



A New Cherry Laurel Cultivar: 'Alis1'

Yeni Karayemiş Çeşidi: 'Alis1'

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A NEW CHERRY LAUREL CULTIVAR: 'ALIS1'

ABSTRACT

'Alis1' is a new cultivar of cherry laurel developed for table consumption. The aim of this study is to describe a new cherry laurel cultivar and to reveal fruit characteristics. Before the study, 32 promising types were determined by the selection study carried out in the Black Sea region between 2007-2010. One of these genotypes was encoded with T219. The type was propagated by cuttings in 2010-2011 and, planted in a trial plot with 6 plants in 2012. Yields started in 2015 and the results of the research covered the years 2017-2019. Fruit, cluster, seed and leaf characteristics of the 'Alis1' cherry laurel cultivar were observed and examined. The fruit characteristics of the 'Alis1' cultivar, including its size, weight, and color, were carefully observed and categorized. The fruit weight was 5.08 g, the fruit size was 19.72 mm, the fruit stem length was 4.65 mm, the seed weight was 0.40 g, the cluster length was 13.3 cm, the cluster weight was 47.94 g, and the number of fruits in the cluster was 9. Leaf width and length were determined as 4.79 cm and 17.40 cm, and annual shoot length was 67.89 cm. Cluster length, number of flowers in clusters and cluster weight are classified as "medium" and fruit size as "large". As a fruit, the 'Alis1' cultivar is the first registered cultivar in our country and in the world. As an evaluation, the 'Alis1' cultivar produces big sized fruits with a blackish fruit color. As a conclusion, the cherry laurel is an important and promising fruit species for our country as product diversity and alternative taste characteristics. Cherry laurel is used as a fruit and ornamental plant. Cultivar registration is commercially the first step for establishing an orchard and paving the way for production. This study and registration is important as diversity for Black Sea region.

Keywords: *Prunus laurocerasus* L., *Laurocerasus officinalis* Roemer, Cherry laurel, Cultivar, Registered Variety, Rootstock.



YENİ KARAYEMİŞ ÇEŞİDİ: 'ALIS1'

ÖZ

'Alis1' sofralık tüketim için geliştirilmiş yeni bir karayemiş çeşididir. Bu çalışmanın amacı tescil edilen bu yeni karayemiş çeşidinin tanımlanması ve meyve özelliklerinin ortaya konulmasıdır. 2007-2010 yılları arasında Karadeniz bölgesinde yapılan seleksiyon çalışması ile 32 ümitvar tip belirlenmiş idi. Bu genotiplerden biri T219 ile kodlanmıştır. 2010-2011 yıllarında çelikle çoğaltılan bu bireyler Ar-Ge parseline dikilmiştir. 2015 yılında verim alınmaya başlanmış olup araştırma

sonuçları 2017-2019 yıllarını kapsamaktadır. 'Alis1' karayemiş çeşidinin meyve, salkım, çekirdek özellikleri ile yaprak özellikleri incelenmiş, bitki gelişimi gözlenmiştir. 'Alis1' çeşidinin meyve ağırlığı 5.08 g, meyve büyüklüğü 19.72 mm, meyve sapı uzunluğu 4.65 mm, çekirdek ağırlığı 0.40 g, salkım uzunluğu 13.3 cm, salkım ağırlığı 47.95 g, salkımda meyve sayısı 9 olarak saptanmıştır. Yaprak eni ve boyu 4.79 cm ve 17.40 cm, yıllık sürgün uzunluğu 74.19 cm olarak tespit edilmiştir. Çiçek salkım uzunluğu, meyve salkımında çiçek sayısı ve meyve salkım ağırlığı "orta", meyve büyüklüğü "büyük" olarak sınıflandırılmıştır. Yaprak uzunluğu ve genişliği "uzun-orta" ve yaprak sapı uzunluğu "uzun" olarak tasnif edilmiştir. Karayemiş meyve ve süs bitkisi olarak kullanılan bir türdür. Meyve olarak 'Alis1' çeşidi ülkemizde ve dünyada ilk tescil edilen bir çeşittir. Bu çeşit aynı zamanda anaç olarak da tescillidir. 'Alis1' çeşidi genel olarak değerlendirildiğinde orta büyüklükte meyve, siyahimsi meyve rengi ve büyük ağaçlar oluşturmaktadır. Bu çalışma ile aşağıdaki hususlar önerilebilir. Karayemiş ürün çeşitliliği ve alternatif tat özelliği bakımından ülkemiz için önemli ve geleceği olan bir meyve türüdür. Ticari olarak çeşit tescili, bahçe kurulması ve üretimin önünün açılması için ilk basamaktır. Ürün çeşitliliği açısından bu çalışma ve tescil önem arz etmektedir. Bu çalışma ürün çeşitliliği ve tescil altına alma bakımından Karadeniz Bölgesi için önem taşımaktadır.

