

Some Ethnobotanical Notes from Gündoğmuş District (Antalya/Turkey)

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ÖZET

Gündoğmuş (Antalya/Türkiye) yöresinden bazı etnobotanik bilgiler

Gündoğmuş (Antalya) yöresinde 2011 yılında yaptığımız etnobotanik çalışmanın sonuçlarına göre, çeşitli amaçlarla yararlanılan toplam 71 bitki (takson) belirlenmiştir. Bunlardan 37'si halk ilacı olarak tedavide kullanılan bitkilerdir. Bu bitkilerin en çok sindirim sistemi ve solunum yolları rahatsızlıklarının giderilmesinde ve şeker hastalığı tedavisinde kullanıldığı belirlenmiştir. Ayrıca, bitkilerden diğer amaçlarla; besin kaynağı olarak (18 yabani bitki), koku ve lezzet vermek amacıyla (10 bitki), çay yapımında (5 bitki), kahve yapımında (2 bitki), sakız elde edilmesinde (2 bitki), sirke, turşu ve nar ekşisi yapımında (3 bitki), özel hayvan yemi olarak (6 bitki), kereste olarak (5 bitki), yakacak olarak (5 bitki), sabun olarak (3 bitki), süs olarak (2 bitki), yapıştırıcı elde edilmesinde (2 bitki), sepet yapımında (2 bitki), süpürge olarak (2 bitki), meyvelerin altına sermek için (2 bitki), çelenk yapımında (1 bitki), süzgeç olarak (1 bitki), tespih yapımında (1 bitki), çardak örtüsü olarak (1 bitki), dam yapımında (1 bitki), derilerin tabaklanmasında (1 bitki) ve balık avlamada (1 bitki) yararlanıldığı saptanmıştır.

Anahtar sözcükler: Gündoğmuş, Antalya, etnobotanik, yararlı bitkiler, geleneksel halk ilacı

ABSTRACT

Some ethnobotanical notes from gündoğmuş district (Antalya/Turkey)

According to the results of our ethnobotanical study made in Gündoğmuş (Antalya) in 2011, total 71 taxa used for various purposes were determined. Thirty-seven taxa were used as folk medicine in treatment. These were mostly used for digestive system disorders, respiratory diseases and diabetes. In addition, other usages of the plants were also recorded as: nutrient (18 wild plants), spice (10 plants), herbal tea (5 plants), coffee (2 plants), gum (2 plants), vinegar, pickle and granate sauce (3 plants), fodder (6 plants), timber (5 plants), firewood (5 plants), cleaner as soap (3 plants), ornament (2 plants), glue (2 plants), basket (2 plants), broom (2 plants), fruit mattress (2 plants), garland (1 plant), strainer (1 plant), rosary (1 plant), arbour cover (1 plant), roof construction (1 plant), leather tanning (1 plant), fishing (1 plant).

Key words: Gündoğmuş, Antalya, ethnobotany, useful plants, traditional folk medicine

INTRODUCTION

Gündoğmuş is located within the borders of Antalya in the south part of Turkey. Gündoğmuş has 1323 km² area and its altitude is 900 m in town center (1). There are 23 villages and 3 bigger settlements (Köprülü, Ortaköy, Senir) in the district (Fig. 1).

Gündoğmuş is found in the Mediterranean Region of Turkey and this region is one of the richest areas in our country in terms of plant diversity and endemism.

The district is covered with the pure or mixed forests consist of mainly *Pinus brutia*, *P. nigra*, *Abies cilicica*, *Cedrus libani*, *Juniperus excelsa* and *J. drupacea*. Among the shrubby plants *Quercus coccifera*, *Laurus nobilis*, *Myrtus communis* subsp. *communis*, *Styrax officinalis*, *Spartium junceum*, *Phillyrea latifolia* and *Paliurus spina-christi* are the most dominant elements in the vegetation (Fig. 2-24).

According to the result of a floristic study, 474 taxa were recorded in the flora of Gündoğmuş and most of them (%27.63) were the Mediterranean elements (2).

