

The picture that thus emerges is of a region administered in a very different form from that of today and consisting of a population centred upon townships of greater significance than in later years.

#### Glossary of Terms

- akçe - Monetary unit in the 1530s  
avarız defter - Record of damages  
mezraa - Arable field  
mufassal defter - Detailed full record, unabridged  
muhasabe defter - Record of Accounts  
salname - Almanac, year-book  
şer'iyye sicilleri - Court Records  
tahrir defteri - Public record of value, extent, and ownership of land as basis of taxation  
temettuât defteri - Record of Dividends  
tîmar - Feudal fief  
tîmar raiyeti - Subjects of a fief  
vakf - Trust, foundation, vaqf  
vakfiye - Deed of trust  
vakıf raiyeti - Subjects of a trust

#### Size of Settlements in Descending Order

- sancak* - province, term used in 1530s.  
*vilâyet* - province, equal to *sancak*, term used in later Ottoman times.  
*kaza* - town, administrative district.  
*nahiye* - township, sub-district.  
*köy* - village.  
*çiftlik* - farmstead.

## THE CURRENT SITUATION AND MAIN CHARACTERISTICS OF HORTICULTURAL CROP PRODUCTION IN TROY ANCIENT CITY REGION AND CANAKKALE

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Troy ancient city situated northwestern Anatolia in Canakkale that holds an enduring place in both literature and archaeology. The legend of the Trojan War is the most notable theme from ancient literature and forms the basis of Homer's Iliad and Odyssey. Though its present-day ruins are not of vast extent, Troy is a key archaeological site whose many layers illustrate the gradual development of civilization in northwestern Anatolia. Troy is a city which existed over 4000 years and known as the center of ancient civilizations. Today Troy or New Ilium places in Canakkale - Turkey. Canakkale is one of the most important province of Turkey. The city, which was the center of ancient civilizations like Troy city and also Assos city was the home of the 'school of logic and reasoning' founded by Aristotle in the seventh century. Another historical location is Gallipoli Peninsula Historical National Park where history's bloodiest war's took place during last century (World War I). In Canakkale, Aegean and Marmara seas are connected and Europe and Asia is met at its coasts has an important place. Agricultural activities including horticultural crop growing are the main economical sector.

In this article, current situation of horticultural crops growing and development studies in Canakkale district were discussed.

**Keywords :** Fruit growing, Troy, Biga Peninsula, Gallipoli Peninsula,

Turkey

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## 1. Introduction

Troy is one of the most famous cities in the old history. The ancient city located 25 km from Canakkale province of Turkey. Today, there are 6 villages in the borders of Troy Historical National Park. The villages are Tefkive, Kalafatih, Ciplak, Yenikumkale, Halileli and Yenikoy. In these villages, agricultural activities including vegetable and fruit production have the main importance in economical life.

The province of Canakkale situated on both sides of the Dardanelles which connects the Marmara Sea to the Aegean Sea and includes also Gokceada and Bozcaada islands. Its shores touch both Europe (with the Gallipoli Peninsula) and Asia (with the Biga Peninsula).

The Dardanelles Strait is one of the most important geological features of Canakkale. This is the almost 60 km long ribbon of water separating the continent of Europe from the Asia. Canakkale district covers 9737 square kilometers in area consisting 11 counties - two of them are island counties - and approximately 450.000 inhabitants have been living in the district. Agricultural activities including fruit growing are the main economical sector.

In Canakkale district, a transition climate of Mediterranean and Aegean Sea climates is dominant. It is typically mild or cool subtropical. Rains generally fall during spring and winter months, so that summer seasons are dry without rain. The climate gives a big opportunity to grow all the deciduous fruits, many subtropical fruits, grapes and vegetables. In Canakkale, agro-ecological conditions favor the production of high quality fruits such as olives, table and wine grapes, peaches, sweet cherries, apples, apricots, persimmons, kiwifruits, vegetables etc. Fruit species are cultivated in the district for thousands of years. Archeological excavations showed that Troy ancient city where in Canakkale had wine making culture. For this reason, wine is one of the oldest symbols of the district. Moreover, the area known as the "Gulf District" near to Canakkale is covered with very old olive orchards. This district is the home of the world-famous golden olive oil produced of "Ayvalik" cultivar<sup>2</sup>. Additionally, Ida is very famous mountain in mythology and well known due to its very wide floral richness especially for aromatic and medical plants.

