

## ORIGINAL RESEARCH

# Turkish folk medicinal plants, VIII: Lalapaşa (Edirne)

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**ABSTRACT:** In this study, the folk medicinal plants of Lalapaşa (Edirne) were researched. During the field works, the information were obtained from local healers, experienced adults and patients by personal interviews and the specimens of the plants were collected. According to the results of the identifications of the specimens, 55 plant taxa are used in therapy in Lalapaşa. These are presented in a table in the text. 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.

**KEY WORDS:** Folk medicine, Medicinal plants, Lalapaşa, Edirne, Turkey

## INTRODUCTION

Lalapaşa (Edirne) is located near the Turkish-Bulgarian border in the European part of Turkey (Figure-1). It covers an area of 536 km<sup>2</sup> and its total population is 10.154 (1).

Agricultural of various plants (wheat, sunflower and barley) and animal breeding have an important role in the popular life in Lalapaşa.

This is the first comprehensive ethnobotanical research realized between 2004-2006. However, this study includes only the plants used in traditional folk medicine.

## MATERIAL AND METHODS

The information about the various data (local names, part(s) of plants used, ailments treated, therapeutic effect, methods of preparation, methods of administration and duration of the treatment) were obtained from local healers, experienced adults and patients by personal interviews.

The plant specimens are kept in the Herbarium of the Faculty of Pharmacy, Marmara University (MARE). The "Flora of Turkey and the East

Aegean Islands" (2) was mainly used for the identification of the plants.

## RESULTS AND DISCUSSION

During the study, 151 specimens were collected in the area. According to the results of identifications, 55 taxa are being used as folk medicine in Lalapaşa. Among them 44 taxa are wild and 11 taxa are cultivated plants. These are presented in Table-1 arranged in alphabetical order of their botanical names with the relevant information.

The folk medicinal plants are mostly used for stomach ailments, hemorrhoids, diabetes, cold and warts.

Decoction and infusion are the methods mostly used for the preparation of the folk medicine.

The comparison of the folk medicinal plants recorded in the ethnobotanical studies which were made in the European part of Turkey (3-6) is presented in Table 2. This comparison comprises only the plants which were recorded in two or more studies. According to this table, the usages of only two plants (*Ecballium elaterium* and *Prunus spinosa* subsp. *dasyphylla*) are similar in five studies.

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**TABLE 1.** Folk medicinal plants of Lalapaşa (Edirne, Turkey)

