International Journal of Nature and Life Sciences

IJNLS

https://dergipark.org.tr/tr/pub/ijnls

e-ISSN: 2602-2397 https://doi.org/10.47947/ijnls.1436102

Research Article

Medicinal Plants Used in the Treatment of Some Diseases and Ailments in Şanlıurfa (Türkiye)

Hasan Akan [1,*], Ayşe Nur Alkış [2], Mehmet Sebih Polat [3]

[1] Harran University, Faculty of Arts and Sciences Department of Biology, Şanlıurfa, Türkiye; https://orcid.org/0000-0002-3033-4349

[2] Mehmet Akif Inan Education and Research Hospital, Şanlıurfa, Türkiye; https://orcid.org/0000-0002-8110-7189

[3] Ministry of National Education, Gölyazı Ünallar Secondary School, Nilufer, Bursa, Türkiye; https://orcid.org/0009-0001-9306-2360

*** Corresponding author:** hakan@harran.edu.tr

Received: February 13, 2024

Accepted: February 26, 2024

Online Published: March 8, 2024

Citation: Akan, H., Alkış, A. N., & Polat, M., S. (2024). Medicinal plants used in the treatment of some diseases and ailments in Şanlıurfa. International Journal of Nature and Life Sciences, 8 (1), 1-8. https://doi.org/10.47947/ijnls.1436102

Abstract: Medicinal plants; It is usually sold in markets or herb-sellers. Within the scope of this study, interviews were held with 10 herb-sellers and spice sellers who sell medicinal plants in Şanlıurfa, and it was determined that 65 different plants were used for phytotherapy purposes. It has been determined that the plants sold in herbalists are generally used for weight loss, gynecological diseases, colds, digestive system, urinary tract, respiratory, diabetes, cardiovascular and cholesterol diseases and as a sedative. It has been determined that medicinal plants sold in herbalists are mostly sold singly and sometimes in mixtures. Photographs of the plants and compounds in the herb-sellers and spice shops where the research was conducted were taken, and the scientific and local names of the plants and compounds were also included.

Keywords: Medicinal plants; Phytothreapy; Herb-sellers; Şanlıurfa.

1. Introduction

Medicinal plants; It has been used in different areas such as medicine, food, perfumery and cosmetics since ancient times. "Phytotherapy", which means "treatment with medicinal plants", mostly investigates the use of herbal-based drugs in treatment (Çubukçu et al., 2002). Nowadays, it is gaining importance under the name of “alternative medicine”, “traditional medicine” or “complementary medicine” (Ersöz, 2012; Kırıcı, 2015). Medicinal plants have gained importance through trial and error since ancient times (Faydaoğlu and Sürücüoğlu, 2011). Due to the side effects of synthetic drugs, herbal treatment has become more important in recent years (Sarışen and Çalışkan, 2005). According to World Health Organization (WHO) data, 70% of the world population benefits from "traditional medicine" (3). It is assumed that the number of medicinal plant species used is around 70,000 (Başaran, 2012). It has been reported that there are around 600 naturally growing medicinal plant species in Turkey (Baytop, 1984).

In rural areas, plants grown or cultivated in the environment are often used to treat diseases. In cities, medicinal plants are generally obtained from herbalists. Herbal products are sold in our country in pharmaceutical forms such as raw drugs, tablets, capsules or as tea. Most of these products can be delivered to the public through herbalists. The word “Aktar” comes from the Arabic word “akarir”, which means drugs (Akbulut and Özkan, 2016). Treatment with herbs is at its highest level in Şanlıurfa. The number and variety of medicinal plants sold in herbalists in Şanlıurfa is increasing day by day. Local people often prefer herbs sold in folk medicine (Ersin and Aksoy, 2004).

Plants sold in herbalists are generally used for weight loss, gynecological diseases, colds, digestive system, urinary tract, respiratory, diabetes, cardiovascular and cholesterol diseases and as a sedative. It has been determined that treatment with plants is mostly carried out by using plants individually, although plants are also recommended in the form of mixtures.

The purpose of this research; The aim is to determine the plants sold for phytotherapy purposes in some herbalists in Şanlıurfa, to investigate which diseases they are preferred in the treatment of, and to investigate the public's interest in medicinal plants. We believe that this research will fill a gap in the field of phytotherapy.