Anahtar Kelimeler: *Prunus laurocerasus*, *Laurocerasus officinalis* Roemer, Taf lan, Tescilli Çeşit, Anaç.



1. INTRODUCTION

The fruit genetic diversity is very high due to the very different ecological conditions and geographical structure in Türkiye. For this reason, Türkiye is the homeland of many fruit species and an important center of fruit culture in the world. Ecological conditions and geographical structure also create important genetic diversity in the Black Sea Region. There are different fruit and plant communities in the region. Cherry laurel is a species that has both fruit and ornamental plant characteristics. It also has medicinal and aromatic value.

Cherry laurel is an evergreen, shrub or tree type. It belongs to the family Rosaceae of the genus *Laurocerasus* DuRoi of the subfamily Prunoideae. The Latin name of this species is *Laurocerasus officinalis* Reomer or *Prunus laurocerasus* (L.) Mill. (Özbek, 1978). The Turkish name of this species is "karayemiş"; the synonym is "taflan" (İslam, 2005).

Cherry laurel plants are found in different areas of the world, especially in the southeast of Europe, the Balkans and Northern Iran. The natural distribution area of the plant in our country is the eastern regions of the Black Sea, the Caucasus,

the Taurus Mountains, the Northern and Eastern Marmara (Zeybek 1960; Anşın and Özkan 1993). Edible types located in the Black Sea region are generally used for table consumption. Cherry laurel trees grow naturally in the Black Sea region.

In the world, this species is mostly used as an ornamental plant. It is a tree with showy flowers. It is suitable for pruning and can be given different shapes. The habitus of cherry laurels differs from each other as leaf size and shape, flowering, flower boards, fruit color and sizes (İslam et al., 2010; Fat and Beyhan, 2024). On the other hand, it has been used in pharmacy (Güven and Geçgil, 1961; Baytop, 1999; Koç, 2003). Again, it has been shown in many studies that cherry laurels have medicinal value. The cultivated types differ to fruit shape, color, taste, size, and ripening time (İslam and Bostan, 1996; İslam, 2002; Turna and Güney, 2006; Macit, 2021). Cherry laurel fruits have a different taste and flavor than other of fruits. Peoples used as fresh consumption, drying, jam, marmalade, preserves and pickles. It is used in the food industry as a flavoring additive (Sülüşoğlu and Çavuşoğlu, 2009). Fruit powders are considered as an alternative to fresh fruit because they are always available (Ergüney et al., 2015). It is used as a diet; it gives a feeling of satiety. It is added to cakes and compotes to add taste and aroma. The molasse is reported to be rich in phenolic compounds (Liyana-Pathirana et al., 2006).

Cherry laurel juice obtained from the fresh and young leaves of cherry laurels is used as a sedative, cough suppressant, nausea reliever and pain reliever (Erdemoglu et al., 2001; Tanker et al., 2007). It is rich in phenolic substances, antioxidants, anti-carcinogens (İslam et al., 2020). It is stated that the antioxidants found in high levels in cherry laurels are effective against Alzheimer's, diabetes, tissue and skin diseases (Alaşalvar et al., 2005; Eser et al., 2014). It is included in the composition of eye lotions (Çankaya et al., 2018). It is stated that the amygdalin glycoside found in cherry laurels can be used as an alternative source for drugs used for the treatment of anemia, asthma, high blood pressure, vascular system, diabetes, migraine and tumors (Dursun and İslam, 2020). Dimethyl sulfoxide extract of cherry laurels has a selective cytotoxic effect on some cancer cells, especially colon cancer (Demir et al., 2017).

