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ORIGINAL RESEARCH PAPER

Medicinal plants used in the Uzunköprü district of Edirne, Turkey

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Abstract

This study examined the use of plants in Uzunköprü and surrounding villages in the years 2013–2015 during the flowering and fruiting season of the studied plants (March–October). Interviews were carried out face-to-face with members of the community. Fifty-seven people in 55 villages were interviewed. Overall, medicinal plants from 96 taxa belonging to 45 families were recorded. Traditional medicinal plants were used to treat 80 diseases and ailments such as diabetes, cold, flu, cough, stomachache, and hemorrhoids. According to the results, the largest eight families are Rosaceae, Lamiaceae, Asteraceae, Poaceae, Ranunculaceae, Malvaceae, Cucurbitaceae, and Brassicaceae. The most commonly used species were *Anthemis cretica* subsp. *tenuiloba*, *Cotinus coggyria*, *Datura stramonium*, *Ecballium elaterium*, *Hypericum perforatum*, *Prunus spinosa*, *Pyrus elaeagnifolia* subsp. *bulgarica*, *Rosa canina*, *Sambucus ebulus*, *Tribulus terrestris*, *Urtica dioica*. The herbarium numbers, Latin and local names, families, village numbers, parts used, usage forms, and uses were listed alphabetically in a table. In this study, 219 local names were identified.

Keywords

medicinal plants; therapy; traditional; Uzunköprü

Introduction

Turkey is rich in flora and approximately 12 000 species of plants are growing there naturally [1–5]. Thanks to its geographical location, geomorphologic structure, and influence of various climate types.

Taxonomy generally starts with Theophrastus (around 370–287 BC). However, people who cultured various plants and used natural resources for medical purpose in Anatolia, China, Egypt, and Central America around 8000 BC definitely had a rich knowledge on plant uses. Hippocrates (460–377 BC) lived on Kos (İstanköy) Island, which is across Bodrum. Also, Dioscorides (30–90 AD), a doctor who was born near Tarsus (Cilicia) and lived in Anatolia, described approximately 600 plants with medical properties. He wrote a book entitled *De materia medica* and this work has been the guidebook for doctors for 15 centuries. In this book, mostly Mediterranean plants were described. For instance, the picture and properties of *Mandragora* (mandrake) plant is presented in this book. This scholar, who travelled a lot, visited Greece, Italy, France, and Turkey. In the Middle Ages, Avicenna's (980–1037 AD) book entitled *The canon of medicine* was the greatest classic. In the twelfth century, ibn Al-Awam described approximately 600 plants [6,7].

Plants have been used by human beings for centuries. In Anatolia, the first ethnobotanical studies have been mostly on medicinal plants [8,9]. Local people are using the plants which grow naturally in proximity for many purposes, for example for medicine, food, fodder, decoration, fuel, toys, crafts, and ornaments. The studies performed in recent years exhibit the considerable importance of the utilization of the plants by the

local people [7–41]. These researchers report that today there are about 20 000 plant species used for medicinal purposes in the world and 600 of these are known to be grown in Turkey. There have been some ethnobotanical studies carried out in Thrace previously [13,14,42–48].

Akalin and Alpinar [42] recorded 58 wild medicinal and edible plants in Tekirdağ.

Ecevit Genç and Özhatay [43] reported 68 flowering plant species used medicinally in Çatalca (European part of Istanbul). Among them, 58 taxa are wild and 10 taxa are cultivated plants which are mostly used for the treatment of stomach and kidney ailments, cough, diabetes, inflammation, and rheumatism.

Tuzlaci and Alpaslan [44] recorded 62 folk medicinal plants from Babaeski (Kırklareli). Among them, 46 species are wild and 16 species are cultivated plants. The folk medicinal plants are mostly used for the treatment of kidney, stomach, and prostate ailments, rheumatism, cold, hemorrhoids, diabetes, asthma, and bronchitis.

Kültür [13] investigated the use of medicinal plants in Kırklareli. The study includes the local names of 126 medicinal plants belonging to 54 families, and among them 100 species were wild and 26 species were cultivated plants. The traditional medicinal plants have been mostly used for the treatment of wounds, cold and influenza, stomach, cough, kidney ailments, diabetes.

Kültür [14] recorded the local names and uses for food, tea, fodder, spice, and dye purposes of 105 species belonging to 50 families from Kırklareli.

Kültür and Sami [45] investigated 68 species belonging to 32 families and 62 genera of folk medicinal plants of İsperih (Razgrad) center and its villages from Bulgaria. Among them, 44 taxa are wild and 24 taxa are cultivated plants. They reported that the folk medicinal plants have been mostly used for treatment of hypertension, cold and influenza, stomach diseases, and wounds.

Tuzlacı et al. [49] recorded the use of 55 species belonging to 25 families of folk medicinal plants by the community of Lalapaşa and villages from Edirne. Among them, 44 taxa are wild and 11 taxa are cultivated plants. The folk medicinal plants are mostly used for stomach ailments, hemorrhoids, diabetes, cold, and warts.

Bulut [47] reported that 35 species are used as folk medicine in the Silivri region. Among them, 25 species are wild and 10 species are cultivated plants. In this study, the folk medicinal plants are mostly used for stomach ailments, cough, hemorrhoids, rheumatism, cold, eczema, and diabetes. Decoction and infusion are the methods mostly used for the preparation of the folk medicine. *Helleborus orientalis* Lam. and *Juglans regia* L. are used only in animal treatment.

There has been no ethnobotanical study performed in the Uzunköprü area before about the local names and ethnobotanical properties of the plants.

The aim of this study was to determine the plants used for medicinal purposes by the local people in the province of Uzunköprü and its villages.

Material and methods

Study site

The study was carried out in March–October in the years of 2013–2015, the seasons when the plants are in bloom and bear fruits, in Uzunköprü and surrounding villages. Uzunköprü is a district of Edirne, which is located in Thrace, the European part of Turkey ($41^{\circ}16'17''$ N and $26^{\circ}41'69''$ E) (Fig. 1). It has an area of 1224 km² and an altitude of about 18 m a.s.l. The majority of the population consists of the immigrants from the Balkans. There are many Turkish immigrants from Bulgaria, Jugoslavia, Greece, and Romania in the area. There are 55 villages and its population is 63 193 according to the address-based census of 2014. The Uzunköprü Mountains are located southeast of the district. They are covered with oak forests and shrubland. Süleymaniye Hill is the highest point that is 378 m [45]. In this place, Mediterranean and continental climates meet with each other. Summers are hot, the winters are cold and snowy. Most rain falls in spring. The highest temperature throughout the year is 41.5°C (July) and the lowest –22.2°C (January). The natural vegetation is steppe. The district's land consists of meadows and pastures (15%), forest and heathland (10%), and agriculture (75%) [49].

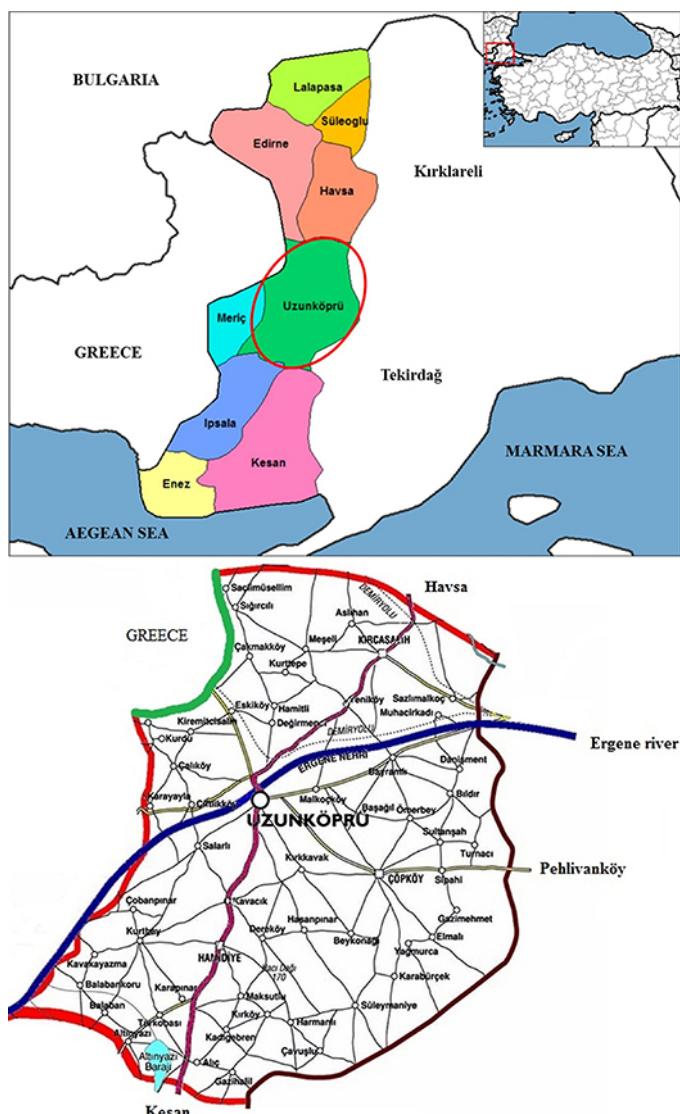


Fig. 1 The map of Uzunköprü and villages.

The Ergene River basin has been determined as “important plant areas of Turkey”. The European part of Turkey (Thrace) covers 23 500 km² and has approximately 2500 vascular plant species belonging to 145 families [50].