As a result of literature searches, studies (Akan et al., 2005; Aslan, 2013; Akan and Bakır, 2015; Aslan, 2018; Cançelik, 2020; Ötnü and Akan, 2020; Yıldız, 2020; Alkış, 2021; Yalçın et al., 2021a,b; Çakır and Akan, 2023) related to phytotherapy are given.

2. Materials and Methods

This study was conducted to detect the herbal products sold for phytotherapy purposes in some herbalists in the center of Şanlıurfa between 2016 and 2017. The research was conducted in Hashimiye Square, where herbalists and spice shops are concentrated. Examinations were made in 10 herbalists and spice shops selling medicinal plants in Şanlıurfa. The herbalists and spice shops visited are:

- Attar Isa,
- Halil Demirkol, son of Attar İsa
- Yenişehir Attar Market,
- Yunus Emre Medicinal Plants,
- Bahçelievler Attar Market,
- Nurs Lokman-ı Hekim
- Basil Herbal products,
- Attar Hacı Yusuf,
- Bağlarbaşı Attar.
- Dedeoğlu Baharat

Face-to-face and one-on-one interviews were held to collect information about the use of medicinal plants (Fig 1.). The answers to the questions asked to the herbalists during the face-to-face interviews were noted down and arranged by transferring them to the previously prepared ethnobotanical information forms . Questions were asked to herbalists and spice sellers, such as the local names of the plants, the purpose for which they were sold and where the plants were obtained.

Some general images taken from herbalists are given in the Appendices section. As a result of the interviews, the local names and medicinal uses of the plants sold were determined. Plant materials obtained from herbalists and spice sellers were evaluated in this study, and scientific diagnoses of the samples were made using the relevant literature (Davis, 1965-1985; Davis et al., 1988; Güner et al., 2000). The obtained plant samples are kept in the Harran Herbarium.