İslam (2005) evaluated the results obtained in the studies conducted in the Black Sea Region and emphasized the importance of cherry laurels for the region. Cherry laurel grows naturally in the Black Sea region, it is a fruit compatible with the climate of the region, and it is known that commercial cherry laurel cultivation will be a good source of income.

Some of the genotypes that are notable in the region (Su, Kiraz, Vavul, Selvi, etc.) have been highlighted and individuals that are valuable for table consumption have been selected through selection (İslam and Odabaş, 1996; Bostan, 2001; İslam, 2002; Bostan and İslam, 2003; Akbulut et al., 2007; Macit, 2008; İslam and Vardal, 2009; İslam et al., 2010; İslam and Deligöz, 2012; İslam et al., 2020).

Today, it is seen that many countries pay more attention to the research of new types of fruits. The characteristics of the species, production techniques, research on usage areas, culturing studies and dissemination of production are becoming increasingly important. Human beings are now trying to eat more consciously by looking for diversity in their taste and examining the medicinal values of foods.

In this study, it is aimed to reveal the fruit characteristics of the 'Alis1' the cherry laurel cultivar, which is the natural plant of the Black Sea Region registered by TTSM (TTSM:Tohumluk tescil ve sertifikasyon merkezi (Seed registration and certification center), the unit under the Ministry of Agriculture and Forestry).

2. MATERIALS AND METHODS

2.1. Material

This study was carried out in 2017 - 2019 in the research parcel located in the Karapınar neighborhood of Ordu province. Individuals with code number T219 were planted in 2012. The T219 type was collected Trabzon province within the Tübitak project scope (project number 107O252).

2.2. Method

This study was carried out based on the method used in İslam et al (2010). Fruit samples were taken from different parts of the tree in 20 clusters to represent the whole. A balance sensitive to 0.01 g was used in 20 fruits for weight measurements. A digital caliper sensitive to 0.01 mm was used to measure cluster, fruit and seed sizes, fruit stem length and thickness. Sensory, observation-counting was performed to determine fruit taste, astringency, uniformity, separation of the seed from the fruit flesh. The classification for registration is taken from the TTSM data bank (Anonymous, 2019).

3. RESULTS AND DISCUSSION

The origin of the 'Alis1' cherry laurel cultivar is the T219 coded selection material, which is promising in the evaluation made as a result of the TÜBİTAK project numbered 107O252 "Selection and propagation of cherry laurel grown in the Black Sea region".

Important pomological characteristics of the 'Alis1' cherry laurel cultivar are presented in Table 1. The fruit weight of the cultivar was 5.08 g, the fruit size was 19.72 mm, the fruit stem length was 4.65 mm, the seed weight was 0.40 g, the cluster length was 13.03 cm, the cluster weight was 47.95 g, and the number of fruits in the cluster was 9.29. Leaf width and length were 4.79 cm and 17.40 cm, and annual shoot length was 74.19 cm.

Table 1. Important pomological characteristics of the ‘Alis1’ cherry laurel cultivar