Tablo 1: Folk medicinal plants of Gündoğmuş (Antalya)

Botanical name, Family and Voucher number	Local name	Plant part used	Preparation	Administration	Ailments treated/Therapeutic effect
<i>Abies cilicica</i> subsp. <i>isaurica</i> (Pinaceae) (MARE 14418)	Gökmar, Ladin	Resin	Mixed with honey	Int.	Gastrointestinal diseases
<i>Arum</i> sp. (Araceae) (MARE 14426, 14427)	Yılan borçağı, Yılan burçağı	Fruits	-	Ingested	Prostate ailments
* <i>Brassica oleracea</i> var. <i>capitata</i> (Cruciferae) (MARE 14432)	Lahana	Leaves	Wrapped in a cloth after boiling in water	Ext.	Rheumatism
<i>Celtis glabrata</i> (Ulmaceae) (MARE 14362)	Dağın	Fruits	-	Eaten	Aphrodisiac
<i>Cornus mas</i> (Cornaceae) (MARE 14338)	Ergen kirazı	Fruits	Syrup or marmalade	Int.	Shortness of breath, diabetes, aphrodisiac, diarrhea (children)
* <i>Corylus colurna</i> (Corylaceae) (MARE 14429)	Fındık	Leaves	Infusion	Int.	Diuretic
<i>Cotoneaster nummularia</i> (Rosaceae) (MARE 14351)	Geyik elması	Leaves	Infusion	Int.	Diabetes, shortness of breath
<i>Cyclotrichium origanifolium</i> (Labiatae) (MARE 14347)	Nane çayı	Aerial parts	Infusion	Int.	Cold, flu
* <i>Diospyros kaki</i> (Ebenaceae) (MARE 14424)	Ammar, Emma	Fruits	-	Eaten	Diabetes
<i>Euphorbia kotschyana</i> (Euphorbiaceae) (MARE 14352)	Sütlük	Latex	-	Ext.	Scorpion or snake bite
<i>Ferula</i> sp. (Umbelliferae) (MARE 14416)	Çaşır	Root Leaves	Decoction Decoction	Int. Int.	Hemorrhoids, strengthen Hemorrhoids, strengthen
* <i>Ficus carica</i> subsp. <i>carica</i> (Moraceae) (MARE 14422)	İncir	Leaves	Decoction	Int.	Diarrhea
<i>Foeniculum vulgare</i> (Umbelliferae) (MARE 14383)	Yabani anason	Aerial parts	-	Feed	Yel disease (for animals)
<i>Hypericum lydium</i> (Guttiferae) (MARE 14379)	Kantaron	Flowers Flowers	Infusion Mixed with olive oil and waited for a while under the sunshine	Int. Ext.	Ulcer Wound
<i>Hypericum perforatum</i> (Guttiferae) (MARE 14344)	Kantaron	Aerial parts	Infusion	Int.	Dyspepsia
<i>Juniperus drupacea</i> (Cupressaceae) (MARE 14417)	Ayığıliği	Cones (waited for a week in water)	Molasses	Int.	Shortness of breath, high cholesterol
<i>Laurus nobilis</i> (Lauraceae) (obs.)	Defne	Volatile oil	Obtained from leaves	Ext.	Arthralgia
<i>Leucocyclus formosus</i> subsp. <i>formosus</i> (Compositae) (MARE 14355)	Papatya	Capitula	Infusion	Int.	Cough
* <i>Mentha spicata</i> subsp. <i>spicata</i> (Labiatae) (MARE 14395)	Nane	Aerial parts	Decoction (added into lemon juice)	Int.	Stomach diseases
* <i>Morus nigra</i> (Moraceae) (MARE 14407)	Kara dut	Fruits	Syrup	Ext.	Aphtha
<i>Myrtus communis</i> subsp. <i>communis</i> (Myrtaceae) (MARE 14433)	Mersin	Leaves	Infusion	Int.	High cholesterol, weight loss
* <i>Olea europaea</i> var. <i>europaea</i> (Oleaceae) (MARE 14339, 14373)	Zeytin	Leaves	Decoction	Int.	Diabetes