Botanical name and Voucher specimen	Local names	Parts used	Uses/Ailments treated	Preparations	Modes of use
<i>Achillea crithmifolia</i> Waldst. et Kit. (Asteraceae), MARE 9404, 10249	Civanperçemi, Mayasıl otu	Aerial parts Aerial parts Aerial parts Aerial parts	Hemorrhoids Boil (on hand) Heart diseases Nervous system diseases	Infusion Infusion Infusion Infusion	Int. Int. Int. Int.
▲ <i>Allium sativum</i> L. (Liliaceae)	Sarımsak	Bulbils	Hair restorer	Crushed	Ext.
<i>Carduus nutans</i> L. (Asteraceae), MARE 10302	Eşek çalısı, Eşek diken	Flowering branches	Prostate ailments	Decoction	Int.
<i>Centaurea solstitialis</i> L. subsp. <i>solstitialis</i> (Asteraceae), MARE 9463, 10274	Çakır diken, Kavgalaz diken, Kaynanadili	Capitula Capitula Capitula	Malaria Malaria Malaria	— Crushed Crushed	Int. Int. Int.
<i>Cerasus mahaleb</i> (L.) Miller var. <i>mahaleb</i> (Rosaceae), MARE 9408, 9453	Delice kiraz, Yaban kirazı	Seeds	Abdominal pain	Crushed	Int.
<i>Cichorium intybus</i> L. (Asteraceae), MARE 9456, 10280	Karakavuk	Latex	Wart	—	Ext.
<i>Corylus avellana</i> L. var. <i>avellana</i> (Corylaceae), MARE 9472	Findik	Leaves	Prostate ailments	Decoction	Int.
<i>Cornus mas</i> L. (Cornaceae), MARE 9425	Kızılçık	Sap provided from heated branches	Wart	—	Ext. (after <i>Crataegus monogyna</i> subsp. <i>azarella</i> application)
<i>Cotinus coggyria</i> Scop. (Anacardiaceae), MARE 9418	Tetre	Leaves Leaves Leaves Leaves Leaves Leaves Leaves	Foot and mouth disease (FMD) Eczema (human&animal) Eczema Rheumatism Prostate ailments Hemorrhoids Calcification	Infusion Infusion Decoction Infusion Decoction Decoction Decoction	Ext. Ext. Ext. Int. Int., 2x1 Int. Ext.
<i>Crataegus monogyna</i> Jacq. subsp. <i>azarella</i> (Gris.) Franco (Rosaceae), MARE 9395	Yemişgen	Spine	Wart	—	Prickled (then used <i>Cornus mas</i> )
<i>Crataegus monogyna</i> Jacq. subsp. <i>monogyna</i> (Rosaceae), MARE 9451	Yemişgen çalısı	Spine	Snake bite (for animals)	—	Prickled into bitten area
▲ <i>Cydonia oblonga</i> Miller (Rosaceae), MARE 9440	Ayva	Leaves Leaves Leaves Leaves	Abdominal pain Cold Antitussive Diabetes	Decoction Decoction Infusion Infusion	Int. Int. Int. Int.
<i>Ecballium elaterium</i> (L.) A. Rich. (Cucurbitaceae), MARE 9411	Acı kavun, Mayasıl otu	Fruit juice Fruit juice Fruit juice	Sinusitis Rheumatism Hemorrhoids	Boiled Boiled —	Inhaled Inhaled Int.
<i>Euphorbia nicaeensis</i> All. subsp. <i>glareosa</i> (Pallas ex Bieb.) A.R. Smith var. <i>lasiocarpa</i> Boiss. (Euphorbiaceae), MARE 10287	Sütlü ot	Whole plant	Increase milk secretion (for animal)	Int.	Int.
▲ <i>Ficus carica</i> L. subsp. <i>carica</i> (Moraceae), MARE 9419	İncir	Leaves Leaves Latex	Abdominal pain Hemorrhoids Wart	Decoction Infusion —	Int. Int. Ext.
<i>Fraxinus ornus</i> L. subsp. <i>ornus</i> (Oleaceae), MARE 9434	Dışbudak	Stem bark Shoots	Hemorrhoids Chicken diseases	Decoction (+sugar) Decoction	Int., before breakfast Int.
<i>Hyoscyamus niger</i> L. (Solanaceae), MARE 9393, 10246	Tatala	Fruits	Gum diseases	Boiled	Inhaled
<i>Hypericum perforatum</i> L. (Hypericaceae), MARE 9446, 9462	Sarı kantaron	Aerial parts Aerial parts Flowering branches	Diabetes Wound Kidney ailments	Decoction Oleat Infusion	Int. Ext. Int.
▲ <i>Juglans regia</i> L. (Juglandaceae), MARE 9399	Ceviz	Leaves Fruits (immature)	Headache Hemorrhoids	Crushed, wrapped in a cloth Decoction	Ext. Int.
<i>Lavatera thuringiaca</i> L. (Malvaceae), MARE 10283	Fatmecik çiçeği	Flowers	Antitussive	Infusion	Int.

▲ Cultivated plant; + mixed with; Int.= internal use; Ext.= external use; 2x1= twice a day; it means 1 glass of decoction or infusion indicated.