	Minimum Value	Maximum Value	Average Value	Standard Deviation
Fruit Weight (g)	4.16	6.23	5.08	±0.525
Fruit Width (mm)	17.04	22.72	19.83	±1.399
Fruit Length (mm)	17.45	22.32	19.60	±1.107
Fruit Size (mm)	17.25	22.42	19.72	±1.216
Fruit Stem Length (mm)	2.32	7.55	4.65	±1.343
Fruit Stem Thickness (mm)	1.47	2.53	1.77	±0.243
Seed Weight (g)	0.33	0.49	0.40	±0.043
Seed Width (mm)	7.01	9.95	8.46	±0.768
Seed Length (mm)	10.54	14.84	12.21	±0.843
Fruit/Seed Ratio	5.93	9.87	7.87	±0.325
Cluster Weight (g)	28.1	91.4	47.95	±15.374
Cluster Length (cm)	8.2	18.5	13.03	±2.147
Number of Fruits in the Cluster (pcs)	5	20	9.29	±3.475
Leaf Width (cm)	4	6	4.79	±0.589
Leaf Length (cm)	15	21.5	17.40	±1.554
Petiole Width (mm)	2.1	3.92	2.76	±0.432
Petiole Length (mm)	9.5	15	12.21	±1.456
Annual Shoot Length (cm)	41	115	74.19	±19.949

For the purpose of registration, some features are classified. Plant growth form is classified as “semi-upright”, inflorescence length and fruit cluster weight as “middle”, and fruit size as “large”. Plant growth are classified as “Very strong”, leaf shape is classified as “narrowly elliptical”, and leaf edge gearing is classified as “partially gearing” (Table 2,3).

Table 2. Basic features of the ‘Alis1’ cultivar*

Botanical Name	<i>Prunus Laurocerasus</i> L.
Species Name	Cherry Laurel
Cultivar Name	Alis1
Test Station Location	Ordu
Duration of the Test	2017-2018
Date of Registration	2019
Variance Report	Markedly Different from Other Varieties
Uniformity	Homogeneous Enough
The Main Characteristics of the Cultivar	Fixed

*: It has been presented according to the “Cultivar Specification Certificate” prepared by TTSM.

Table 3. Technical characteristics of the 'Alis1' cultivar *

Breeding Method	Selection
Plant Growth Force	Very Strong
Plant Growth Form	Semi-Upright
Plant Branching	A Lot
Shoot Color	Light Green
Branch Color	Brownish-Gray
Branch Lenticular Density	None or Very Little
Angle of the Side Shoots with the Main Branches	Medium
Sheet Length-Width	Tall-Medium
Petiole Length	Tall
Leaf Shape	Narrowly Elliptical
Leaf Tip	Pointed
Leaf Base	Narrow Angle
Leaf Edge Gearing	Partially Gearing
Inflorescence Time	Middle
The Number of Flowers in the Inflorescences	Medium
The Location of the Stigma Relative to the Stamens in the Flower	High
Fruit Cluster Length	Middle
Fruit Cluster Weight	Middle
Fruit Density in Cluster	Sparse
Fruit Size	Large
Fruit Stem Length	Medium
Fruit Shape	Heart
Fruit Color	Blackish
Pulp Color	Yellow
Fruit Firmness	Very
Breaking off the Fruit from the Stem	Easy
Fruit Taste	Middle
Seed Size	Medium
Seed Shape	Wide Elliptical
Separation of Seed from Fruit Flesh	Medium
The Beginning of Flowering	Medium
Time of Ripeness for Consumption	Early

*: It has been presented according to the "Cultivar Specification Certificate" prepared by TTSM.

Alis1
Prunus laurocerasus L.



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Figure 1. Some pictures showing the characteristics of the ‘Alis1’ cultivar*

*: It has been presented according to the “Cultivar Specification Certificate” prepared by TTSM.



Figure 2. Fruit cluster of 'Alis1' cultivar (Foto: A. İSLAM, 2022)

Fruit weight is one of the most important quality criteria in cherry laurels for table consumption. The fruit weight of the 'Alis1' cherry laurel cultivar is 5.08 g. Bostan and İslam (2003) reported that the fruit weight of the cherry laurel types grown in the central district of Trabzon province varied between 2.06-6.79 g. It is reported that the fruit weights of promising types in Ordu province vary between 1.47-6.24 g (İslam and Deligöz, 2012). Akbulut et al. (2007) reported that the fruit weight was 1.40-5.39 g, and Macit (2008) stated that in 2005-2006, the fruit weight of the promising 4 cherry laurel type was between 3.48-4.81 g in the Black Sea Agricultural Research Institute Ambarköprü trial area. The fruit of 'Alis1' cultivar is big compared to other cherry laurel types.