Field study

In this study, 55 villages were visited and interviews were performed with elderly people of the villages, 57 persons in total, in various places such as at their own houses, in the fields, and tea houses. Interviews were carried out face-to-face with the community. The detailed questions were asked how and when the useful and harmful plants are used. The characteristics of the people participating are shown in Tab. 1. The numbers representing each village are given below. At the end of the field studies, 257 specimens were collected. The identification of the plant species determined to be in use was based on *Flora of Turkey and East Aegean Islands* [1,2,4], *The flora of European Turkey* [3], the list of flowering plants and ferns of Thrace (unpublished material), and *List of Turkey plants* [5]. The voucher specimens are kept in Trakya University, Faculty of Pharmacy, Department of Pharmaceutical Botany.

Results

In Uzunköprü district and its villages, 96 plant taxa belonging to 45 families were used by the local people (Tab. 2). The herbarium numbers, Latin name of the plants, local names, families, village number, part used, usage form, and uses were listed alphabetically. Among them, 66 taxa

are wild and 30 taxa are cultivated plants. Eighty diseases are cured by the plants used. In this study, 219 local plant names were determined.

According to the results, the largest eight families are Rosaceae (13 taxa), Lamiaceae (11 taxa), Asteraceae (10 taxa), Poaceae (four taxa), Ranunculaceae (four taxa), Malvaceae (three taxa), Cucurbitaceae (three taxa), Brassicaceae (three taxa).

The most commonly used species are *Arum maculatum*, *Cerasus avium*, *Cotinus coggyria*, *Cydonia oblonga*, *Datura stramonium*, *Ecballium elaterium*, *Ficus carica*, *Hypericum perforatum*, *Juglans regia*, *Matricaria chamomilla*, *Menta spicata* subsp. *spicata*, *Momordica charantia*, *Palustris spinosa-cristi*, *Prunus spinosa*, *Pyrus elaeagnifolia* subsp. *bulgarica*, *Rosa canina*, *Rubus sanctus*, *Sambucus ebulus*, *Satureja hortensis*, *Silybum Marianum* subsp. *mariannum*, *Tribulus terrestris*, *Thymus longicaulis* subsp. *longicaulis*, *Tilia cordata*, *Urtica dioica*, *Vitis vinifera*, and *Zea mays* (Tab. 2).

Some of medicinal plants have many uses: *Pinus nigra* (10 uses), *Satureja* (nine uses), *Cotinus coggyria* (eight uses), *Tribulus terrestris* (seven uses), *Palustris spinosa-cristi* (seven uses), *Datura stramonium* (six uses), *Momordica charantia* (six uses), *Rosa canina* (six uses), *Sesamum indicum* (six uses), *Cerasus* (six uses), *Ecballium elaterium* (five uses), *Hypericum perforatum* (five uses), *Plantago major* (five uses), *Urtica* (five uses).

The most common usage forms are decoction (46.9%), infusion (25%), fresh plant (14.6%), crushing (6.3%), and the other preparation methods (7.2%). The most common used parts are fruit (28%), leaf (20%), flower (15%), aerial parts (14%), seed (7%), and the other plant parts (16%).

Tab. 1 Demographic characteristics of the participants.

Demographic characteristics	Number	%
Age		
44–59	9	15.8
60 and above	48	84.2
Sex		
Female	25	43.9
Male	32	56.1
Educational level		
Nonliterate	3	5.3
Literate	2	3.5
Primary school	39	68.4
Secondary to university	13	22.8
Profession		
House wife	24	42.2
Farmer	18	31.4
Retired	8	14.0
İmam	1	1.8
Barber	1	1.8
Tanner	3	5.2
Veterinary technician	1	1.8
Manager of a tea house	1	1.8

reported for the first time in Thrace: *Adonis annua*, *Brassica nigra*, *Citrullus lanatus*, *Clematis vitalba*, *Heliotropium suaveolens*, *Juncus effusus*, *Juniperus communis*, *Knautia orientalis*, *Nigella arvensis*, *Pinus nigra*, *Portulaca rausii*, *Prunus cocomilia*, *Raphanus sativus*, *Rubus idaeus*, *Rumex acetosa*, *Silybum marianum*, *Solanum americanum*, *Sorghum bicolor*, *Tanacetum macrophyllum*, *Trifolium strictum*, *Veronica cirinata*, *Ziziphus jujuba*, *Xanthium spinosum*. The uses and usage form of these plants are given in Tab. 2 and Tab. 3. Also, the photographs of some medicinal plants are presented (Fig. 2).

Discussion

As much as 80% of Uzunköprü land is arable. The Ergene Plain occupies a part of the lands in Uzunköprü district. The Ergene River carries alluvion to the plain when it overflows. For this reason, the soil of the plain is highly fertile and appropriate for all kinds of plant production. In irrigated farming, vegetables, fruits, rice, corn, sunflower, sugar beet, trefoil, broad bean and pea, zucchini, and especially gardens are grown. In dry farming, on the other hand, crop, wheat, barley, grape, corn, sunflower, chickpea, lentil, sainfoin, vetch, bitter vetch, melon, and watermelon are grown. Those counted are the plants which are grown to provide financial income. Apart from these, people can grow any cultivated plant they want in their garden and field. As these plants are sufficient for daily life, wild plants are not needed to be benefited from. The fact that soil is fertile has increased both the level of income and the purchasing power of people.

The traditional medicinal plants are mostly used for the cold and influenza (42 plant species = 43.75%), digestive system (39 plant species = 40.63%), respiratory system (26 plant species = 27.08%), diabetes (25 plant species = 26.04%), urinary system (22 plant species = 22.92%), circulatory system (21 plant species = 21.88%), skin diseases (33 plant species = 34.38%), insect and immune system issues (seven plant species = 7.3%), cancer (six plant species = 6.3%), analgesic and calcification (four plant species = 4.2%), to keep fit, lose weight, sedative, migraine, insomnia, thyroid issues (two plant species = 2.08%), and other diseases, for veterinary purposes, to induce hallucinations, as aphrodisiac, to quit smoking, against headache, as antipyretic, for mumps, menstrual pain, cellulite, make-up, embolism, hair, allergy, earache (one species = 1.04%).

Some medicinal plants are used together (as multiherbal mix). Their names and usage purposes are given in Tab. 3.

Some of the plants are used in both veterinary and human medicine (*Beta vulgaris*, *Helleborus orientalis*, *Persica vulgaris*), some of them are used as insecticides (*Artemisia absinthium*, *Juglans regia*, *Menta spicata* subsp. *spicata*, *Ocimum basilicum*, *Origanum vulgare*, *Sambucus ebulus*) (Tab. 2).

On the other hand, some species of a genus and some species of different genera are known by the same local name, maybe as a result of their similar appearances and same uses, e.g., *Anthemis cretica* subsp. *tenuiloba*, *Matricaria chamomilla* and *Tanacetum macrophyllum* (papatya), *Pyrus communis* subsp. *communis* and *Pyrus elaeagnifolia* subsp. *bulgarica* (alat, ahlat, kak), *Thymus longicaulis* subsp. *longicaulis* and *Satureja cuneifolia* (kekik, kekik otu, keklik otu), *Urtica dioica* and *Urtica urens* (ısrın, ısrıgan), *Eryngium cireticum* and *Xanthium spinosum* (çakır tiken) (Tab. 2).

It is also noted that, the same local name is given to different plants because of the same uses, e.g., *Adonis annua*, *Matricaria chamomilla*, *Nigella arvensis* var. *glaucia*, *Satureja cuneifolia*, *Anthemis cretica* subsp. *tenuiloba*, *Anthemis tinctoria*, *Knautia orientalis*, *Veronica cirinata* (çay bitkisi) (Tab. 3).

In this study, the medicinal uses of 23 species have been

Tab. 2 Medicinal plants of Uzunköprü.

Latin name and herbarium number	Family	Local name	Village number** and number of people referring (in brackets)	Part used	Usage form	Use	References of similar usage
<i>Acer tataricum</i> L.; 4138, 4143	Aceraceae	Akçaağacı, kelebek ağacı, keveli, kebele	12, 19 (2)	Bark	Infusion/a glass – twice a day; burn and make ash/ext.	Diabetes, wounds	-
<i>Achillea millefolium</i> L. subsp. <i>millefolium</i> ; 4240	Asteraceae	Kurpotu, dişotu, pelin otu	41, 47 (4)	Capitulum	Decoction/sitting on – once a day/washing/ext.	Hemorrhoids, warts	[13,38,41,45, 48]
<i>Alcea apterocarpa</i> (Fenzl) Boiss.; 4013	Mallowaceae	Fatmaana gülli, gül-fatma, fatme çiçeği, fatmegül, fatmeçik, fatman çiçeği	20, 55 (3)	Flowers	Infusion/a glass – once a day	Diabetes	-
<i>Alcea biennis</i> Winter; 4301	Mallowaceae	Fatmaana gülli, gül-fatma, fatme çiçeği, fatmegül, fatmeçik, fatman çiçeği	20, 8, 55 (5)	Seeds	3-4 seeds eaten – once a day	Analgesic	-
<i>Adonis annua</i> L.; 4037	Ranunculaceae	Çay bitkisi, kış çayı	9 (1)	Dried flowers	Infusion/a glass – once a day	Cough, cold	-
<i>Allium ampeloprasum</i> L.; 4269*	Amaryllidaceae	Pırasa	11, 3 (3)	Leaves	Decoction and dropped into ear/ext.	Earache	[13]
<i>Allium cepa</i> L.; 4667*	Amaryllidaceae	Suvan, kuru suvan	4, 15, 37, 39, 41 (11)	Bulbus	Crushed and wrapped/ one night/ext.	Oedema, sprains, bruises	[13,45]
<i>Allium sativum</i> L.; 4298*	Amaryllidaceae	Sarımsak, samsak	2, 4-13, 25, 32-37, 44 (19)	Bulbs	Crushed/garlic juice/ ext; eaten	Hair restorer, ringworm, regulate tension	[13,39,40,45, 46]
<i>Anthemis cretica</i> L. subsp. <i>tenuiloba</i> (DC.) Grierson; 4231, 3918	Asteraceae	Papatya, papurga, kelçiçe, çay bitkisi	3, 4, 10, 15, 19, 24, 29, 45 (10)	Capitulum	Infusion/a glass – once a day; feet/poultices are (placed on) painful places/ext., crushing/ext.	Stomachache, analgesic and blains	[13]
<i>Anthemis tinctoria</i> L.; 4039, 3918	Asteraceae	Sarıppapatya, çay bitkisi	9, 17, 35, 42 (9)	Capitulum	Infusion/a glass – once a day	Cold	[13]