<sup>1</sup> Anonymous, 2001a. Climate Catalog. Turkish State Meteorological Services Publications, Ankara, Turkey

<sup>2</sup> Seker, M.; N. Kaynas, 2001. The Possible Applications of Molecular Markers for the Improvement of Olive (*Olea europaea* L.) Genetic Resources in Turkey. (Ed. Z. Demirbag) Proceedings of the 1<sup>st</sup> Eurasian Congress on Molecular Biotechnology, 17-20 October 2001, Karadeniz Technical University, Trabzon - Turkey, p. 265 - 268.

Low winter temperatures are the main factor that limits the growing of some of the subtropical fruits including citrus species. But, citrus trees like early maturing Satsuma mandarins (*Citrus unshiu*) have been grown in limited scale near to Troy region and coastal belt of the district without winter cold damage.

The informations about horticultural characteristics of Canakkale district are limited. For this reason, many research programs have been carried out to determine and to solve horticultural problems of the district. International cooperation would provide great opportunity for region's development and related efforts would improve the importance of the region at international level.

## 2. Current Status of HORTICULTURAL CROP Production in Canakkale

Some of the most important species cultivated in Canakkale district are olive, peach, grape, apple and sweet cherry which have been grown as agricultural activity for ancient times. Vegetable fields can be seen extensively through Canakkale.

In Canakkale region, there are approximately 7 million of fruit trees according to the last official datas. The numbers of fruit trees of Canakkale and Turkey are given in Table 1. According to the data, olives are the main in Canakkale and peaches are the second in the consideration of total fruit trees. As one of the most important crops, grape planted agricultural lands are estimated in 6489 hectares<sup>3</sup>.

Total fruit production of Canakkale region is approximately 280.000 tons in 2001 (Table 2.). Total fruit production is shared with 91.642 tons olives, 76.181 tons peaches, 53.550 tons grapes and 39.077 tons apples<sup>4</sup>. The production of fruits and utilization of agricultural areas for fruit cultivation are continually expanding rapidly in the region. In comparison with the other regions of Turkey, Canakkale has one of the most potential for high quality fruit production.

<sup>3</sup> Anonymous, 2001b. Agricultural Production Yearbook. Directorate of Agriculture Service of Canakkale Province. Ministry of Agriculture and Rural Affairs.

<sup>4</sup> Tuzcu, O.; S. Paydas; A. B. Kuden; A. I. Ozguven; S. Eti; M. Seker. 1994. Growing and Status of Subtropical and Tropical Fruit Species in Turkey. Proceedings of the 2<sup>nd</sup> FAO - MESFIN Meeting, 7 - 8 November 1994 Zaragoza. Spain 145 - 167. , Anonymous, 2001b. Agricultural Production Yearbook. Directorate of Agriculture Service of Canakkale Province. Ministry of Agriculture and Rural Affairs.

Main fruit production areas of Canakkale can be identified as follows:

Canakkale central county

Lapseki county

Bayramiç county

Ezine county

Bozcaada island

Bozcaada island has big importance because of its high quality grapes and wines. Local grape cultivars have been processed to well known wines (Figure 1). Wine production factories have been constructed or modernized in last years and wine production has been supported by the state.