Cherry laurel fruits are located on clusters arranged on a single axis (Figure 2). The weight and length of the cluster and the number of fruits in the cluster are important. Similar studies were conducted in fruit or cluster in cherry laurel. The cluster weights of the selected types in the Ordu are 17.28-70.69 g; cluster lengths were 99.10-154.25 mm (İslam and Deligöz, 2012). Karadeniz and Kalkışım (1996) stated that cluster weights ranged 62.7 from 123.9 g in cherry laurel types grown in Akçaabat region. Macit (2008) found that the cluster weights of 4 cherry laurel types were between 13.31-40.20 g; the length of the cluster was between 7.67-12.50 cm in the trial orchard of the Black Sea Agricultural Research Institute. Akbulut et

al. (2007) found that the cluster weight was 5.84-57.82 g, Bostan (2001) found that the cluster weight of the Su cherry laurel local cultivar grown in Trabzon was 46.75 g. And İslam (2002), reported that the cluster weight of Kiraz cherry laurel local cultivar was 67.9 g. The results of the resources are similar.

The fruit/seed ratio is an important feature with regard to fruit quality. It is desirable that this rate is high. The fruit / seed ratio was 7.87 in 'Alis1' cultivar. İslam and Odabaş (1996) determined the fruit /seed ratios were between 4.39-7.35 in the cherry laurel selection study carried out in Vakfikebir. Macit (2008) determined the fruit /seed ratios between 5.23-7.78 in his study on selected 4 cherry laurel types. Karadeniz and Kalkışım (1996) reported that the fruit /seed ratios in 20 cherry laurel types were between 4.75-16.52. The fruit /seed ratio values in these studies are similar.

4. CONCLUSION

Cherry laurel is commonly grown in the Black Sea Region and consumed for different purposes such as table fruit, jam, molasses, pickles, etc. Cherry laurels are fondly consumed by the local people. The commercial cherry laurel production has not yet developed, and the fruits are frequently sold in neighborhoods and local markets.

'Alis1' cherry laurel cultivar is evaluated. It can be said that the cultivar has big sized fruits, early maturation, blackish fruit color and big sized trees.

It is recommended to establish regular cherry laurel orchards and used good cultural techniques. So, the yield will be increased and fruit quality characteristics will improve. As a result, the fruit will be better promoted, the market value will increase, and it will be a separate economic income for the growers.

It is important to continue the studies on cherry laurels and to determine the real value of this species by revealing its characteristics, and to improve the existing cultivation areas. It is also expected that the number of varieties will increase with regard to different characteristics.

Cherry laurel is a fruit and landscape species and also has medicinal and aromatic value. It is natural in Turkey's plant population. It is a promising fruit species in terms of product diversity and alternative taste characteristics. Because cherry laurel attracts attention with its different fruit taste. Some genotypes have different levels of bitter taste; some have a different flavor and taste.

A commercially registered cultivar is the first step towards establishing an orchard and leading to production. 'Alis1' can be used both as a cultivar and as a

rootstock. Detailed research can be done on this cultivar. Consumer preferences should be highlighted in registered varieties. Different genotypes should be registered and detail resources such as flowering biology, pollination, fruit set, fruit characteristics and quality, disease and pest control, post-harvest physiology, storage, health effects, processing technology, usage area, etc should be done on the registered cultivar.

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Conflict of Interest

For the certification process, the applicant institute is Ordu University, Faculty of Agriculture for registration. Prof. Dr. Ali İSLAM is that carried out the application and all research on the cultivar, and all rights of the cultivar belong to him.