Tab. 2 Continued

Latin name and herbarium number	Family	Local name	Village number** and number of people referring (in brackets)	Part used	Usage form	Use	References of similar usage
<i>Artemisia absinthium</i> L.; 4003	Asteraceae	Aci papatyā	34, 48, 51 (4)	Aerial parts	Decoction/in coops/ sprinkled to kill the lice; decoction/a glass – twice a day	Insecticide (for dried fruits), stomachache	[13,39-41,45]
<i>Arum maculatum</i> L.; 3910	Araceae	Yılanbastığı, yılan bıçağı, yılan otu, yılan yatağı	6, 9, 11-15, 29, 31, 43, 52, 55 (25)	Tubers, seeds	Tablet of tuber/once a day; a seed ingested – once a day for 2 weeks	Hemorrhoids, asthma	[13,40,45]
<i>Beta vulgaris</i> L. var. <i>altissima</i> Döll.; 4275*	Amaranthaceae	Pancar, şeker pancarı	6, 8, 11-17, 29, 31, 41, 52, 54 (27)	Roots	Boiled in water root juice	Antianemic (in humans), use in veterinary medicine/drink it	[39]
<i>Brassica nigra</i> L.; 3987, 4009	Brassicaceae	Ardal, rapisa, radika, hardalİYE (traditional drink)	1, 5, 13, 23, 33, 42 (20)	Seeds	Seeds wrapped in a cloth, put into grape juice and wait 1-2 months/a glass – a day	Cardiovascular diseases	-
<i>Centaurea solstitialis</i> L.; 4163, 4199	Asteraceae	Sarı tiken	26, 37 (3)	Spines	Spines are pricked in wart/ext.	Warts (in the past)	[44]
<i>Cerasus mahaleb</i> (L.) Mill. var. <i>mahaleb</i> ; 4114, 4115	Rosaceae	Delice kirez, delikirez	11, 23, 48 (5)	Stalks	Decoction/a glass – once a day	Oedema, diuretic	[46]
<i>Cerasus avium</i> (L.) Moench; 4277*	Rosaceae	Kiraz	11, 23, 48 (6)	Fruits and stalks	Fruits fresh eaten or stalks decoction/a glass – once a day	To be fit and lose weight, diabetes, oedema, diuretic	[13,43,44,47]
<i>Cerasus vulgaris</i> Mill.; 4272*	Rosaceae	Vişne	11, 23, 48 (5)	Fruits and stalk	Decoction/a glass – once a day	To be fit and lose weight, diabetes, oedema, diuretic	[13]
<i>Cucurbita</i> sp.	Cucurbitaceae	Karpuz	15 (2)	Exocarp	Dried, burnt, and made into ash/applied/ext.	Mouth cancer	-
<i>Citrullus lanatus</i> (Thunb.) Matsum. & Nakai; 4274*	Ranunculaceae	Akasma	51 (1)	Bark	Resin applied on/ext.	Mouth cancer, skin diseases	[43]
<i>Clematis vitalba</i> L.; 4215	Cornaceae	Kızılık	38, 45, 52 (7)	Fruits	Pickled, jam, fruit juice	Diabetes	[13,39,43-47]

Tab. 2 Continued

Latin name and herbarium number	Family	Local name	Village number** and number of people referring (in brackets)	Part used	Usage form	Use	References of similar usage
<i>Cotinus coggyria</i> Scop.; 4155, 3927	Anacardiaceae	Ttere, teterē, tetra otu	1, 3, 4, 6, 9, 10, 14, 15, 17, 19–21, 33, 35, 48, 55 (24)	Leaves	Decoction/one glass a day/before breakfast/a week; hand washing/ext.; washing/ext.	Stomachache, gastric, ulcer, eczema, rheumatism, calcification, wounds, skin diseases	[13,40,43–46]
<i>Crataegus monogyna</i> Jacq. var. <i>monogyna</i> ; 3919, 3993	Rosaceae	Yemişken, yemişen, alışan, müşmula, alıç	20, 45 (5)	Spines, flowers, and fruits	Spines are pricked in wart; infusion/a glass – twice a day	Warts (in the past), cardiovascular diseases	[13,39,40,43, 45,46]
<i>Cydonia oblonga</i> Mill.; 4202	Rosaceae,	Ayva yaprağı	9, 14, 33, 48, 52, 55 (9)	Leaves	Decoction/a glass – once a day	Cough and cold	[13,39,43–47]
<i>Cynodon dactylon</i> (L.) Pers.; 4202	Poaceae	Ayrık	9, 18, 41 (8)	Roots and aerial parts	Decoction/twice a day/for 40–50 days	Prostate ailments, rheumatism, kidney stones	[13,40,44,45]
<i>Datura stramonium</i> L.; 3955; 4056, 3980-a, 4063	Solanaceae	Tatula, tatala, mandack, mandalak, domuz pitrağı, pitrak	20, 29, 35, 42, 46, 48, 55 (12)	Seeds, leaves, flowers	5–6 seeds swallowed; flowers are smoke like cigarettes; leaves crushed and put on burn/ext.; put flowers in nose/ext.	Sedative, hallucination, aphrodisiac, asthma (in the past), burn, quitting smoking (in the past)	[13,40,43,44]
<i>Echium elatiforme</i> A. Rich.; 4157, 4266	Cucurbitaceae	Yabalale, acikavun, karakavun, acikelek, patlangacı, gargadüleği, kargadüğüle	1, 3, 4, 6, 9, 10, 14, 15, 17, 19–21, 33, 35, 55 (17)	Fruits	Fruit juice/2–3 drops are dropped into water/dropped into nostrils/ext.; decoction/a glass – once a day; fruits boiled and made into ointment/wrapped/ext.	Sinusitis, headache, migraine, hemorrhoids, rheumatism	[13,43–47]
<i>Elaeagnus angustifolia</i> L.; 4010*	Elaeagnaceae	İde	29, 42 (3)	Fruits	Decoction/a glass – once a day	Kidney stones	[43,44]
<i>Equisetum giganteum</i> L. 4258, 4670	Equisetaceae	Kırkklılıt otu, kavalotu	18, 27, 35, 48 (7)	Aerial parts	Decoction/a glass – once a day	Calcification, kidney stones, prostate ailments	-

Tab. 2 Continued

Latin name and herbarium number	Family	Local name	Village number** and number of people referring (in brackets)	Part used	Usage form	Use	References of similar usage
<i>Eryngium cicutarium</i> Lam.; 3974, 4160	Apiaceae	Eşek tikeni, çakır takeni, mavi çakır	47, 50 (3)	Stems and flowers	Eaten fresh	Liver diseases	-
<i>Ficus carica</i> L.; 4279*	Moraceae	İncir	10, 17, 32, 40, 49 (6)	Fruits, latex	Eaten fresh and dried; applied /ext.	Cough, warts	[43,46,47]
<i>Heliotropium suaveolens</i> L.; 4055, 4213	Boraginaceae	Kesikotu	42 (2)	Leaves	Crushed and put on/ext.	Wounds (in the past)	-
<i>Helleborus orientalis</i> Lam.; 4668	Ranunculaceae	Karaot	9, 29, 42 (5)	Leaves	Inserted behind the ear/ (for animals); inserted behind the ear or placed under the tongue (for humans)	Antipyretic, analgesic, veterinary and humans (in the past)	[43,47]
<i>Hypericum perforatum</i> L.; 4178, 4214	Hypericaceae	Sarı kantaron, sarı kan-taron otu, kantaron	3, 5, 6, 9, 15, 17, 19, 25, 27, 36, 38, 42, 45, 47, 50 (21)	Flowers and leaves	Flowers and leaves mixed with olive oil and wait for a month; infusion/dried flowers/a glass – once a day	For sunburn and hemorrhoids/ usable 2–3 times a day; skin stains, scars, cold, stomachache, ulcer	[13,38–40, 43–47]
<i>Hordeum vulgare</i> L.; 4667*	Poaceae	Arpa	14 (2)	Fruits	Scraped with fruit / ext.	Skin stains and mumps (in the past)	[13]
<i>Juglans regia</i> L.; 4291*	Juglandaceae	Ceviz	4, 9, 7, 15, 20, 25, 44 (10)	Fruits, leaves, roots	Decoction and bathe/ ext.; put in wheat warehouse/ext.; put into olive oil/waiting during the winter and put on/ ext.	Prevent from baldness, to darken hair, insecticide (in the past), rheumatism, calcification (in the past)	[13,40,43–47]
<i>Juncus effusus</i> L. subsp. <i>effusus</i> ; 4205, 4249	Juncaceae	Dipçik, kindra	12 (1)	Roots	Decoction/a glass – once a day	Urinary diseases	-