**TABLE 1.** Folk medicinal plants of Lalapaşa (Edirne, Turkey) (continued)

Botanical name and Voucher specimen	Local names	Parts used	Uses/Ailments treated	Preparations	Modes of use
<i>Malva sylvestris</i> L. (Malvaceae), MARE 9413	Ebe gümece	Aerial parts Aerial parts Flowers	Hemorrhoids Immunostimulan Antitussive	Decoction Infusion Infusion	Int. Int. Int.
<i>Matricaria chamomilla</i> L. var. <i>recutita</i> (L.) Grierson (Asteraceae), MARE 9433	Papatya	Capitulum Capitulum	Hemorrhoids Diabetes	Infusion Infusion	Int. Int.
<i>Melissa officinalis</i> L. (Lamiaceae), MARE 9396	Oğul otu	Aerial parts	Embolism	Infusion	Int., before breakfast
<i>Mentha spicata</i> L. subsp. <i>spicata</i> (Lamiaceae), MARE 9431	Nane	Aerial parts Aerial parts	Nausea Stomachache	Infusion —	Int. Int.
▲ <i>Momordica charantia</i> L. (Cucurbitaceae)	Yağanda, Yarhanda	Fruits Fruits	Wound Stomachache	Oleat Oleat	Ext. Int., before breakfast
▲ <i>Morus alba</i> L. (Moraceae), MARE 9397	Dut	Leaves  Leaves	Panaris  Antitussive	Wrapped in a cloth  Infusion	Ext.  Int.
▲ <i>Ocimum basilicum</i> L. (Lamiaceae)	Fesleğen	Aerial parts	Stomachache	Infusion	Int.
<i>Onopordum tauricum</i> Willd. (Asteraceae), MARE 9394, 10266	Eşek çalısı, Eşek dikenini, Deve dikenini	Capitula Aerial parts	Burn Liver ailments	Oleat Decoction	Ext. Int.
<i>Origanum vulgare</i> L. subsp. <i>vulgare</i> (Lamiaceae), MARE 9442, 9474	Çay otu, Kantız, Kır çayı	Aerial parts Aerial parts Aerial parts	Stomach ailments Cold Strengthen of bones	Infusion Infusion Infusion	Int. Int. Int.
<i>Paliurus spina-christi</i> Miller (Zygophyllaceae), MARE 9447	Kara çalı	Fruits Fruits Fruits Fruits	Heart diseases Diabetes Kidney stones Abdominal pain	Decoction Decoction Decoction Decoction	Int. Int. Int. Int.
<i>Papaver rhoeas</i> L. (Papaveraceae), MARE 10267	Gelincik	Petals	Insomnia	Put in water for 1 week	Int.
▲ <i>Persica vulgaris</i> Miller (Rosaceae)	Şeftali	Leaves	Anthelmintic	Decoction	Int.
<i>Pinus sylvestris</i> L. (Pinaceae), MARE 9458	Çam	Buds	Asthma	Decoction	Int.
<i>Plantago lanceolata</i> L. (Plantaginaceae), MARE 10269	Sinirli ot	Aerial parts	Diarrhea (for children)	Decoction	Int.
<i>Plantago major</i> L. subsp. <i>major</i> (Plantaginaceae), MARE 9414, 9436, 9470	Sinirli ot, Sinirli yaprak	Aerial parts Leaves	Stomachache Diabetes	Decoction Decoction	Int. Int.
<i>Prunus spinosa</i> L. subsp. <i>dasyphylla</i> (Schur) Domin (Rosaceae), MARE 10236	Güvem eriği	Fruits	Diabetes	Decoction	Int.
▲ <i>Ricinus communis</i> L. (Euphorbiaceae), MARE 9443	Bostankenesi, Domuzkenesi	Seeds	Purgative (for animals)	Added into the feed	Int.
▲ <i>Robinia pseudoacacia</i> L. (Fabaceae), MARE 9393	Katırtırnağı	Flowers	Bronchitis	Infusion	Int.
<i>Rosa canina</i> L. (Rosaceae), MARE 9468	Kuşburnu	Flowering branches Flowering branches Fruits Fruits Fruits	Embolism  Heart diseases  Asthma Antitussive Cold	Infusion  Infusion  Decoction Decoction Decoction	Int.  Int.  Int. Int. Int.
<i>Rubia tictorum</i> L. (Rubiaceae), MARE 10252	Yapışkan ot	Roots	Kidney stones	Decoction	Int.
<i>Rubus canescens</i> DC. var. <i>canescens</i> (Rosaceae), MARE 9473	Böğürtlen, Börtlen	Fruits Fruits	Cancer Intestinal diseases	Infusion —	Int. Eaten
<i>Rubus sanctus</i> Schreber (Rosaceae), MARE 9421	Böğürtlen, Börtlen Karamik	Fruits & leaves Fruits & leaves	Cancer Intestinal diseases	Infusion Infusion	Int. Int.
<i>Rumex crispus</i> L. (Polygonaceae), MARE 9424	Labada	Leaves	Digestive	Cooked	Int.
<i>Sambucus ebulus</i> L. (Caprifoliaceae), MARE 9422, 10272	Sultan otu	Aerial parts Seeds	Chicken mite Constipation	— —	Put on the ground in coop Int.

▲ Cultivated plant; + mixed with; Int. = internal use; Ext. = external use; 2x1 = twice a day; it means 1 glass of decoction or infusion indicated.