REFERENCES

- Akbulut, M., Macit, İ., Ercişli, S., Koç, A. 2007. Evaluation of 28 cherry laurel (*Laurocerasus officinalis*) genotypes in the Black Sea region, Turkey. *New Zealand Journal of Crop and Horticultural Science*, 35, 463-465.
- Alaşalvar, C., Al-Farsi, M., Shahhidi, F. 2005. Compositional Characteristics and Antioxidant Components of Cherry Laurel Varieties and Pekmez. *Journal of Food Science*, 70(1), 47-52.
- Anonymous, 2019. Tarım Bakanlığı Tohumculuk tescil ve sertifikasyon merkez müdürlüğü. Ankara. <https://www.tarimorman.gov.tr/BUGEM/TTSM> (Erişim tarihi: 01/10/2024)
- Anşın, R., Özkan, Z.C., 1993. *Tohumlu Bitkiler (Spermatophyta). Odunsu Taksonlar*. K.T.Ü. Orman Fak. Genel Yayın No: 167, Fakülte Yayın No: 19, Trabzon, 512 s.
- Baytop, T. 1999. *Türkiye'de bitkiler ile tedavi*. Nobel Tıp Kitabevi. ISBN: 975-420-021-1 480s
- Bostan, S. Z. 2001. Pomological traits of "Su" cherry laurel. *Journal American Pomological Society*, 55(4), 215-217.
- Bostan, S. Z., İslam, A. 2003. Trabzon'da yetiştirilen mahalli karayemiş (*Prunus laurocerasus* L.) tiplerinin pomolojik ve fenolojik özellikleri. *Ondokuzmayıs Üniversitesi Ziraat Fakültesi Dergisi*, 18(1), 27-31.
- Çankaya, S., Öçsoy, İ., Kaçmaz, G., Çolak, C., İlgün, S., İldiz, N., Eken, A., Yusufbeyoğlu, S., Karaman, Ü., Baldemir, A. 2018. *Laurocerasus officinalis* Roemer (Taflan) meyve ekstraktlarından nano çiçek sentezi ile akantamobisidal aktivitenin artırılmasında yeni bir strateji. *Mikrobiyol Bul.* 52(1), 56-71
- Demir, S., Turan, İ., Demir, F., Ayazoğlu, E., Aliyazıcıoğlu, Y. 2017. Cytotoxic effect of *Laurocerasus officinalis* extract on human cancer cell lines. *Marmara Pharmaceutical Journal*, 21, 121-126
- Dursun, S., İslam, A. 2020. Karayemişte siyanür içerikli amigdalin ve prunasın miktarlarının belirlenmesi. *Akademik Ziraat Dergisi*, 9(2), 213 - 222
- Erdemoglu, N., Küpeli, E., Yesilada, E. 2001. Anti-inflammatory and antinociceptive activity assessment of plants used as remedy in Turkish folk medicine. *Journal of Ethnopharmacology*, 89, 123-129.
- Ergüney, E., Gülsünoğlu, Z., Firatlıgil-Durmus, E., Kılıç-Akyılmaz, M. 2015. karayemis tozu fiziksel özelliklerinin iyileştirilmesi. *Akademik Gıda*, 13(2), 108-114.
- Eser, M., Şentürkoğlu, S., Tunçdemir, M., Balcı, H., Karaca, Ç., Uslu, E., Atikeren, P., Karabulut, E., & İslam, A. 2014. *The antidiabetic effects of the fruits of 'Laurocerasus officinales Roemer' on pancreatic islands of streptozotocin-induced diabetic rats*, 18th International Microscopy Congress, Prag, September 7-12, pp.3398-3398
- Fat, A., Beyhan, N. 2024. Floral Bud Development of Cherry Laurel (*Laurocerasus officinalis* Roemer) in the Black Sea Region of Türkiye. *Applied Fruit Science*, 66(6), 2433-2442.