Tab. 2 Continued

Latin name and herbarium number	Family	Local name	Village number** and number of people referring (in brackets)	Part used	Usage form	Use	References of similar usage
<i>Juniperus communis</i> L. var. <i>communis</i> ; 4227	Cupressaceae	Ardıç	29, 38 (3)	Fruits (cones) and aerial parts	Decoction/fresh fruits/a glass – twice a day; boiled/make tar/ext.; dried fruits/3–4 pieces eaten once a day/before breakfast	Calcification, heart diseases, wounds, asthma, and rheumatism	[38–41]
<i>Knautia orientalis</i> L.; 4060	Caprifoliaceae	Çay bitkisi	9, 47 (2)	Dried flowers	Infusion/a glass – once a day	Cough and cold	-
<i>Laurus nobilis</i> L.; 4298*	Lauraceae	Defne	14, 42 (2)	Fruits	4–5 fruits crushed and mixed with honey/eaten before breakfast/over 2 weeks; everyday one fruit crushed and eaten with honey	Sinusitis, migraine, hemorrhoids	[43]
<i>Malva sylvestris</i> L.; 3844, 3885*	Malvaceae	Ebegimeci, ebegümeci, gümülcün otu	16, 45, 55 (5)	Aerial parts	Decoction/a glass – once a day/until recovery	Cancer, tonsillitis	[13,38,42–47]
<i>Malus sylvestris</i> (L.) Mill. subsp. <i>orientalis</i> (Uglitzk.) Browicz var. <i>orientalis</i> ; 4122	Rosaceae	İşi elma, yabani elma	3, 52 (2)	Fruits	Decoction/3–4 pieces/a glass – once a day/until recovery	Diabetes	[13,39]
<i>Matricaria chamomilla</i> L.; 4141, 4218, 4231	Asteraceae	Papatya, çay bitkisi	9, 10, 15, 38 (6)	Flowers (capitulum)	Decoction/dried flowers/a glass – once a day/until recovery	Analgesic, sedative, cold, flu, beautifies the skin	[13,40,44–47]
<i>Melissa officinalis</i> L.; 3843, 3973, 4050*	Lamiaceae	Oğulotu, ariotu, limon çiçeği	4, 19, 35, 45, 47 (9)	Aerial parts	Infusion/a glass – once a day/until recovery	Diabetes, cold, insomnia	[13,44–46]
<i>Menta longifolia</i> L. subsp. <i>typhoides</i> (Briq.) Harley; 4180	Lamiaceae	Göl nanesi, su nanesi	2, 8, 17, 26, 37, 51, 53 (15)	Aerial parts	Decoction/a glass – once a day	Menstrual pain and stomachache	[13,39]
<i>Menta ×piperita</i> L.; 4187*	Lamiaceae	Ev nanesi	3, 10, 17, 28, 31, 36, 51, 53 (17)	Leaves	Decoction/a glass – once a day	Cold, stomachache	[38,45,47]

Tab. 2 Continued

Latin name and herbarium number	Family	Local name	Village number** and number of people referring (in brackets)	Part used	Usage form	Use	References of similar usage
<i>Mentha spicata</i> L. subsp. <i>spicata</i> ; 4186	Lamiaceae	Kir nanesi, deli name	6, 8, 11, 52, 55 (9)	Aerial parts	Mixed with seeds/ext.	Insecticide, cold, stomachache, gynecological diseases	[45,46]
<i>Momordica charantia</i> L.; 4283*	Cucurbitaceae	Yağarda, kudret narı, yarende	6, 16, 22, 32, 38, 42, 48, 52 (12)	Fruits and seeds	Fresh fruits mixed olive eaten one spoon a day; dried and triturated/eat with honey/one spoon a day/two times	Wounds, ulcer, gastritis, cough, stomachache, immunostimulant	[13,46]
<i>Morus nigra</i> L.; 4293*	Moraceae	Siyah dut	44, 49 (3)	Roots	Decoction/a glass – once a day	Urinary diseases	[13,40,43,46]
<i>Nigella arvensis</i> L. var. <i>glauca</i> Boiss.; 4032	Ranunculaceae	Çay bitkisi, kuş çayı	9, 21, 37 (3)	Flowers, seeds	Infusion/a glass – once a day; crushed and eaten with honey	Cough and cold, immunostimulant	-
<i>Olea europaea</i> L.; 4297*	Oleaceae	Zeytin	40 (2)	Leaves	Kept in olive oil and applied/ext; infusion/a glass – once a day	Cellulitis, diabetes, kidney stones	[13]
<i>Ocimum basilicum</i> L.; 4287*	Lamiaceae	Peslan, feslen, feslegen	7, 23, 29, 46 (5)	Leaves	Leaves crushed/juice applied/ext; dried leaves put in seeds/ext.	Bee stings, insecticide	[45,46]
<i>Origanum vulgare</i> L.; 3887, 4225, 3980	Lamiaceae	Güveyotu, güveotu, kekikotu	8, 14, 20, 40, 55 (6)	Aerial parts	Decoction/dried fruits soaked in hot water 3–5 min; infusion	Insecticide (in the past), gastritis, diabetes	[13,43,44,46]
<i>Palustris spina-cristi</i> L.; 4194, 4671	Rhamnaceae	Karakalı	2, 4–9–11, 25, 38, 44, 49, 53 (14)	Fruits, branches, stems	Infusion or decoction/a glass – once a day; put in boiled milk/ext; juice/ext.	Cough (for children), gall bladder diseases, stomachache, diabetes, fungal diseases in women, used to make yogurt (in the past), skin diseases	[13,43,44,46, 47]

Tab. 2 Continued

Latin name and herbarium number	Family	Local name	Village number** and number of people referring (in brackets)	Part used	Usage form	Use	References of similar usage
<i>Persica vulgaris</i> Mill.; 4288*	Rosaceae	Şeftali	18 (2)	Leaves	Mixed olive/ext.	Wounds, skin diseases (for animals)	[13,46]
<i>Petroselinum crispum</i> (Mill.) A. W. Hill; 4286*	Apiaceae	Maydanoz	12, 23, 24, 44 (5)	Aerial parts	Decoction/a glass – once a day	Kidney stones and urinary diseases	-
<i>Pinus nigra</i> L.; 4192	Pinaceae	Karaçam suyu, çam şrası, çira suyu	29 (1)	Stems and kindling	Decoction/a glass – once a day	Diabetes, asthma, expectorant, heart diseases, hyperthyroidism, goiter, stomachache, gall bladder diseases, gastritis, ulcer	[45]
<i>Plantago major</i> L. subsp. <i>majör</i> ; 3996, 4147, 4188	Plantaginaceae	Sinirli ot, sinirotu, yara otu, sağlam otu	11, 27, 39, 43, 44, 51 (8)	Leaves	Crushed/applied/ext.; put in shoes/ext.; infusion/a glass – once a day	Blain (in the past), warts (in the past), wounds on foot, prostate ailments, stomachache	[13,39,42-46]
<i>Platanus orientalis</i> L.; 3889	Platanaceae	Çınar	2, 29 (3)	Leaves	Decoction/a glass – twice a day	Calcification	[43]
<i>Portulaca rausii</i> Danin; 4193, 4668	Portulacaceae	Semizotu	44 (1)	Aerial parts	Plant crushed/applied on warts/ext.; eaten	Warts (in the past), cancer	-
<i>Prunus cocomillia</i> Ten.; 4305	Rosaceae	Yaban eriği	1, 5, 7 (4)	Fruits	Fresh, marmalade, compote	Warts (in the past), diabetes, bronchitis	[13,43-46]
<i>Prunus spinosa</i> L.; 4101, 4111	Rosaceae	Güvem, güvem tiken	3, 4, 6, 9, 10, 15, 17, 19-21, 24, 29, 33, 35, 38, 42-48, 51, 52 (35)	Fruits	Fresh, marmalade, jam	Urinary diseases, diabetes, bronchitis	-
<i>Pyrus communis</i> L. subsp. <i>communis</i> ; 3931, 4025	Rosaceae	Alat, ahlat, kak, alfat	2, 4, 9, 15, 17, 19, 29, 33, 35, 38, 46-48 (17)	Fruits	Dried fruits/compote; pickled	Diabetes	-
<i>Pyrus elaeagnifolia</i> Pall. subsp. <i>bulgarica</i> (Kuth. & Sachokia) Vulev; 3926, 3928, 3968	Rosaceae	Domuz alatı, taşlı alat, kak, alfat	2, 4, 6, 9, 15, 17, 19, 20, 29, 33, 35, 38, 46-48 (22)	Fruits	Dried fruits/compote; pickled	Diabetes	[13,43,44]