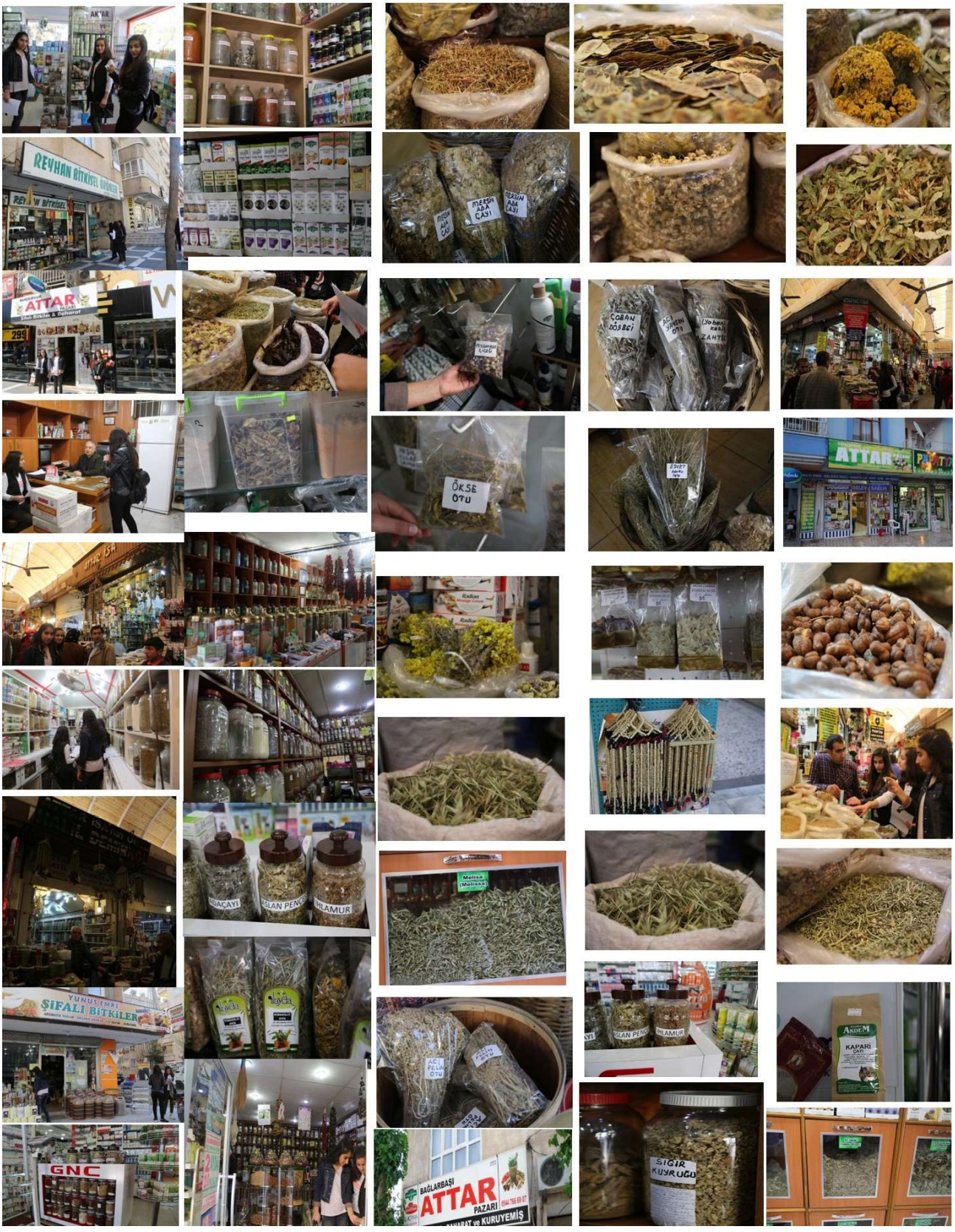

Figure 1. General images of some herb-sellers and some medicinal plants sold from herb-sellers in Şanlıurfa.

3. Results

The local and scientific names and intended uses of the medicinal plants obtained within the scope of this study are given in Table 1. Table 1 lists medicinal plants used in the treatment of diseases and disorders.

Table 1. Medicinal plants used in the treatment of some diseases and disorders in Şanlıurfa.

Scientific name of plant	Vernacular name	Name of the disease or illness for which the plant is used
Acorus calamus L.	Eğirkökü	Nausea and pain, preventing prostate enlargement
Achillea millefolium L.	Civanperçemi	Hemorrhoids, menopause, stomach bleeding, gallbladder disorders
Alpinia officinarum Hance	Havlıcan	Indigestion, headaches and dizziness, diuresis, digestive system, expectoration
Anethum graveolens L.	Dereotu	Indigestion, osteoporosis, infection prevention
Artemisia absinthium L.	Pelinotu	Gallbladder disorders, intestinal disorders, sexual desire, skin disorders, fever reduction
Bellis perennis L.	Çayır papatyası, koyungözü	Indigestion, menopause, gastrointestinal disorders, wound treatment, cough and cold
Camellia sinensis (L.) Kuntze	Yeşil çay	Preventing prostate enlargement, forgetfulness and poor memory, high cholesterol
Capsicum annuum L.	Kırmızıbiber	Protection from cancer, strengthening the immune system, stomach and digestive pains
Cassia acutifolia Delile	Sinemaki	Preventing constipation and edema disorders
Ceratonia siliqua L.	Hünnap, keçiboynuzu	Sexual potency enhancer, infertility treatment, asthma and bronchitis, cold, cough and chest diseases
Ceterach officinarum (L.) DC.	Dalakotu	Kidney diseases, antitussive and diuretic
Cichorium intybus L.	Hindiba	Liver disorders, diuretic, aids bowel movements
Cinnamomum verum J. Presl.	Tarçın	Menopause, high sugar, relaxing the intestines, increasing immunity, oral and dental treatment
Crataegus monogyna Jacq.	Alıç	Heart diseases, diabetes and asthma, strengthening the immune system
Crocus sativus L.	Safran	Increasing sexual potency, treating inflammation, asthma and respiratory diseases
Cuminum cyminum L.	Kimyon	Indigestion, anemia, stomach and intestinal disorders
Curcuma longa L.	Zerdaçal	Liver disorders, prostate enlargement, strengthening the immune system, reducing muscle and joint pain
Cynara scolymus L.	Enginar yaprağı	Liver disorders, cancer treatment, regulating bowel movements
Echinacea purpurea (L.) Moench	Ekinezya	Cold, chills and cough, strengthening the immune system, reducing inflammation
Elettaria cardamomum (L.) Maton	Kakule	Increasing sexual potency, Indigestion, forgetfulness and memory weakness, Fatigue
Elymus repens (L.) Gould	Ayrıkotu	Kidney diseases, inflammation treatment, refreshing feature
Equisetum arvense L.	Atkuyruğu	Helps with kidney diseases, rheumatism pain, regulating blood sugar, removing edema
Eucalyptus camaldulensis Dehnh.	Okaliptus yaprağı, sıtma ağacı	Treatment of colds, chills and coughs, expectoration, skin wounds
Foeniculum vulgare Mill.	Rezene	Indigestion, constipation, stress, depression and anxiety, sleep disorder, lowering high blood pressure, relieving stomach bloating
Glycyrrhiza glabra L. var *glabra*	Meyankökü	Increase sexual potency, cold, chills and cough, fatigue
Helichrysum arenarium (L.) Moench	Altınotu, ölmez çiçek	Relieving gallbladder disorders, urinary tract infections, joint and muscle pain
Humulus lupulus L.	Şerbetçi Otu	Stress, depression, and anxiety, sleep disturbance
Hypericum perforatum L. subsp. *perforatum*	Kantaron	Stress, depression and anxiety, burn treatment, skin problems, preventing hair loss,