Some of the most important vegetables cultivated in Canakkale district are tomato and pepper which have been grown especially for processing industry. Total vegetable production of Canakkale region is approximately 500.000 tons in 2001. Tomato production is the first and covers 300.000 tons. Watermelon, melon, squash, cabbage, cauliflower, cucumber and green bean production have also great importance for the district. Edible mushrooms have been extensively collected from nature in the region by local farmers. Vegetable processing industry is well developed in Canakkale district. Tomato and pepper pastes, dried vegetables and frozen vegetables are produced from vegetables which grown in Canakkale.

### 3. IMPORTANT FRUIT SPECIES, CULTIVARS AND ROOTSTOCKS

Over the years, olive, apple, peach and grape were concentrated in the major growing areas of Canakkale. Since last decades, other fruit species were introduced and grown economically. So that, fruit growing areas have been increased year by year. But the introduction of suitable cultivars and rootstocks were not performed at scientific level. The common characteristic of cultivar compositions of orchards is generally old and traditional cultivars. Introduction and acceptance of modern fruit cultivars by local growers are very slow due to lack of enough adaptation results. The list of the important cultivars which economically grown in the region is given in Table 3 according to the fruit species.

"Ayvalik" cultivar is the leading olive cultivar due to its highest oil quality in the world. "Starking Delicious" and "Golden Delicious" apples are the main apple cultivars which comprise 90% of total apple production of the region. There is wider cultivar composition for peach, grape, sweet cherry, plum and apricot species

depending on the chilling requirements. Among stone fruits, there is an interesting example which probably hybrid of peach and plum called as "Tüysüz Beyaz Şeftali - White nectarine" is grown only in Canakkale in Turkey (Figure 2). Among sweet cherry cultivars, "0900 Ziraat" is the leading cultivar with high quality fruit characteristics has been exported to European countries (Figure 3). Some economically important cultivars like "Bing", "Lapins", "Sunburst" and "Sweet Heart" have been planted. Sweet cherry, non - astringent persimmon, olive cultivars for oil production and kiwifruits have been preferred for new orchard plantings by local growers<sup>5</sup>.

### 4. FRUIT ORCHARD ESTABLISHMENT AND MANAGEMENT

The majority of new orchards are given excellent care including well irrigated and fertilized, so that they come into bearing early. Planting distances range from 2.5 x 5 m for sweet cherries, 4 x 5 m for peaches and 8 x 8 m for olives etc.

In Canakkale it is difficult to state that the use of appropriate orchard management techniques are done at desired level. The use of certified nursery plants for important fruit crops are not enough in the region. The local growers supply their nursery plant needs from different locations without taking care of plant characteristics and quarantine application due to low costs of nursery plants. One of the most serious problems about nurseries is certification of propagated materials. No regular and internationally accepted virus tests are used in most of the nurseries. Virus observations are made by nurseries that have little experience in recognizing virus symptoms. The Fruit Tree Production Stations of Ministry of Agriculture and Rural Affairs have produced certified nursery plants of traditional cultivars including vines, olives and deciduous fruits for many years. Private nursery companies have been started to produce thousands of certified nursery plants of temperate fruit species such as sweet cherry cultivars on dwarfing "Gisela" rootstocks and apple cultivars on dwarfing and semi-dwarfing rootstocks.

<sup>5</sup> Tuzeu, O.; M. Seker, 1997. The Situation of Persimmon (*Diospyros kaki* L.) Cultivation and Germplasm Resources in Turkey. (Eds : A. B. Küden and F. G. Dennis), 5th International Symposium on Temperate Zone Fruits in Tropics and Subtropics, (29 May - 1 June 1996) Adana - Turkey, Acta Hort. 441 : 107 - 114

### 5. Common Problems of HORTICULTURAL CROP Growing

In general, the common complaints of fruit growers have been concentrated more on the marketing of the fruit crops than growing problems. The principal problems are low prices of the crops, unavailability of new markets and insufficient grower organizations.

In the consideration of horticultural problems, the primary problem of fruit growing is the low percentage of certified nursery plants which used for new orchards. In the region, low fruit yield can be mentioned for all fruit species in comparison with other fruit growing regions of Turkey. For this reason, growers should be canalizing to use certified nursery plants in order to increase fruit quality and productivity.