Tab. 2 Continued

Latin name and herbarium number	Family	Local name	Village number** and number of people referring (in brackets)	Part used	Usage form	Use	References of similar usage
<i>Raphanus sativus</i> L; 4307*	Brassicaceae	Karatürp	14 (1)	Roots	Mixed honey/wait a week/every day eat one spoonful	Diabetes and cholesterol, cystitis, cold	-
<i>Rosa canina</i> L; 3965, 3982, 4672	Rosaceae	Köpek güllü, köpek yemişi, kuşburnu, öküzgötü, göt giviştiren, göt giviştiren, gülbubusu	3, 4, 6, 9, 10, 15, 17, 19–21, 24, 29, 33, 35, 38, 42–48, 51, 52, 55 (33)	Fruits	Decoction/infusion/a glass – once a day	Prostate ailments, expectorant, stomachache, gastritis, ulcer, diabetes	[13,43–47]
<i>Rosmarinus officinalis</i> L; 4308*	Lamiaceae	Biberiye	9, 24, 51 (7)	Leaves	Decoction/a glass – once a day	Tension, heart diseases	[13]
<i>Rubus idaeus</i> L; 3969*	Rosaceae	Böğürtlen	42 (2)	Roots	Decoction/a teacup – twice a day	Allergy, eczema	-
<i>Rubus sanctus</i> Schreb.; 3969, 4673	Rosaceae	Karamuk, karamuk, karabubucuk, kapinak, papıda, gürlük	15, 29, 35 (5)	Fruits	Eaten fresh or compote	Diabetes	[43,44,46,47]
<i>Rumex acetosa</i> L; 3899, 4117, 4150, 4081	Polygonaceae	Kuzukulağı, ekşiol, ekşikulak, işıkulak, işimelek, kiselek,ırka	9, 20, 38, 48, 55 (6)	Stems, leaves	Eaten fresh or make salad	Diabetes	
<i>Ruscus aculeatus</i> L; 4248, 3795	Asparagaceae	Tavşan biberi, tavşan şeleri, tavşan bulucu, tavşan kirazı	37, 48, 20, 9 (4)	Fruits	Eaten fresh	Diabetes	[13,43]
<i>Salix alba</i> L; 4182	Salicaceae	Sügüt yaprağı	29, 14 (3)	Leaves	Eaten fresh	Headache (in the past)	[13,47]
<i>Sambucus ebulus</i> L; 3963, 3978, 4121, 4238	Araliaceae	Sultan otu, bizga, kokarca	6, 18, 29, 30, 32, 33, 37, 41, 49, 50, 55 (11)	Aerial parts; leaves; seeds	Put in the hen coop/ext; crushed leaves/mixed olea oil and applied/twice a day/ext; 3–5 seeds swallowed	Insecticide (in the past), rheumatism, hemorrhoids	[13,39,43–46]
<i>Sambucus nigra</i> L; 3779	Araliaceae	Mülver, müliver, mürver ağacı,	23, 49 (4)	Flowers	Cigarette	Asthma, cough, bronchitis	[13,38,43, 45–47]

Tab. 2 Continued

Latin name and herbarium number	Family	Local name	Village number** and number of people referring (in brackets)	Part used	Usage form	Use	References of similar usage
<i>Satureja cuneifolia</i> Ten.; 4154	Lamiaceae	Keklik, keklik otu, keklik otu, dağ kekigi, çay bitkisi	9, 29, 45 (3)	Aerial parts	Decoction/a glass – once a day	Prostate ailments, cough, cold	-
<i>Satureja hortensis</i> L.; 4176, 4216	Lamiaceae	Cubrika, çiprasa, çibrisa, çoprişka, çoprişka çoprişka, yabannane	9, 20, 42 (5)	Aerial parts	Decoction/a glass – once a day	Diabetes, cold, cholesterol lowering	[45,46]
<i>Sesamum indicum</i> L. 4311*	Pedaliaceae	Tarfin, susam	4, 30 (3)	Seeds	Crushed and mixed with boiled grape juice/ eaten	Cough, cold, regulate, immunostimulant	-
<i>Sideritis scardica</i> L. subsp. <i>scardica</i> ; 4217, 4232	Lamiaceae	Adaçayı	42 (2)	Aerial parts	Decoction/a glass every day	Cough, cold, insomnia	[13]
<i>Silybum marianum</i> (L.) Gaertn. subsp. <i>mariannum</i> ; 3999, 4018, 4189	Asteraceae	Sütlü kengel, kengel, kengel tikeni, górgel, sütlü diken, eşek diken	9, 17, 20, 38, 48, 53 (11)	Stems	Eaten fresh or pickled	Liver diseases	-
<i>Solanum americanum</i> Mill.; 4300	Solanaceae	Ay üzümü, köpek üzümü	3, 9 (2)	Fruits	Crushed and wrapped/ext.	Burn (in the past)	-
<i>Sorghum bicolor</i> (L.) Moench; 4312*	Poaceae	Darı	15, 24 (3)	Fruits	Roasted wheat grains become flour and mixed water/apply 2–3 times/ext.	Itching (in the past)	-
<i>Tanacetum macrophyllum</i> (Waldst. & Kit.) Sch. Bip.; 4014, 4022	Asteraceae	Papatya	10 (1)	Capitulum	Infusion/a glass – once a day/1 week	Stomachache and cold	-
<i>Teucrium chamaedrys</i> L. subsp. <i>chamaedrys</i> ; 4333	Lamiaceae	Basurotu, mayaslı otu	42, 54 (3)	Aerial parts	Decoction/a glass – once a day/1 week	Hemorrhoids	[13,39,43,46]
<i>Thymus longicaulis</i> C. Presl subsp. <i>longicaulis</i> ; 3966, 3967, 4012	Lamiaceae	Keklik, keklik otu, keklik otu	29, 45, 48, 54 (5)	Aerial parts	Infusion/a glass – once a day/1 week	Tension, diabetes, stomachache	[13,40,44–47]
<i>Tilia cordata</i> Mill.; 3797	Tiliaceae	İlhamur, İlambur, İlambur	5, 12, 21, 32, 41, 44, 48, 55 (15)	Bracts and flowers	Decoction/a glass – once a day	Cough	[38]

Tab. 2 Continued

Latin name and herbarium number	Family	Local name	Village number** and number of people referring (in brackets)	Part used	Usage form	Use	References of similar usage
<i>Tribulus terrestris</i> L.; 3975	Zygophyllaceae	Çoban kalkitan, çoban kalğıdan, çoban kaldırın, çoban hoplatan, çökelek	9, 13, 17, 19, 22, 25, 28, 33, 34, 38, 41, 44, 46, 51, 54 (20)	Aerial parts, fruits	Decoction/three times a day; infusion; decoction/a glass – once a day	Hemorrhoids, embolism, blood purifier, cardiovascular diseases, stomachache, kidney diseases	[13,44]
<i>Trifolium strictum</i> L.; 4033	Fabaceae	Çay bitkisi	9 (1)	Dried flowers	Infusion/a glass – once a day	Cough and cold	-
<i>Ulmus minor</i> Mill.; 3841, 4120	Ulmaceae	Karaağaç, karaç	15, 21, 36 (4)	Branches	Juice applied/ext.	Warts (in the past)	[13,43,46]
<i>Urtica dioica</i> L.; 3877, 3997, 4001, 4083	Urticaceae	İsrgan, kopırma, isran	3, 4, 6, 9, 10, 15, 17, 19–21, 24, 29, 35, 38, 42–48, 51, 52, 55 (42)	Fresh, dried plant, aerial parts	Decoction/a glass – once a day; infusion/a glass – once a day; applied to the legs	Urinary diseases, hemorrhoids, cancer, anti-inflammatory, rheumatism	[13,39,40, 43–47]
<i>Urtica urens</i> L.; 4131, 4183, 4228	Urticaceae	İsrgan, kopırma, isran	3, 4, 6, 9, 10, 15, 17, 19–21, 24, 29, 35, 38, 42–48, 51, 52, 55 (37)	Fresh and dried plant, aerial parts	Decoction/a glass – once a day; infusion/a glass – once a day; applied to the legs	Urinary diseases, hemorrhoids, cancer, anti-inflammatory, rheumatism	[46,47]
<i>Veronica cirrhata</i> Kit; 4034	Plantaginaceae	Çay bitkisi	9, 19 (2)	Dried flowers	Infusion/a glass – once a day	Cough and cold	-
<i>Viscum album</i> L. subsp. <i>album</i> ; 3960, 4255	Santalaceae	Buruş, ellim karası, verem otu	14, 38, 43 (4)	Leaves, stems	Decoction/a glass – once a day/1 week; decoction/a teacup – everyday/before breakfast	Shortness of breath, asthma, diabetes	[13,43–45]
<i>Vitis sylvestris</i> C. C. Gmel; 3983, 4134	Vitaceae	Koruk, yabani astma, kuş astması, kuşüzümü	20, 48, 55 (5)	Fruits	Crushed and added into the salad	Diabetes	[13,44]
<i>Vitis vinifera</i> L.; 4315*	Vitaceae	Asma, üzüm, bağ	6, 15, 33, 45, 48, 52 (10)	Fruits and seeds	Boiled grape juice; to make wine; seeds crushed and eaten with honey; seed decoction	Anaemia, cardiovascular diseases, beautifies the skin, revitalizes hair, cancer	[45]