**TABLE 1.** Folk medicinal plants of Lalapaşa (Edirne, Turkey) (continued)

Botanical name and Voucher specimen	Local names	Parts used	Uses/Ailments treated	Preparations	Modes of use
<i>Sambucus nigra</i> L. (Caprifoliaceae), MARE 10275	Mürver ağacı	Flowers Flowers Flowers Flowers	Abdominal pain Anthelmintic Diabetes Antitussive	Decoction Decoction Decoction Decoction	Int. Int. Int. Int.
▲ <i>Satureja hortensis</i> L. (Lamiaceae), MARE 9441, 10301	Çıbrıka, Çobrisa	Aerial parts	Stomachache	Infusion	Int.
<i>Teucrium chamaedrys</i> L. subsp. <i>chamaedrys</i> (Lamiaceae), MARE 10276	Kısacıkmahmut, Kösemahmut	Aerial parts	Cirrhosis	Infusion	Int.
<i>Teucrium polium</i> L. (Lamiaceae), MARE 9430	Mayasıl otu	Aerial parts Aerial parts	Hemorrhoids Boil (on hand)	Decoction Decoction	Int., after meal Ext.
<i>Thymus longicaulis</i> C.Persl subsp. <i>longicaulis</i> var. <i>subisophyllus</i> (Borbas) Jalas (Lamiaceae), MARE 10263	Kekik otu, Keklik otu, Yeşil kekik otu	Aerial parts	Abdominal pain	Decoction	Int.
<i>Typha latifolia</i> L. (Typhaceae), MARE 10270	Kesik otu, Saz otu	Female inflorescence	Haemostatic	—	Ext., wrapped in a cloth
<i>Ulmus minor</i> Miller subsp. <i>canescens</i> (Melville) Browicz et Zieliński (Ulmaceae), MARE 9409	Kara ağaç	Stem bark	Hand chaps	Decoction	Ext., 2x1, 60 days
<i>Urtica dioica</i> L. (Urticaceae), MARE 9412, 9437	Isırgan	Whole plants  Aerial parts Aerial parts Aerial parts Aerial parts	Hypertansion  Stomachache Wound (on hand) Stomachache Allergy	Decoction, before breakfast Cooked Infusion Infusion Infusion	Int.  Int. Int. Int.
<i>Urtica urens</i> L. (Urticaceae), MARE 10268	Isırgan	Aerial parts	Eczema	Decoction	Int.
<i>Verbascum macrum</i> Ten. (Scrophulariaceae), MARE 9461	Siğirkuyruğu	Flowers	Stomachache	Infusion	Int.
<i>Verbascum ovalifolium</i> Donn ex Sims subsp. <i>thracicum</i> (Velen.) Murb. (Scrophulariaceae), MARE 10250	Siğirkuyruğu	Flowers	Stomach ulcer	Infusion	Int.

▲ Cultivated plant; + mixed with; Int. = internal use; Ext. = external use; 2x1 = twice a day; it means 1 glass of decoction or infusion indicated.

**FIGURE 1.** Location of Lalapaşa

**TABLE 2.** The comparison of the folk medicinal plants recorded in the ethnobotanical studies made in the European part of Turkey (≠: different usage, —: plants not recorded)