In general, Canakkale district is free of many pests and diseases in comparison with other horticultural crop growing regions of Turkey, so that, applications of pesticides are very low. For this reason, Canakkale has big potential for organic crop production. This point is particularly important for exporting of fruit crops with satisfactory prices to European markets.

In spite of all the problems, the local growers are satisfied and want to improve their production capacities with application of new horticultural techniques.

The local growers need wider cold storage opportunity with high capacity in their growing regions. This point is especially important for sweet cherries, peaches and apples to protect their best qualities. Fruit processing factories are another need of the region.

### 6. Future Trends of Canakkale District for Fruit Production

Fruit production is expected to increase rapidly in the near future and attain amounts of 400.000 tons since at present there are already many young plantings that have not yet come into bearing. There are some fruit species gaining greater importance, because of their potential as export fruits are sweet cherry, non - astringent persimmon, almond and pistachios. High quality wine production has importance for centuries, so grape production for wine processing has been encouraged by the state and growers intend to enlarge of their vineyards. Among other fruit crops, fig, walnut, almond, persimmon, strawberry and kiwifruit are also developing fruit crops in Canakkale district. Most of the agricultural lands have been utilized for these species.

There are many terebinth (*Pistacia terebinthus*) trees on the higher lands of the district. Those terebinth trees have been topgrafted with pistachio cultivars and the growers have been interested to establish pistachio orchards because of kernel's high quality.

### 7. Research and Development Studies in Canakkale

Experimental researches started in Canakkale region with the University of Canakkale Onsekiz Mart which is one of the newly established universities in Turkey. Since then, agricultural development have been increased rapidly. The Faculty of Agriculture of the University aimed to provide higher education for Canakkale environments and scientific research concerning to regions agricultural needs. In this aim, many research projects on olive, sweet cherry, kiwifruit, grape, peach and persimmon have been carried out at horticulture program in the university. The researches have been concentrated on adaptation of new fruit cultivars, breeding and characterization of local fruit genotypes.

Research plots have been established from different fruit species including apricot, olive, apple, persimmon, mulberry, fig, walnut cultivars and types which could be important for horticultural characteristics.

Different adaptation, hybridization and selection studies have been carried out for different aspects on fruit breeding.

Some of the research activities which carried out at horticulture department can be mentioned as follow:

- a) Breeding of new sweet cherry cultivars with superior characteristics by hybridization and mutation breeding techniques,
- b) Genetic characterization of local olive cultivars and types by molecular markers,
- c) Comparison and characterization of European, Japanese and Turkish persimmon cultivars and types by molecular markers,
- d) Adaptation of new cultivars and rootstocks of subtropical and temperate fruit species in Canakkale ecological conditions.
- e) Improvement of organic crop production in the district.

The Department of Horticulture of Canakkale Onsekiz Mart University is planning to establish collaboration with international research centers and institutes

to carry out joint research projects on different aspects of horticulture.

### 8. Conclusion

It is expected that Canakkale district will become increasingly important region for fruit growing in Turkey due to its very favorable and large potential. The old orchards should be changed with new cultivars which suitable for exports. The plant materials used for new orchard establishment should be certified. The percentage of organic crop production should be increased. The utilization of fertilizers, pesticides and herbicides should be optimized and limited. It is very important to define the optimum production areas for specific cultivars with most favorable rootstocks is essential for domestic and international market demands.

Table 1. Fruit tree numbers of Canakkale district and Turkey (Anonymous, 2001b).