Tab. 2 Continued

Latin name and herbarium number	Family	Local name	Village number** and number of people referring (in brackets)	Part used	Usage form	Use	References of similar usage
<i>Zea mays</i> L; 4316*	Poaceae	Misir püskülü	17, 29, 45 (4)	Styles	Decoction/wash/ext; decoction/a glass – once a day	Psoriasis, cold and cough, kidney diseases, diuretic	[13,40,44,45]
<i>Ziziphus jujuba</i> Mill; 4314, 4160*	Rhamnaceae	İndap, ünnap, hünnap	24, 42 (3)	Fruits	Eaten fresh and dried	Constipation	-
<i>Xanthium spinosum</i> L; 3974	Asteraceae	Çakır tiken, sari taken	37, 52 (2)	Spines	5–6 spines are pricked in wart/after 1 week callus dried/ext.	Callus (in the past)	-

* Cultivated plant. ** Village numbers: 1 – Aliç; 2 – Altunyazı; 3 – Aslıhan; 4 – Balaban; 5 – Balabankoru; 6 – Başağlı; 7 – Bayramlı; 8 – Bildir; 9 – Çakmakköy; 10 – Çavuşlu; 11 – Çalköy; 12 – Çiftlikköy; 13 – Çobanpinar; 14 – Qöpköy; 15 – Danışment; 16 – Değirmenci; 17 – Dereköy; 18 – Elmalı; 19 – Eskiköy; 20 – Gazimehmet; 21 – Gazihaftı; 22 – Hamidiye; 23 – Hamitli; 24 – Harmanlı; 25 – Hasanpinar; 26 – Kadıkonağı; 27 – Kadıgebreñ; 28 – Karabürçek; 29 – Karapınar; 30 – Karayayaç; 31 – Kavaklıç; 32 – Kavakayaçma; 33 – Kircasalıh; 34 – Kırkavak; 35 – Kirköy; 36 – Kiremitçisalıh; 37 – Kurdu; 38 – Kurtbey; 39 – Kurtttepe; 40 – Maksutlu; 41 – Malkoçköy; 42 – Merkez (Uzunköprü); 43 – Meşeli; 44 – Muhaçrkadı; 45 – Ömerbey; 46 – Saçlımüsselüm; 47 – Salarlı; 48 – Sazlımalkoç; 49 – Sığrcılı; 50 – Sıpalı; 51 – Sultanşah; 52 – Süleymaniye; 53 – Turnacı; 54 – Türkobası; 55 – Yeniköy (Fig. 1). ext. – external; others are for internal use.

Nowadays, it has become pretty easy to reach shopping centres and hospitals. Therefore, benefiting from natural plants is about to be forgotten. The information given here is obtained from elders and barely known by the young. It is elders again who benefit from these plants for various purposes today. With this study, the information obtained from elders will be recorded and transmitted to the next generations, therefore, it will not disappear.

When this study is compared with the previous studies of Thrace, it is seen that many of the medicinal plants are the same (Akalin and Alpinar [42] 22, Ecevit Genç and Özhatay [43] 33, Kültür [13] 50, Tuzlaci and Alpaslan [44] 27, Kültür and Sami [45] 33, Tuzlaci et al. [46] 31 and Bulut [47] 22). However, the local name, usage form, and uses of some plants (such as *Cotinus coggyria*, *Arum maculatum*, *Sambucus ebulus*, *Anthemis tinctoria*, *Cornus mas*, *Ecbalium elaterium*, and *Hypericum perforatum*) are different. For instance, while *Cotinus coggyria* is used for stomachache, gastric, ulcer, eczema, rheumatism, calcification, wound and skin diseases according to our findings, Leporatti and Ivancheva [40] state that it is used as anti-inflammatory, astringent (in Bulgaria), as mouth wash (in Italy); Akalin and Alpinar [42] for stomachache; Ecevit Genç and Özhatay [43] for stomachache, burns, swelling, wounds, wounds – for animals, goiter, diabetes, hemorrhoids, asthma, mushroom poisoning, analgesic, allergy of the eye; Tuzlaci and Alpaslan [44] for hemorrhoids, wound, eczema, antifungal, gastrointestinal ailments, stomach ulcer, stomachache, stomach ailments, colon cancer, cancer, skin cancer, asthma, hair restorer, prostate ailments, kidney stones; Kültür [13] for stomachache gastric ulcer, cuts, wounds, burns, eczema, antifungal, fracture, diabetes, urinary diseases, cardiac diseases, kidney stones, nephritis, cancer, antihypertensive, cough, abdominal pain, numbness of arm, vasodilator, asthma, hemorrhoids, anthrax, enteritis, inflamed wounds and mouth wounds; Kültür and Sami [45] for wounds, eczema, hemorrhoids, gynecological disorders; Tuzlaci et al. [46] state that it is used for foot and mouth diseases, eczema (human and animal), rheumatism, prostate ailments, hemorrhoids, calcification. Also, while according to our findings *Hypericum perforatum* is used for skin stains, scars, cold, stomachache, ulcer, sunburns and sunspots, it is used for kidney pains and hemorrhoids according to Rexhepi et al. [38]; for stomach pain, respiratory disorders, skin infections, sunburn or thermal burn, antitussive, antihemorrhoidal, anticholesterolemic, eczema according to Mustafa et al. [39]; for ulcers, anti-inflammatory (in Bulgaria), cicatrizing agent, against Herpes simplex cholangogue (in Italy) according to Leporatti and Ivancheva [40]; for asthma, stomachache, skin diseases, earache, and toothache according to Akalin and Alpinar [42]; for kidney stones, sedative, wounds, stomachache and rheumatism according to Ecevit Genç and Özhatay [43]; for kidney stones, urinary diseases, diabetes, antihypertensive, cold, stomachache, enteritis, eczema, antifungal, cardiac diseases, arteriosclerosis, antihemorrhagic, asthma, insomnia, uroclepsia (for babies), gall bladder ailments, facial paralysis, gastritis,

chest diseases, internal hemorrhage, bronchitis, anti-inflammatory, tuberculosis, pharyngitis, wounds, burns, cuts, herpes labialis, lip chap, and ulcers according to Kültür [13]; for prostate ailments, kidney ailments, cystitis, wound (for human and animals), diarrhea, aphthae according to Tuzlaci and Alpaslan [44]; for urinary diseases, stomach diseases, gastric ulcer, gingivitis, otitis, hemorrhoids, cardiac diseases, wounds and rheumatism according to Kültür and Sami [45]; for diabetes, wounds and kidney ailments according to Tuzlaci et al. [46]; and for diabetes and stomachache according to Bulut [47]. Furthermore, although the local names of plants are considerably similar, there are some differences. For instance, while *Teucrium chamaedrys* subsp. *chamaedrys* is named “basur otu” (pilewort) in our area of study, it is recorded as “kısacık mahmut” in the findings of Kültür [13] (Tab. 4).

In conclusion, in this study, 96 folk medicinal plants belonging to 45 families have been presented. For 31 of them, no records about their use were found in previous studies in Thrace. This information is expected to be tested pharmacologically in the future.

Tab. 3 Multitherbal recipes used as medicinal plants in Uzunköprü.

Latin name	Local name	Plant part used	Usage form	Use
<i>Adonis annua</i> , <i>Matricaria chamomilla</i> , <i>Nigella arvensis</i> var. <i>glauca</i> , <i>Satureja canefolia</i> , <i>Anthemis cretica</i> subsp. <i>tenuifolia</i> , <i>Anthemis tinctoria</i> , <i>Knautia orientalis</i> , <i>Veronica cerniata</i>	Çay bitkisi, kış çayı	Dried flowers	Infusion/a glass – once a day	Cough and cold (winter tea)
<i>Cydonia oblonga</i> , <i>Cerasus avium</i> , <i>Melissa officinalis</i> , <i>Zea mays</i>	Aya yaprağı, kiraz sap, oglu otu, misir püskülü	Cydonia leaves, cherry stalk, melissa leaves, corn silk	Decoction/together and cooling drink/a glass – once a day	Cough and cold
<i>Elaeagnus angustifolia</i> , <i>Salix alba</i>	İde yaprağı + Sağıştırı yaprağı	Leaves	Boiled and getting warm/sitting on/3–5 times/ext.	Calcification (especially for knee)
<i>Mentha piperita</i> , <i>Piper nigrum</i>	Nane + karabiber	Leaves and fruits	Decoction/a glass – once a day	Cold and stomachache
<i>Prunus spinosa</i> , <i>Pyrus communis</i> subsp. <i>communis</i> , <i>Brassica nigra</i>	Löngür, lengür	Fruits and seeds	Pickle/ <i>Brassica nigra</i> 's seeds wrapped in a cloth, put into and waiting 1–2 months/a glass – once a day/before breakfast	Diabetes, tension, immunostimulant, kidney stones
<i>Urtica dioica</i> , <i>Thymus longicaulis</i> subsp. <i>longicaulis</i> , <i>Menta spicata</i> subsp. <i>spicata</i>	Isrgan + kekik + nane	Aerial parts and leaves	Infusion/a glass – once a day/1 week	Cold and stomachache
<i>Sesamum indicum</i> , <i>Vitis vinifera</i>	Tarfin + üzüm	Seeds and fruits	Crushed and mixed with boiled grape juice/eaten	Anemia, cough, cold, immunostimulant