Ilex paraguariensis A. St.-Hil.	Mate	Slimming tea, sedative
Juniperus communis L.	Ardıç	Relieves cold, cough and rheumatism pain, regulates blood sugar
Lavandula angustifolia Mill.	Lavanta	Relieving rheumatism pain, stress, depression and anxiety, eliminating sleep problems, preventing high blood pressure.
Leontice leontopetalum L.	Aslan Pençesi, kırbaş	To prevent menopause, uterine and prostate cancers
Linum usitatissimum L.	Keten	Anti-constipation, blood pressure and digestion regulator
Lycopodium clavatum L.	Kurtpençesi	Liver disorders, stopping bleeding and vaginal discharge, treating gum disease
Malva sylvestris L.	Ebegümeci, tolik	Cold, chills and cough
Matricaria chamomilla L.	Papatya	Rheumatic pain, cold, chills and cough, stress, depression, and anxiety, sleep disorder
Melissa officinalis L. subsp. *officinalis*	Oğulotu	Rheumatic pain, stress, depression, and anxiety, sleep disorder
Mentha aquatica L.	Nane	Nausea and pain, cold, chills and cough
Mercurialis annua L.	Sultanotu	Hemorrhoids, boosting the immune system, against flu infections
Momordica charantia L.	Kudret narı	High sugar, regulating breathing and blood circulation, eye health treatment, removing toxins from the body
Myrtus communis L. susbp. *communis*	Mersin	Prevent high sugar, soothe stomach, diuretic, prevent eye inflammations
Olea europaea L. subsp. *europaea*	Zeytin yaprağı	upper respiratory tract infection, strengthening the immune system
Pimenta racemosa (Mill.) J.W.Moore	Yenibahar	Indigestion, preventing arteriosclerosis, increasing body resistance, muscle aches
Pimpinella anisum L.	Anason	Sleep disturbance, indigestion, menopause, rheumatic pain, stress, depression, and anxiety
Plantago major L. subsp. *major*	Sinir otu	Constipation, asthma and diabetes treatment, asthma and bronchitis treatment
Primula vulgaris Huds.	Çuha çiçeği	Sleep disorder, nervous system regulator, against flu infections, blood pressure regulator
Prunus mahaleb L.	Mahlep	High blood sugar, breath and asthma treatment, cardiovascular diseases, expectorant
Rhus coriaria L.	Sumak	Stomach bleeding, vascular health treatment, hemorrhage stopper, herpes treatment
Rosa canina L.	Kuşburnu	Hemorrhoids, stomach bleeding, fatigue, high cholesterol
Rosmarinus officinalis L.	Biberiye	Rheumatic pain, forgetfulness and poor memory, fatigue, figh cholesterol
Ruta chalepensis L.	Sedef otu	Against blood pressure and circulatory disorders and externally against rheumatism
Salvia fruticosa Mill.	Adaçayı	Menopause, forgetfulness and memory loss, fatigue
Silybum marianum (L.) Gaertn. subsp. *marianum*	Meryemana dikeni	Liver disorders, asthma and cold treatment, edema, fever and hepatitis treatment
Syzygium aromaticum (L.) Merr. & L.M. Perry	Karanfil	Cold, chills and cough, rheumatism pains
Taraxacum officinale L.	Karahindiba	Gallbladder disorders, kidney and skin health, blood sugar regulation, strengthening the immune system
Teucrium polium L. subsp. *polium*	Talik, ca'de, acı ot	Indigestion, diuretic, anti-inflammatory, relieves menstrual and abdominal pain
Thuja occidentalis L.	Mazı	Hemorrhoids, hair growth aid, antiallergic and antiviral
Thymbra capitata (L.) Cav.	Kekik	Rheumatic pain, fatigue, high cholesterol
Tilia cordata Mill.	Ihlamur	Cold, chills and cough

