## Consumption:

Walnut consumption has increased significantly in recent years. Per capita consumption, which was estimated previously as 1.5 kilograms/year, is now estimated to be almost 2 kilograms. Consumption has increased due to perceived health benefits and the availability of inexpensive imported walnuts.

Walnuts are commonly used in dessert production. Also, by combining walnuts with mulberries and grapes, special products such as *pestil* and *köme* are made. Walnuts also are used in ice cream and *halva* production, and in the dried fruit industry. The leaves and green shells are used as a pigment as well.

Retail prices of shelled walnuts vary greatly because of large differences in quality. A kilogram of top quality domestically grown shelled walnuts is sold for approximately TL 46 and lower quality walnuts may be sold for as low as TL 20/kg in retail stores in Ankara.

## Trade:

The processing industry has grown in recent years. As a result, imports of both in-shell and shelled walnuts and exports of shelled walnuts have increased. However, Turkey remains a net importer of walnuts. Walnut exports are approximately 5,000 MT annually.

Walnut imports remained stable in MY 2009 compared to the previous years. In MY 2010 walnut imports increased about 17 percent compared to MY 2009, reaching 50,000 MT. Due to increasing demand, walnut imports are predicted to continue in MY 2011 and are expected to reach 52,000 MT.

## Production, Supply and Demand Data Statistics:

| Walnuts, Inshell Basis Turkey | 2009/2010 | | 2010/2011 | | 2011/2012 | |
|---|---|---|---|---|---|---|
| | Market Year Begin: Aug 2009 | | Market Year Begin: Aug 2010 | | Market Year Begin: Aug 2011 | |
| | USDA Official | New Post | USDA Official | New Post | USDA Official | New Post |
| **Area Planted** | 0 | | 0 | | | |
| **Area Harvested** | 0 | | 0 | | | |
| **Bearing Trees** | 4,980 | 4,980 | 0 | 5,000 | | 5,000 |
| **Non-Bearing Trees** | 2,700 | 2,700 | 0 | 2,700 | | 2,700 |
| **Total Trees** | 7,680 | 7,680 | 0 | 7,700 | | 7,700 |
| **Beginning Stocks** | 3,000 | 3,000 | 5,046 | 5,046 | | 3,046 |
| **Production** | 88,000 | 88,000 | 85,000 | 85,000 | | 83,000 |
| **Imports** | 42,500 | 42,500 | 50,000 | 50,000 | | 52,000 |
| **Total Supply** | 133,500 | 133,500 | 140,046 | 140,046 | | 138,046 |
| **Exports** | 6,800 | 6,800 | 5,000 | 5,000 | | 4,500 |
| **Domestic Consumption** | 121,654 | 121,654 | 132,000 | 132,000 | | 132,546 |
| **Ending Stocks** | 5,046 | 5,046 | 3,046 | 3,046 | | 1,000 |
| **Total Distribution** | 133,500 | 133,500 | 140,046 | 140,046 | | 138,046 |
| | | | | | | |
| HA, 1000 TREES, MT | | | | | | |