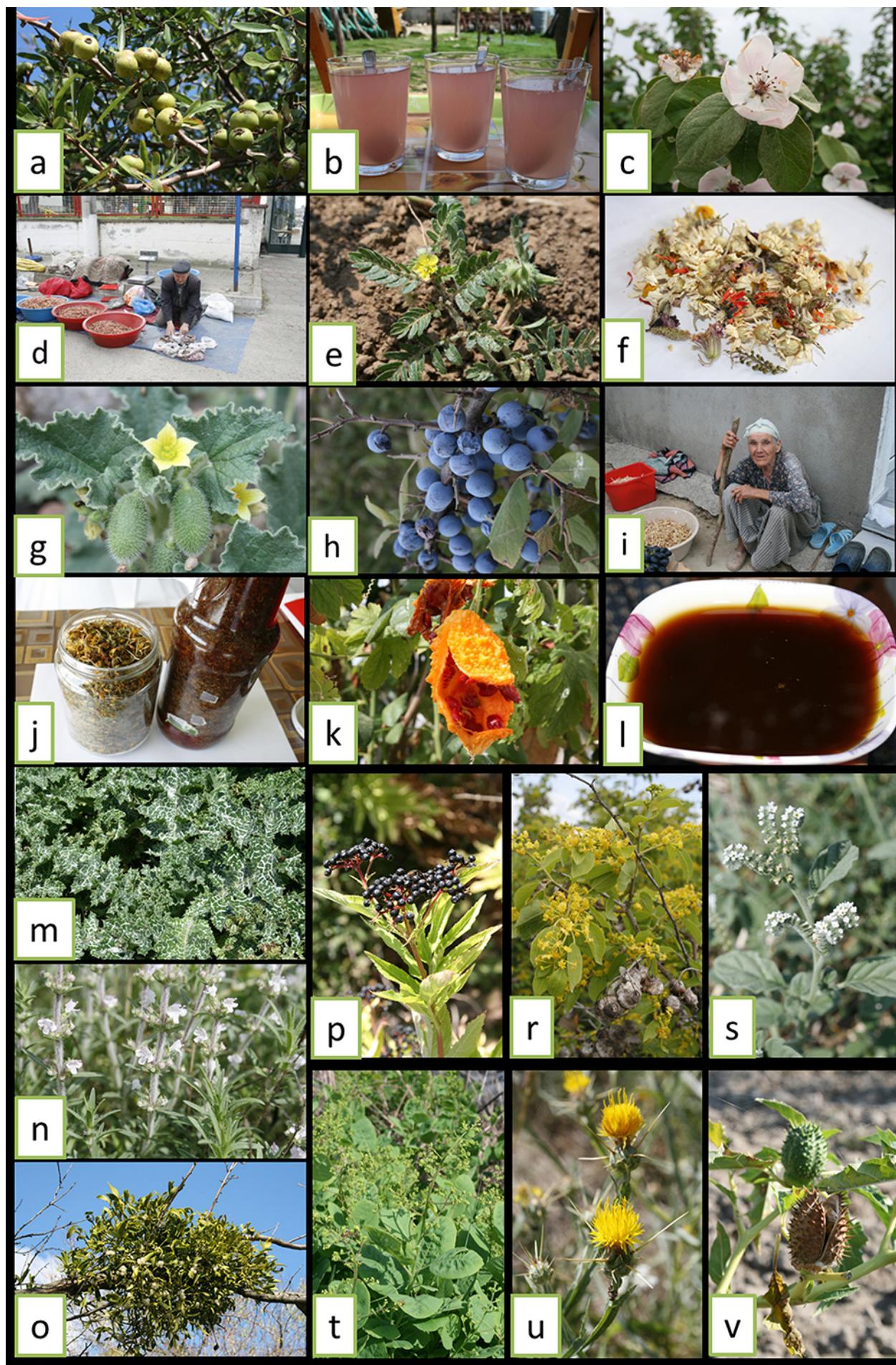


Fig. 2 The photographs of some medicinal plants. **a** *Pyrus elaeagnifolia* subsp. *bulgarica*. **b** *Prunus spinosa* + *Pyrus communis* subsp. *communis* + *Brassica nigra*. **c** *Cydonia oblonga*. **d** Bazaar (Çöpköy village). **e** *Tribulus terrestris*. **f** *Adonis annua*, *Matricaria chamomilla*, *Nigella arvensis* var. *glauca*, *Satureja cuneifolia*, *Anthemis cretica* subsp. *tenuiloba*, *Anthemis tinctoria*, *Knautia orientalis*, *Veronica cirinata*. **g** *Ecballium elaterium*. **h** *Prunus spinosa*. **i** Interviewee (Yeniköy). **j** *Hypericum perforatum*. **k** *Momordica charantia*. **l** *Beta vulgaris* var. *altissima*. **m** *Silybum marianum* subsp. *marianum*. **n** *Satureja cuneifolia*. **o** *Viscum album*. **p** *Sambucus ebulus*. **r** *Palustris spina-cristi*. **s** *Heliotropium suaveolens*. **t** *Cotinus coggyria*. **u** *Centaurea solstitialis*. **v** *Datura stramonium*.

Tab. 4 The comparison of the results in the ethnobotanical studies made in the European part of Turkey (Thrace).

Results	Akalm and Alpinar [42], Tekirdağ	Ecevit Genç and Özhatay [43], Çatalca (İstanbul)	Kültür [13], Kırklareli	Alpaslan [44], Babaeski (Kırklareli)	Kültür and Sami [45], İspirih (Bulgaria)	Tuzlaci et al. [46], Lalapasa (Edirne)	Bulut [47] Silivri (İstanbul)
The number of villages	Eight districts and one center, unspecified villages number	Six subdistricts and 43 villages	Five districts and 123 villages	35 villages	One center and 22 villages	One center, villages unspecified	13 villages
The number of participants	Unspecified	Unspecified	Unspecified	85	Unspecified	Unspecified	Unspecified
The number of medicinal plants	58; all plants are wild	68; 58 wild, 10 cultivated	126; 100 wild, 26 cultivated	62; 46 wild, 16 cultivated	68, 44 wild, 24 cultivated	55; 44 wild, 11 cultivated	35; 25 wild, 10 cultivated
The number of families	Unspecified	Unspecified	54	Unspecified	32	Unspecified	Unspecified
The largest three families	Unspecified	Unspecified	Rosaceae (22 species), Lamiaceae (13), Asteraceae (12)	Unspecified	Lamiaceae (9), Rosaceae (8), Asteraceae (7)	Unspecified	Unspecified
The most common part used	Unspecified	Aerial parts, leaves, fruits, flowers, bracts, seeds	Aerial parts, leaves, fruits, seeds, flowers, roots	Unspecified	Aerial parts (31 times), leaves (22), flowers (15) and fruits (11)	Unspecified	Unspecified
The most common usage form	Unspecified	Decoction, infusion	Decoction, infusion	Decoction, infusion	Decoction, infusion, paste, most are taken orally	Decoction, infusion	Decoction, infusion
Medicinal plants mostly used for	Unspecified, analgesic, stomach and kidney ailments, hemorrhoids, skin ailments, asthma, bronchitis, diarrhea, antidiabetic, kidney stones	72 different uses; stomach and kidney ailments, cough, diabetes, inflammation, rheumatism	143 different uses; wounds 25, cold and influenza 24, 6, stomach 20, cough 19, kidney ailments 18, 2, diabetes 13, 4	Unspecified, kidney, stomach, prostate ailments, rheumatism, cold, asthma, hemorrhoids, diabetes, bronchitis	62 different uses; hypertension 54, cold and influenza 38, stomach diseases 37, wounds 35	Unspecified, stomach ailments, hemorrhoids, diabetes, cold, warts	Unspecified, stomach ail- ments, cough, hemorrhoids, rheumatism, cold, eczema, diabetes
The number of local names	94	Unspecified	266	Unspecified	180	Unspecified	Unspecified