Fruit species	Total Fruit Tree Numbers	
	Canakkale	TURKEY
Olive	4.069.120	90.297.000
Apple	485.470	38.000.000
Peach	850.485	13.920.000
Sweet cherry	131.805	9.310.000
Plum	137.465	8.465.000
Walnut	36.725	4.645.000
Almond	134.240	4.415.000
Fig	39.590	9.840.000
Pomegranate	14.150	3.000.000
Pistachio	303.925	44.000.000
Persimmon	1.750	300.000
Apricot	66.975	13.030.000
Pear	211.765	13.072.000
Quince	91.725	3.750.000
		2,50

Table 2. Fruit production of Canakkale district and Turkey (Anonymous, 2001b).

Fruit species	Fruit Production (tons)		%
	Canakkale	TURKEY	
Olive	91.642	1.650.000	5,55
Apple	76.181	2.450.000	3,11
Grape	53.550	3.400.000	1,58
Peach	39.077	410.000	9,53
Sweet cherry	2.822	195.000	1,45
Plum	2.732	200.000	1,37
Walnut	1.216	120.000	1,01
Almond	2.000	33.000	6,06
Fig	700	255.000	0,27
Pomegranate	177	54.730	0,32
Pistachio	152	35.000	0,43
Persimmon	54	10.000	0,54
Apricot	2.000	270.000	0,74
Pear	4.712	360.000	1,31
Quince	1.665	95.000	1,75
TOTAL	279.680	9.537.730	2,93

Table 3. Fruit species, cultivars and rootstocks composition in Canakkale

Fruit Species	Cultivars	Rootstocks or Propagation method
Olive ( <i>Olea europaea</i> )	Ayvallik, Gemlik	Cuttings, selected olive seedlings
Apple ( <i>Malus comminus</i> )	Golden Delicious, Granny Smith, Jonagold, Stark Delicious, Stark Crimson, Delicious,	M-9 and MM-106 clonal rootstocks

Peach and nectarine ( <i>Prunus persica</i> )	J. H. Hale, Red Haven, Crest Haven, Blake, Early Red peaches and Arking, Independence, Fantasia, 'Tüysüz Beyaz Şeftali - White nectarin' nectarin cultivars	Peach seedlings
Sweet cherry ( <i>Prunus avium</i> )	0900 Ziraat, Lambert, Van, Bing, Stella, Sweet Heart, Lapins	Sweet cherry seedlings, mahaleb ( <i>Prunus mahaleb</i> ) and Gisela dwarfing rootstocks
Plum ( <i>Prunus domestica</i> )	Formoza, Papaz, Can, Stanley, Angeleno, Red Hard, Wickson, President	Plum seedlings
Walnut ( <i>Juglans regia</i> )	Yalova-1, Yalova-3, Yalova-4, Şebini, Bilecik, Kaman	Selected seedlings
Almond ( <i>Amygdalus communis</i> )	Texas, Non pareil	Selected seedlings
Fig ( <i>Ficus carica</i> )	Bursa siyahı	Cuttings
Pomegranate ( <i>Punica granatum</i> )	Yerli (local types)	Cuttings
Pistachio ( <i>Pistacia vera</i> )	Local female and male cultivars	Terebenth ( <i>Pistacia terebinthus</i> ) seedlings
Persimmon ( <i>Diospyros kaki</i> )	Fuyu, Hachiya and Yerli (local types)	<i>Diospyros lotus</i> seedlings
Apricot ( <i>Prunus armeniaca</i> )	Hungarian Best, Şekerpare, Precoce de thyrinthe, Hasanbey, Haçhaliloğlu	Apricot seedlings
Pear ( <i>Pyrus communis</i> )	Santa Maria, Ankara, Williams, Deveci, Akça	Pear seedlings
Quince ( <i>Cydonia vulgaris</i> )	Yerli (local types)	Cuttings