Tribulus terrestris L.	Demirdikeni, çobançökerten	Increasing sexual potency, reducing stones, removing vascular occlusion
Urtica urens L.	Isırganotu	Cancer prevention, prostate enlargement
Valeriana officinalis L.	Kediotu	Sleeping disorder
Viscum album L.subsp. *album*	Ökseotu	Heart diseases, cancer prevention
Vitis vinifera L.	Üzüm çekirdeği	High cholesterol, wound healing, skin protective
Zingiber officinale Roscoe	Zencefil	Elimination of sexual reluctance, indigestion, hemorrhoids, nausea and pain, cold, chills and cough, forgetfulness and memory weakness, fatigue, high cholesterol

This study was conducted between 2016-2017. It was aimed to determine the herbal products sold for phytotherapy purposes in some herb-sellers in the center of Şanlıurfa. It was determined that 65 plants were sold for different diseases and illnesses in 10 herbal shops in Şanlıurfa. Some plants sold in herb-sellers are collected from throughout the province, while some of plants are brought from herbal wholesalers in İstanbul, Ankara and Mersin.

4. Discussion

It has been observed that some herbs are sold for more than one disease or illness in herb-sellers. Among these; Species such as *Acorus calamus, Achillea millefolium, Camellia sinensis, Curcuma longa, Ceratonia siliqua, Elettaria cardamomum, Foeniculum vulgare, Matricaria chamomilla* and *Zingiber officinale* can be given as examples. For example, *Zingiber officinale* is sold for the treatment of many different ailments such as sexual reluctance, indigestion, hemorrhoids, nausea and pain, colds, chills and cough, forgetfulness and memory impairment, fatigue and high cholesterol. The fact that these plants are used in the treatment of multiple diseases has also been confirmed by studies such as (Ötnü and Akan, 2020; Aslan, 2018; Yalçın et al., 2021a, b; Alkış et al., 2021).

The medicinal plants used in the treatment of some diseases and disorders given in Table 2 can be summarized as follows when classified under subheadings:

a) Plants sold in herb-sellers for stomach disorders: *Acorus calamus, Achillea millefolium, Zingiber officinale, Mentha aquatica, Rhus coriaria, Myrtus communis, Rosa canina, Foeniculum vulgare, Bellis perennis* and *Cuminum cyminum*

b) Some plants sold in herb-sellers to prevent prostate enlargement: *Acorus calamus, Camellia sinensis, Curcuma longa, Leontice leontopetalum, Urtica* urens and *Valeriana officinalis.*

c) Some plants sold in herb-sellers for the treatment of hemorrhoids: *Thuja occidentalis, Rosa canina, Zingiber officinale, Mercurialis annua* and *Achillea millefolium.*

d) Plants sold by herb-sellers for liver disorders: *Salvia fruticosa, Silybum marianum, Lycopodium clavatum, Cuminum cyminum, Curcuma longa*, *Cichorium intybus* and *Cynara scolymus*

e) Plants sold to increase sexual potency: *Artemisia absinthium, Ceratonia siliqua, Zingiber officinale* and *Tribulus terrestris*

f) Plants sold for menopause treatment: *Achillea millefolium, Bellis perennis, Cinnamomum verum, Leontice leontopetalum, Pimpinella anisum and Salvia fruticosa*

g) Plants sold for heart diseases: *Crataegus monogyna, Prunus mahaleb* and *Viscum album.*

h) Plants sold for the purpose of preventing constipation: *Cassia fistula, Foeniculum vulgare* and *Linum usitatissimum*