Botanical name	Lalapaşa (Edirne)	Babaeski (Kırklareli)	Kırklareli (except Babaeski)	Tekirdağ	Çatalca (İstanbul)
<i>Achillea crithmifolia</i> Waldst. et Kit.	Hemorrhoids	Hemorrhoids	—	—	—
<i>Allium sativum</i> L.	≠	—	≠	—	—
<i>Centaurea solstitialis</i> L. subsp. <i>solstitialis</i>	Malaria	Malaria	—	—	—
<i>Cotinus coggyria</i> Scop	Eczema	Eczema Hemorrhoids	Eczema Hemorrhoids	≠	Hemorrhoids
<i>Cornus mas</i> L.	≠	≠	≠	—	≠
<i>Corylus avellana</i> L. var. <i>avellana</i>	Prostate ailments	—	Prostate ailments	—	—
<i>Crataegus monogyna</i> Jacq. subsp. <i>monogyna</i>	≠	—	≠	—	≠
<i>Cydonia oblonga</i> Miller	Cold	Antitussive Cold	≠	—	Cold
<i>Ecballium elaterium</i> (L.) A. Rich.	Sinusitis Rheumatism Hemorrhoids	Sinusitis Rheumatism Hemorrhoids	Sinusitis Rheumatism Hemorrhoids	Rheumatism Hemorrhoids	Sinusitis Hemorrhoids
<i>Euphorbia nicaeensis</i> All. subsp. <i>glareosa</i> (Pallas ex Bieb.) A.R. Smith var. <i>lasiocarpa</i> Boiss.	≠	—	≠	—	—
<i>Ficus carica</i> L. subsp. <i>carica</i>	Hemorrhoids Wart	—	—	—	Hemorrhoids Wart
<i>Fraxinus ornus</i> L. subsp. <i>ornus</i>	≠	—	≠	—	≠
<i>Hyoscyamus niger</i> L.	≠	—	≠	—	—
<i>Hypericum perforatum</i> L.	Diabetes Wound Kidney ailments	Kidney ailments	Diabetes Wound Kidney ailments	≠	—
<i>Juglans regia</i> L.	Hemorrhoids	≠	Hemorrhoids	—	—
<i>Matricaria chamomilla</i> L. var. <i>recutita</i> (L.) Grierson	≠	≠	≠	—	—
<i>Malva sylvestris</i> L.	≠	≠	≠	≠	≠
<i>Melissa officinalis</i> L.	≠	≠	≠	—	—
<i>Morus alba</i> L.	≠	≠	—	—	≠
<i>Origanum vulgare</i> L. subsp. <i>vulgare</i>	Stomach ailments Cold	—	Stomach ailments Cold	≠	≠
<i>Paliurus spina-christi</i> Miller	Kidney stones	Kidney stones	≠	≠	≠
<i>Papaver rhoeas</i> L.	≠	≠	≠	—	≠
<i>Pinus sylvestris</i> L.	Asthma	Asthma	Asthma	—	—
<i>Plantago lanceolata</i> L.	Diarrhea	—	≠	—	Diarrhea
<i>Plantago major</i> L. subsp. <i>major</i>	Diabetes	≠	Diabetes	—	≠
<i>Prunus spinosa</i> L. subsp. <i>dasyphylla</i> (Schur) Domin	Diabetes	Diabetes	Diabetes	Diabetes	Diabetes
<i>Robinia pseudoacacia</i> L.	Bronchitis	—	—	—	Bronchitis
<i>Rosa canina</i> L.	Asthma Cold	Cold	Cold	Asthma	Asthma
<i>Rubus canescens</i> DC. var. <i>canescens</i>	≠	—	≠	—	—
<i>Rubus sanctus</i> Schreber	Cancer	≠	—	≠	Cancer
<i>Rumex crispus</i> L.	≠	—	≠	—	≠
<i>Sambucus ebulus</i> L.	≠	≠	≠	≠	≠
<i>Sambucus nigra</i> L.	Diabetes	—	—	≠	Diabetes
<i>Satureja hortensis</i> L.	≠	—	—	≠	—
<i>Teucrium chamaedrys</i> L. subsp. <i>chamaedrys</i>	≠	—	≠	—	—
<i>Teucrium polium</i> L.	≠	—	≠	≠	—
<i>Thymus longicaulis</i> C.Persl subsp. <i>longicaulis</i> var. <i>subisophyllus</i> (Borbas) Jalas	Abdominal pain	≠	Abdominal pain	—	—
<i>Urtica dioica</i> L.	Hypertansion Stomachache	≠	Hypertansion Stomachache	—	Stomach ache
<i>Urtica urens</i> L.	≠	—	—	≠	—

## Türkiye'nin halk ilacı bitkileri, VIII: Lalapaşa (Edirne)

**ÖZET:** Bu çalışmada Lalapaşa (Edirne) yöresinin halk ilacı olarak kullanılan bitkileri araştırılmıştır. Bilgiler, arazi çalışmaları sırasında yerel halk hekimlerinden, deneyimli yaşlı kimselerden ve hastalardan kişisel görüşmelerle derlenmiş ve yörede kullanılan bitkilerin örnekleri toplanmıştır. Bu örneklerin teşhislerinin sonucunda, Lalapaşa yöresinde 55 bitkinin tedavi amacıyla kullanıldığı saptanmıştır. Bunlar metin içinde tablo halinde sunulmuştur. Bunların arasında 44 takson yabancı ve 11 takson ise yörede yetiştirilen bitkilerdir. Halk ilacı olarak kullanılan bu bitkiler en çok mide rahatsızlıklarının giderilmesinde, hemoroidlere karşı, şeker hastalığının tedavisinde, soğuk algınlığının giderilmesinde ve siğillere karşı kullanılmaktadır.

**ANAHTAR KELİMELER:** Halk ilacı, Tıbbi bitkiler, Lalapaşa, Edirne, Türkiye

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