Grape ( <i>Vitis vinifera</i> )	Karasakız (for cognac production), Vasilaki, Sidalan, Cabernet Sauvignon, Semillion Blanché, Merlotte, Kalecik Karası (wine production) Çavuş (table grape), Cardinal, Italia, Beyaz Kozak, Hafiz Ali, Algemre Uslu, Yalova Incisi, Müşkülle, Elhamra (table grapes)	99 R, 5 BB, Rupestris du Lot, 1103 Poulsen, 140 Rugeri
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## Eski Truva Şehir Alanı ve Çanakkale'de Bahçe Bitkileri Üretiminin Genel Özellikleri ve Günümüzdeki Durumu

Çanakkale, sınırlarının içerisinde Antik Truva ve Assos kentleri ile yakın tarihimizde çok önemli bir yer tutan Gelibolu Tarihi Milli Parkı'nı bulunduran, tarihsel zenginliğinin yanında stratejik konumu ve doğal güzellikleri ile Türkiye'de haklı bir öneme sahip, ekonomisi genelde tarım sektörü ve tarımsal sanayiye dayanan bir ildir.

Çanakkale ilinin uygun ekolojik özellikleri, farklı iklim ve subtropik meyvelerin, erkenci, orta mevsim ve son turfanda üzüm çeşitleri ile kışlık ve yazlık sebzeilerin yetiştirilmesine oldukça uygun özellikler taşımaktadır. İl genelinde özellikle zeytin, şeftali, kiraz, elma, kayısı ile sofralık ve şaraplık üzüm çeşitlerinin yetiştiriciliği ön plana çıkmaktadır. Çanakkale ilinin meyve ve üzüm üretimi 2001 yılı verilerine göre yaklaşık 280.000 ton olup, bunun 91.642 tonunu zeytin, 76.181 tonunun şeftali, 53.550 tonunu üzüm ve 39.077 tonunu da elma yetiştiriciliği oluşturmaktadır. Bununla birlikte, Çanakkale ilinin birçok yöresinde çeşitli alternatif ürün desenlerini oluşturmaya yönelik yeni çalışma ve arayışlar bütün hızıyla devam ettirilmektedir.

Geniş bir ürün yelpazesine ve potansiyeline sahip olan Çanakkale ilinde, eski gen kaynaklarını korumak suretiyle yeni islah edilmiş ve dünya pazarlarında tutulan yeni meyve ve üzüm tür ve çeşitleriyle oluşturulacak olan bağ ve bahçeler, yetiştirilmiş olan ürünlerin ihracatına zemin hazırlayarak ekonomiye katkıda bulunacaktır. Bununla birlikte, ildeki pestisit ve herbisitlerin kullanımını sınırlandırmak suretiyle planlanacak olan organik ürün yetiştiriciliğinin farklı ürün desenleri bazında faaliyete geçirilmesi, ek bir kazanç kapısının daha açılmasını sağlayabilecektir. Bunun için uygun pilot üretim bölgeleri ve ürünlerin seçimi ile yöre çiftçisinin hızla bilinçlendirilmesine yönelik altyapı çalışmalarına önem verilmelidir.

Bu araştırmada, geniş bir tarım potansiyeline sahip olan Çanakkale ili bahçe bitkileri yetiştiriciliği açısından incelenmiş, mevcut olan ürün deseni ile üretim bölge ve alan miktarları ortaya konulmaya çalışılarak yöre yetiştiriciliğindeki mevcut sorunlar ve yeni yaklaşımlar incelenmiştir.