Table 2 shows the situation that emerged as a result of comparing the results of this research with other similar studies.

Table 2. Comparison of our research with other studies.

Name of study	Number of medicinal plants
Medicinal plants sold in Şanlıurfa (Aslan, 2013)	27
Kahta and narince medicinal plants (Akan and Bakır, 2015)	48
Plants sold for phytotherapy purposes in pharmacies and herb-sellers in Şanlıurfa (Ötnü and Akan, 2020)	144
Medicinal plants sold in herb-sellers in Suruç District (Yalçın et al., 2021a)	88
Plants sold for weight loss in Şanlıurfa (Alkış et al., 2021)	40
Present study	65

Looking at Table 2, when compared in terms of the number of medicinal plants sold, it is seen that it is close to the number of plants sold in herb-sellers in Suruç district (Yalçın et al., 2021a). One of the reasons why the number of plants was 144 in the study conducted by Ötnü and Akan (Ötnü and Akan, 2020) is that pharmacies were also included in this study.

In recent years, we see that there is an interest in medicinal plants. As a matter of fact, as seen in previous studies (Ötnü and Akan, 2020; Aslan, 2018; Yalçın et al., 2021a, b; Alkış et al., 2021)., it was determined that patients resorted to supportive or alternative methods, especially herbal treatment.

5. Conclusions

It has been observed that there are serious problems in storing the plants sold. It was concluded that the plants were sold uncovered and therefore more attention should be paid to the plant storage conditions. It is recommended that herb-sellers receive in-service training and be trained in the use of plants.

Conflicts of Interests
Authors declare that there is no conflict of interests

Financial Disclosure
Author declare no financial support.

Statement contribution of the authors
This study's experimentation, analysis and writing, etc. all steps were made by the authors.

Acknowledgements: We would like to thank the herb-sellers and spice sellers who shared their knowledge with us, Dr. Maruf Balos and his high school students who participated in voluntary studies; Zilan Hatice Taş, Vesfa Karataş and Gamzegül Ağkaya who helped with the field studies.