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References

1. Davis PH, Miller RR, Tan K. Flora of Turkey and the Aegean Islands. Vol. 1–9. Edinburgh: Edinburgh University Press; 1965–1985.
2. Davis PH, Miller RR, Tan K. Flora of Turkey and the Aegean Islands. Vol. 10 (Supplement I), Edinburgh: Edinburgh University Press; 1988.
3. Webb DA. The flora of European Turkey. Proc R Ir Acad B. 1966;65(1):1–100.
4. Güner A, Özhatay N, Ekim T, Başer KHC. Flora of Turkey and the Aegean Islands. Vol. 11. Second supplement. Edinburgh: Edinburgh University Press; 2000.
5. Güner A, Aslan S, Ekim T, Vural M, Babaç MT, editors. Türkiye Bitkileri Listesi: (Damarlı Bitkiler). İstanbul: Nezahat Gökyiğit Botanik Garden and Flora Researchers Association Press; 2012.
6. Yıldız B, Aktoklu A. Bitki sistemi: ilkin karasal bitkilerden bir çeneklilere. Ankara: Palme Press; 2012.
7. Polat R, Satılı F. An ethnobotanical survey of medicinal plants in Edremit Gulf (Balıkesir – Turkey). J Ethnopharmacol. 2012;139(2):626–641. <https://doi.org/10.1016/j.jep.2011.12.004>
8. Baytop T. Therapy with medicinal plants in Turkey (past and present). İstanbul: Nobel Medicine Publication; 1984.
9. Polat R, Selvi S, Çakılcioglu U, Acar M. Investigations of ethnobotanical aspect of wild plants sold in Bingöl (Turkey) local markets. Biological Diversity and Conservation. 2012;5(3):155–161.
10. Ertuğ F. An ethnobotanical study in central Anatolia (Turkey). Econ Bot. 2000;54(2):155–182. <https://doi.org/10.1007/BF02907820>
11. Ertuğ F. Ethnobotanical research in Friday markets of Bodrum (Mugla, Turkey). Delpinoa. 2003;45:167–172.
12. Ertuğ F. Wild edible plants of the Bodrum area (Muğla, Turkey). Turk J Botany. 2004;28(1–2):161–174.
13. Kültür Ş. Medicinal plants used in Kırklareli Province (Turkey). J Ethnopharmacol. 2007;111:341–364. <https://doi.org/10.1016/j.jep.2006.11.035>
14. Kültür Ş. An ethnobotanical study of Kırklareli (Turkey). Phytologia Balcanica. 2008;14(2):279–289.
15. Koyuncu O, Yaylaci O, Öztürk D, Potoglu Erkara I, Savaroglu F, Akcoskun O, et al. Risk categories and ethnobotanical features of the Lamiaceae taxa growing naturally in Osmanieli (Bilecik/Turkey) and environs. Biological Diversity and Conservation. 2010;3(3):31–45.
16. Uysal İ, Onar S, Karabacak E, Çelik S. Ethnobotanical aspects of Kapıdağ Peninsula (Turkey). Biological Diversity and Conservation. 2010;3(3):15–22.
17. Güneş F, Özhatay N. An ethnobotanical study from Kars (Eastern) Turkey. Biological Diversity and Conservation. 2011;4(1):30–41.
18. Sağıroğlu M, Arslantürk A, Akdemir Z K, Turna M. An ethnobotanical survey from Hayrat (Trabzon) and Kalkandere (Rize/Turkey). Biological Diversity and Conservation. 2012;5(1):31–43.
19. Tetik F, Civelek S, Çakılcioglu U. Traditional uses of some medicinal plants in Malatya (Turkey). J Ethnopharmacol. 2013;146(1):331–346. <https://doi.org/10.1016/j.jep.2012.12.054>
20. Güler B, Kümüştekin G, Uğurlu E. Contribution to the traditional uses of medicinal plants of Turgutlu (Manisa – Turkey). J Ethnopharmacol. 2015;176:102–108. <https://doi.org/10.1016/j.jep.2015.10.023>
21. Güler B, Manav E, Uğurlu E. Medicinal plants used by traditional healers in Bozüyüük (Bilecik – Turkey). J Ethnopharmacol. 2015;173:39–47. <https://doi.org/10.1016/j.jep.2015.07.007>
22. Mükemre M, Behçet L, Çakılcioglu U. Ethnobotanical study on medicinal plants in villages of Çatak (Van – Turkey). J Ethnopharmacol. 2015;166:361–374.

<https://doi.org/10.1016/j.jep.2015.03.040>

23. Özdemir E, Alpinar K. An ethnobotanical survey of medicinal plants in western part of central Taurus Mountains: Aladaglar (Nigde – Turkey). *J Ethnopharmacol.* 2015;166:53–65. <https://doi.org/10.1016/j.jep.2015.02.052>
24. Korkmaz M, Karakuş S. Traditional uses of medicinal plants of Üzümlü district, Erzincan, Turkey. *Pak J Bot.* 2015;47(1):125–134.
25. Han, Mİ, Bulut G. The folk-medicinal plants of Kadisehri (Yozgat – Turkey). *Acta Soc Bot Pol.* 2015;84(2):237–248. <https://doi.org/10.5586/asbp.2015.021>
26. Akbulut S. Differences in the traditional use of wild plants between rural and urban areas: the sample of Adana. *Studies on Ethno-Medicine.* 2015;9(2):141–150. <https://doi.org/10.1080/09735070.2015.11905430>
27. Kalankan G, Özkan ZC, Akbulut S. Medicinal and aromatic wild plants and traditional usage of them in Mount Ida (Balıkesir/Turkey). *Journal of Applied Biological Sciences.* 2015;9(3):25–33.
28. Bulut G. Medicinal and wild food plants of Marmara Island (Balikesir – Turkey). *Acta Soc Bot Pol.* 2016;85(2):3501. <https://doi.org/10.5586/asbp.3501>
29. Doğan A, Bulut G, Tuzlacı E, Şenkardeş İ. A review of edible plants on the Turkish Apiaceae species. *Journal of Faculty Pharmacy of Istanbul University.* 2014;44(2):251–262.
30. Akbulut S, Karakoş M. Some wild plants commonly used in folk medicine in Turkey. In: Çamlı AA, Arabaci R, Ak B, Recep E, editors. *Recent advances in health sciences.* Sofia: St. Kliment Ohridski University Press; 2016. p. 547–559.
31. Furkan MK. Ethnobotanical features of some plants grown in Adiyaman Province [Master thesis]. Adiyaman: Adiyaman University; 2016.
32. Bulut G, Haznedaroğlu MZ, Doğan A, Koyu H, Tuzlacı E. An ethnobotanical study of medicinal plants in Acipayam (Denizli – Turkey). *J Herb Med.* 2017 (in press). <https://doi.org/10.1016/j.hermed.2017.08.001>
33. Polat R, Cakilcioglu U, Satılı F. Traditional uses of medicinal plants in Solhan (Bingöl – Turkey). *J Ethnopharmacol.* 2013;148(3):951–963. <https://doi.org/10.1016/j.jep.2013.05.050>
34. Bulut G, Tuzlaci E. An ethnobotanical study of medicinal plants in Turgutlu (Manisa – Turkey). *J Ethnopharmacol.* 2013;149(3):633–647. <https://doi.org/10.1016/j.jep.2013.07.016>
35. Pieroni A. Medicinal plants and food medicines in the folk traditions of the upper Lucca Province, Italy. *J Ethnopharmacol.* 2000;70(3):235–273. [https://doi.org/10.1016/S0378-8741\(99\)00207-X](https://doi.org/10.1016/S0378-8741(99)00207-X)
36. Nedelcheva A. An ethnobotanical study of wild edible plants in Bulgaria. *EurAsian Journal of BioSciences.* 2013;7:77–94. <https://doi.org/10.5053/ejobios.2013.7.0.10>
37. Carrió E, Vallès J. Ethnobotany of medicinal plants used in Eastern Mallorca (Balearic Islands, Mediterranean Sea). *J Ethnopharmacol.* 2012;141(3):1021–1040. <https://doi.org/10.1016/j.jep.2012.03.049>
38. Rexhepi B, Mustafa B, Hajdari A, Rushidi-Rexhepi J, Quave CL, Pieroni A. Traditional medicinal plant knowledge among Albanians, Macedonians and Gorani in the Sharr Mountains (Republic of Macedonia). *Genet Resour Crop Evol.* 2013;60(7):2055–2080. <https://doi.org/10.1007/s10722-013-9974-3>
39. Mustafa B, Hajdari A, Krasniqi F, Hoxha E, Ademi H, Quave CL, et al. Medical ethnobotany of the Albanian Alps in Kosovo. *J Ethnobiol Ethnomed.* 2012;8(1):6. <https://doi.org/10.1186/1746-4269-8-6>
40. Leporatti ML, Ivancheva S. Preliminary comparative analysis of medicinal plants used in the traditional medicine of Bulgaria and Italy. *J Ethnopharmacol.* 2003;87(2):123–142. [https://doi.org/10.1016/S0378-8741\(03\)00047-3](https://doi.org/10.1016/S0378-8741(03)00047-3)
41. Pieroni A, Giusti ME, Münz H, Lenzarini C, Turković G, Turković A. Ethnobotanical knowledge of the Istro-Romanians of Žejane in Croatia. *Fitoterapia.* 2003;74(7):710–719. <https://doi.org/10.1016/j.fitote.2003.06.002>
42. Akalın E, Alpinar K. A research on the medicinal and food plants of Tekirdağ (Turkey). *Ege University, Journal of Faculty Pharmacy.* 1994;2:1–11.
43. Ecevit Genç G, Özhata N. An Ethnobotanical study in Çatalca (European part of İstanbul) II. *Turkish Journal of Pharmaceutical Sciences.* 2006;3:73–89.

44. Tuzlacı E, Alpaslan DF. Turkish folk medicinal plants. Part V: Babaeski (Kırklareli), Journal of Faculty Pharmacy, Istanbul. 2007;39:11–23.
45. Kültür Ş, Sami SN. Medicinal plants used in Isperih (Razgrad – Bulgaria) district. Turkish Journal of Pharmaceutical Sciences. 2009;6(2):107–124.
46. Tuzlacı E, İşbilen DFA, Bulut G. Turkish folk medicinal plants, VIII: Lalapaşa (Edirne). Marmara Pharmaceutical Journal. 2010;14:47–52.
47. Bulut G. Folk medicinal plants of Silivri (Istanbul Turkey). Marmara Pharmaceutical Journal. 2011;15(1):25–29.
48. Wikipedia, The Free Encyclopedia [Internet]. Uzunköprü. 2017 [cited 2017 Nov 20]. Available from: <https://en.wikipedia.org/wiki/Uzunk%C3%B6pr%C3%BC>
49. Dönmez Y. Thrace plant geography. Istanbul: Istanbul University, Institute of Geography; 1990.
50. Özhata N, Byfield A, Atay S. Important plant areas of Turkey. Istanbul: WWF Turkey Press; 2003.