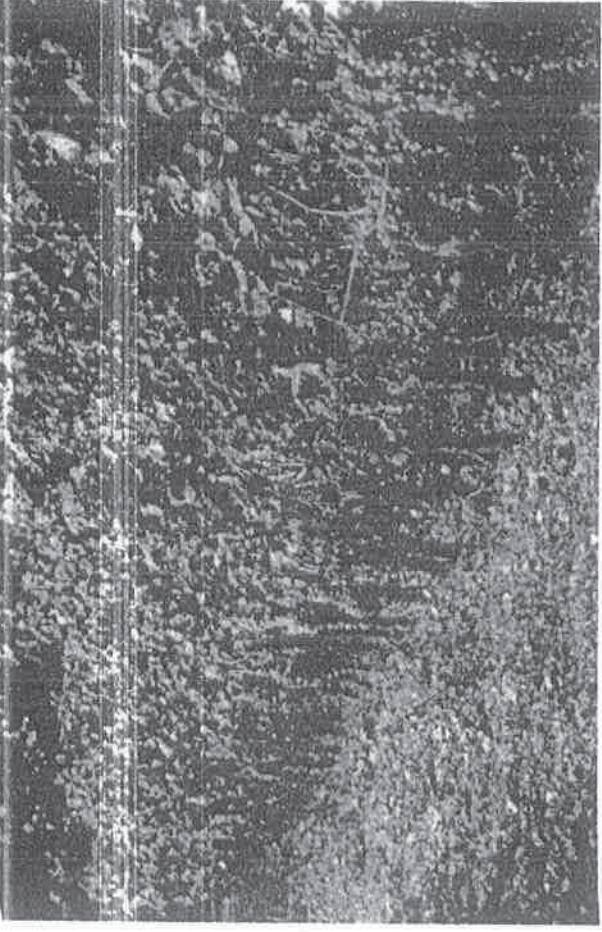


Figure 1. The clusters of 'Uslu' grape cultivar in Çanakkale.

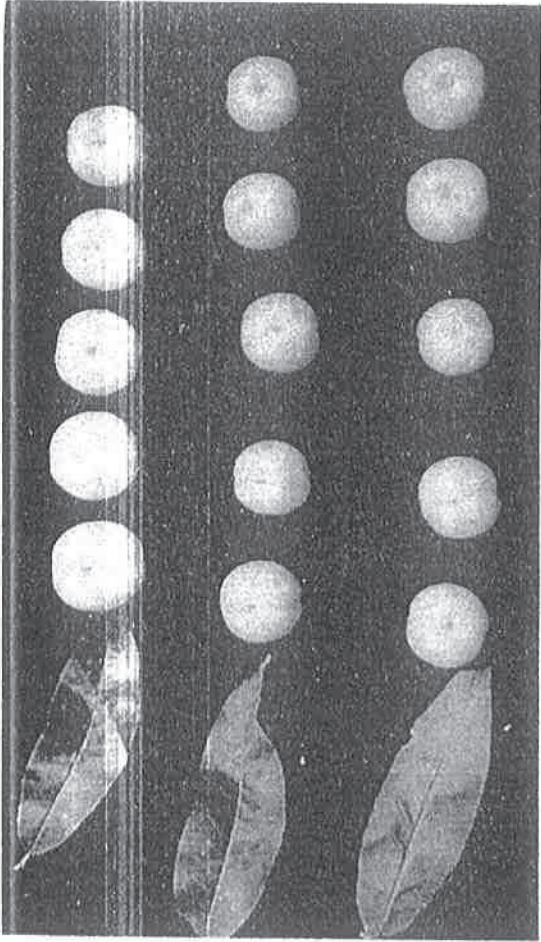


Figure 2. The fruits of 'Tüysüz Beyaz Şeftali' – White Nectarine' nectarine cultivar grown only in Canakkale in Turkey.

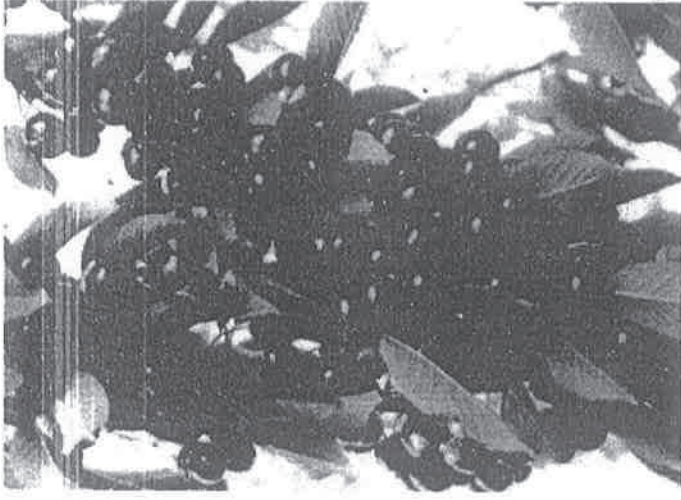


Figure 3. The fruits of '0900 Ziraat' Turkish sweet cherry cultivar in Canakkale.