References

1. Akan, H., & Bakır, S. Y. (2015). Kahta (Adıyaman) merkezi ve Narince köyünün etnobotanik açıdan araştırılması. Bitlis Eren Üniversitesi Fen Bilimleri Dergisi, 4 (2), 219-248.
2. Akan, H., Aslan, M., & Balos, M. M. (2005). Şanlıurfa kent merkezindeki semt pazarlarında satılan bazı bitkiler ve kullanım amaçları. Ot Sistematik Botanik Dergisi, 12 (2), 43-58.
3. Akbulut, S., & Özkan, Z. C. (2016). Herbalist-customer profile in medicinal and aromatic herbs trade: a case study of Kahramanmaraş, Turkey. Kastamonu University Journal of Forestry Faculty, 16 (1), 246-252.
4. Alkış, A.N., Parmaksız, A., & Akan, H. (2021). Investigation of medicinal plants used for weight loss in herbal markets of Şanlıurfa, birth place of Abraham, Turkey. Journal of Medicinal Plants, 9, 48-58.
5. Aslan, M. (2013). Plants used for medical purposes in Şanlıurfa (Türkiye). Kahramanmaraş Sütçü İmam Üniversitesi Doğa Bilimleri Dergisi, 16 (4), 28-35.
6. Aslan, M. (2018). Şanlıurfa il merkezinde aktarlarında satılan tıbbi ve aromatik bitkiler ve kullanımı. Journal on Mathematic, Engineering and Natural Sciences (EJONS), 2 (5), 113-120.
7. Başaran, A. A. (2012). Türkiyedeki bitkisel ilaçlar ve ürünlerde yasal durum. Türk Eczacıları Birliği Meslek İçi Sürekli Eğitim Dergisi, (27-28), 22-26.
8. Baytop, T. (1984). *Türkiye'de Bitkiler ile Tedavi.* İstanbul Üniversitesi Yayını No. 3637, İstanbul: İstanbul Üniversitesi Eczacılık Fakültesi Yayın No: 40. pp. 240-376.
9. Cançelik, M. (2020). Field Research on the Medical Aromatic Plant Selling Enterprises (Aktar/Attar) in Şanlıurfa, in Current Researches in Economics and Administrative Sciences, 1st ed., Y. A. Unvan & İ. Serbestoğlu, Eds. Cetinje-Montenegro: Ivpe, pp. 25-48.
10. Çakır, D., & Akan, H. (2023). A review on medicinal plants used for women's diseases and health in Anatolia (Turkey). International Journal of Nature and Life Sciences, 7 (2), 36-54.
11. Çubukcu, B., Sarıyar, G., Meriçli, A. H., Sütlüpınar, N., Mat, A., & Meriçli, F. (2002). *Fitoterapi Yardımcı Ders Kitabı.* İstanbul Üniversitesi Eczacılık Fakültesi Yayın No: 79, İstanbul: İstanbul Üniversitesi Basım ve Yayınevi Müdürlüğü.
12. Davis, P. H., (1965-1985). *Flora of Turkey and the East Aegean Island* (Vol. 1-9). Edinburgh UK.: Edinburgh University Press.
13. Davis, P. H., Miller, R. R., & Kit, T. (1988). *Flora of Turkey and the East Aegean Island* (Vol. 10). Edinburgh UK.: Edinburgh University Press.

14. Ersin, F., & Aksoy, Ş. (2004). Şanlıurfa'da bir halk hekimi attar İsa. Türkiye Klinikleri Journal of Medical Ethics-Law and History, 12 (2), 87-91.
15. Ersöz, T. (2012). Bitkisel ilaçlar ve gıda takviyeleri ile ilgili genel yaklaşım ve sorunlar. Türk Eczacıları Birliği Meslek İçi Sürekli Eğitim Dergisi (MİSED), (27-28), 9-19.
16. Faydaoğlu, E., & Sürücüoğlu, M. S. (2011). Geçmişten günümüze tıbbi ve aromatik bitkilerin kullanılması ve ekonomik önemi. Kastamonu Üniversitesi Orman Fakültesi Dergisi, 11 (1), 52-67.
17. Güner, A., Özhatay, N., Ekim, T., & Başer, K. H. C. (2000). *Flora of Turkey and the East Aegean Islands* (Vol.11). Edinburgh UK.: Edinburgh University Press.
18. Kırıcı, S. (2015). Türkiye'de tıbbi ve aromatik bitkilerin genel durumu. Türktob, Türkiye Tohumcular Birliği Dergisi, 15, 4-11.
19. Ötnü, H., & Akan, H. (2020). Şanlıurfa'daki eczanelerde ve aktarlarda fitoterapi amaçlı satılan bitkiler. Kahramanmaraş Sütçü İmam Üniversitesi Tarım ve Doğa Dergisi, 23 (4), 947-965.
20. Sarışen, O., & Çalışkan, D. (2005). Fitoterapi: Bitkilerle tedaviye dikkat. Sürekli Tıp Eğitimi Dergisi (Sted), 14 (8), 182-187.
21. Yalçın, S., Akan, H., & Çakılcıoğlu, U. (2021). Suruç ilçesindeki (Şanlıurfa-Türkiye) aktarlarda satılan şifalı bitkiler. International Journal of Nature and Life Sciences, 5 (1), 40-51.
22. Yalçın, S., Akan, H., & Çakılcıoğlu, U. (2021). Suruç'ta (Şanlıurfa-Türkiye) Bazı şifalı bitkilerin geleneksel kullanımları. Türk Doğa ve Fen Dergisi, 10 (1), 236-244.
23. Yıldız, A. (2000). Aktar İsa. Şanlıurfa Memleket Dergisi, 5 (26), 1-30.