- Güven K.L., Geçgil, T.H. 1961. *Taftan suyu hazırlanması hakkında*. Eczacılık Bülteni No:3, s:17
- İslam, A., Deligöz, H. 2012. Ordu ilinde karayemiş (*Laurocerasus officinalis* L.) seleksiyonu. *Akademik Ziraat Dergisi*, 1(1), 37-44. <https://doi.org/10.29278/azd.132750>
- İslam, A. 2002. 'Kiraz' cherry laurel (*Prunus laurocerasus*). *New Zealand Journal of Crop and Horticultural Science*, 30, 301-302.
- İslam, A. 2005. Karayemiş yetiştiriciliği ve önemi. *Ege Karadeniz Dergisi*, 28(4), 25-32.
- İslam, A., & Bostan, S. Z. 1996. Ümitvar bir meyve: Karayemiş. *Ziraat Mühendisliği Dergisi*, 291, 21.
- İslam, A., Çelik, H., Aygün, A., Kalkışım, Ö. 2010. Selection of native cherry laurels (*Prunus laurocerasus* L.) in the Blacksea Region. In *International Conference on Organic Agriculture in Scope of Environmental Problems* 3(7).
- İslam, A., Karakaya, O., Gün, S., Karagöl, S., Öztürk, B. 2020. Fruit and biochemical characteristics of Selected Cherry Laurel Genotypes. *Ege Üniv. Ziraat Fak. Derg.*, 57 (1),105-110. DOI: 10.20289/zfdergi.601390
- İslam, A., Odabaş, F. 1996. Vakfıkebir ve çevresinde yetiştirilmekte olan karayemişlerin seleksiyon yoluyla ıslahı-I. *Yüzüncü Yıl Üniversitesi Ziraat Fakültesi Dergisi*, 6(4), 147-158.
- İslam, A., Vardal, E. 2009. Pomological characteristics of cherry laurel (*Prunus laurocerasus* L.) grown in Rize. *Acta Horticulturae*, 818, 133-136.
- Karadeniz, T., Kalkışım, Ö. 1996. Akçaabat'ta yetiştirilen karayemiş tiplerinde seleksiyon çalışması. *Yüzüncü Yıl Üniversitesi Ziraat Fakültesi Dergisi*, 6(1), 147-153.
- Koç, H., 2003, Lokman Hekimden Günümüze Bitkilerle Sağlıklı Yaşama. Kültür Bakanlığı Yayınları 2883, Kültür Eserleri Dizisi 373, Ankara.
- Liyana-Pathirana, C.M., Shahidi, F., Alasalvar, C. 2006. Antioxidant activity of cherry laurel fruit (*Laurocerasus officinalis* Roem.) and its concentrated juice. *Food Chemistry* 99,121-128
- Macit, İ. 2008. Karadeniz Bölgesi Karayemiş (*Prunus laurocerasus* L.) Seleksiyonu II. Aşama. *Ondokuzmayıs Üniversitesi Fen Bilimleri Enstitüsü, Yüksek Lisans Tezi (Basılmamış)*, Samsun, 47 s.
- Macit, İ. 2021. Evaluation of agronomic, bioactive and element status of promising cherry laurel (*P. laurocerasus*) accessions in the genetic collection by multivariate analysis. *Scientia Horticulturae*, 287, 110253.
- Özbek, S. 1978. *Genel meyvecilik*. Çukurova Üniversitesi Ziraat Fakültesi Ders Kitabı No:31, Adana, 386 s.
- Sülüşoğlu, M., Cavusoglu, A. 2009. Cutting propagation possibilities of natural Cherry Laurel (*Prunus laurocerasus* L.) of Turkey. *American-Eurasian Journal of Sustainable Agriculture*, 3(2):234-237
- Tanker, N., Koyuncu, M., Coşkun, M. 2007. *Farmasötik botanik*. Ankara Üniversitesi Eczacılık Fakültesi Yayınları, 93:288. Ankara.
- Turna, İ., Güney, D. 2006. Karayemiş (*Laurocerasus officinalis* Roemer)'in genel özellikleri ve odun dışı orman ürünü olarak değerlendirilmesi. *1st International Non-Wood Forest Products Symposium (01-05 Kasım 2006, Trabzon)*, *Bildiriler Kitabı*, 56-62.
- Zeybek, N. 1960. *Türkiye'nin Tıbbi Bitkileri. Kuzeydoğu Anadolu Bölgesi*. Ege Üniversitesi Tıp Fakültesi Yayınları, İzmir.