1. Giriş

Tarım dayalı sanayii (TDS), tarım ürünlerini hammadde olarak kullanarak ve bunları işleyen sanayi olarak tanımlanmaktadır. Başka bir ifadeyle tarıma dayalı sanayi, hammaddenin büyük bir çoğunluğunu tarım sektöründen temin eden ve tarımsal hammaddelere çeşitli işleme, ambalajlama ve yaygın pazarlama hizmetleri gerçekleştirerek bu ürünlerin nitelik ve niceliklerini değiştiren imalat sanayi alt sektörüdür. Tarıma dayalı sanayiler; A.Gıda Sanayii: 1. Sebze ve Meyve İşleme Sanayii, 2. Bitkisel Yağ Sanayii, 3. Şeker ve Şekerli Mamuller Sanayii, 4. Çay Sanayii, 5. Un ve Unlu Mamuller Sanayii, 6. Et ve Mamulleri Sanayii, 7. Süt ve Sütü Mamuller Sanayii, 8. Yem Sanayii, B. İçki Sanayii: 1. Alkollü İçkiler Sanayii (Düşük ve Yüksek Alkollü İçkiler), 2. Alkolsüz İçkiler Sanayii (Gazozlar, Doğal Maden ve Membed Suları), C. Diğer Sanayiler: 1. Tütün ve Mamulleri Sanayii, 2. Dokuma ve Giyim Sanayii, 3. Deri ve Deri Mamulleri Sanayii, 4. Orman Mamulleri ve Mobilya Sanayii, 5. Kağıt Sanayii'nden oluşur<sup>1</sup>. Bu makalede Çanakkale İli'nde tarıma dayalı sanayileri yukarıdaki gruptandırmayı esas alarak değerlendirmeye tabi tutacağız.

Tarım dayalı sanayiler, özellikle gelişmekte olan ülkelerin dış ticaretinde önemli bir yer tutar. İşlenmiş tarım ürünleri; katma değeri yüksek, fiyat dalgalanmalarından uzak ve geniş bir pazar yelpazesi bulabilen ürünlerdir. Tarıma dayalı sanayiler tarımsal üretiminin geliştirilmesine ve çeşitlenmesine neden olduğu gibi, tarımda girdi kullanımını teşvik etmektedir. Ayrıca sanayi-kir bütüleşmesini sağlayarak tarımsal üretimde yıldan yıla yaşanan üretim ve fiyat dalgalanmalarını önler. Sözleşmeli ekimi yaygınlaştırarak çiftçinin tarımsal kültürünü geliştirir, verimliliği düşük kırsal kitlenin üretim sürecine katılmasını sağlar ve bitkisel desenin çeşitlenmesine yol açar. Ayrıca çiftçinin düzenli bir

\* Bu makale, "Çanakkale İli'nde Tarıma Dayalı Sanayiler" adlı yayımlanmış kitap çalışmamın, kısa bir özet ve genel değerlendirmesi niteliğinde bir çalışmadır. Geniş bilgi için bakınız: Yaşar, O., 2003, Çanakkale İli'nde Tarıma Dayalı Sanayiler, Çantay Kitabevi, Melisa Matbaacılık, İstanbul

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<sup>1</sup> Yaşar, O., 2003a, Sanayi Coğrafyası Açısından Bir Araştırma: Türkiye'de Tarıma Dayalı Sanayiler, Çantay Kitabevi, Melisa Matb., İstanbul, s.29.