Table 1: Folk medicinal plants of Gündoğmuş (Antalya) (Continued)

Botanical name, Family and Voucher number	Local name	Plant part used	Preparation	Administration	Ailments treated/Therapeutic effect
<i>Origanum bilgeri</i> (Labiatae) (MARE 14348)	Kekik	Aerial parts	Infusion	Int.	Cold
<i>Origanum majorana</i> (Labiatae) (MARE 14401, 14434)	Kekik, Yağ kekiği	Aerial parts	Infusion	Int.	Sore throat, cold
<i>Paliurus spina-christi</i> (Rhamnaceae) (MARE 14385)	Çaltı	Fruits	Decoction	Int.	Kidney stones, diabetes
<i>Pinus brutia</i> (Pinaceae) (MARE 14419)	Çam	Tar Resin	- -	Ext. Ext.	Wound (human and animal) Wound, scabies, acarid repellent
<i>Pistacia terebinthus</i> subsp. <i>palaestina</i> (Anacardiaceae) (MARE 14382, 14392)	Çöğre, Sakızlak	Fruits	Boiled in water with molasses after being pounded	As a gargle	Toothache
		Young shoots	Peeled	Eaten	Stomachic
<i>Platanus orientalis</i> (Platanaceae) (MARE 14387)	Biladan	Leaves	Decoction	Int.	Osteoarthritis
* <i>Punica granatum</i> (Punicaceae) (MARE 14425)	Hicaz narı	Seeds	-	Eaten	Diabetes
<i>Quercus coccifera</i> (Fagaceae) (MARE 14370, 14414)	Pıynar	Root	Decoction	Ext.	Burn
<i>Rhus coriaria</i> (Anacardiaceae) (MARE 14389)	Sumak	Leaves	-	Chewed	Mouth diseases
<i>Rubus sanctus</i> (Rosaceae) (MARE 14397)	Böğürtlen	Roots	Decoction	Int.	Weight loss
		Fruits	-	Eaten	Leucemia
<i>Sideritis pisdica</i> (Labiatae) (MARE 14340)	Sahil adaçayı	Aerial parts	Infusion	Int.	Stomach diseases
* <i>Solanum tuberosum</i> (Solanaceae) (MARE 14345)	Patates	Tubers	Crushed after boiling in water	Ext.	Abscess
<i>Spartium junceum</i> (Leguminosae) (MARE 14346, 14412)	Borcak, Sırım borcak	Flowers	Infusion	Int.	Stomachic
<i>Urtica dioica</i> (Urticaceae) (MARE 14405)	Isırgan	Aerial parts	Decoction	Int.	Cancer
* <i>Zea mays</i> subsp. <i>mays</i> (Gramineae) (MARE 14381)	Mısır	Style	Decoction	Int.	Kidney stone

*= cultivated plant; Int.= internal use; Ext.= external use; Obs.=observation

There is no comprehensive ethnobotanical research in Gündoğmuş except only one publication including some useful plants which were recorded during the floristic and ecological research (3).

This study contains the results of our ethnobotanical research made in Gündoğmuş.

MATERIALS AND METHODS

A trip was held to the Gündoğmuş district in 10-24 July 2011 to collect the plants which have local usage and compiling the information on this subject. The field works have been carried out in the center of Gündoğmuş, in

Kozağacı and Pembelik villages. The information about the plants were obtained from the native people living in the research area by personal interviews made face to face and 76 plant specimens were collected. The results of the identification of the plant specimens used for various purposes in Gündoğmuş district are presented in Table 1 and 2, in alphabetical order according to their botanical names.

All the plant specimens were collected by Şenkardeş and they are kept in the Herbarium of The Faculty of Pharmacy, Marmara University (MARE). Their identifications were made using mainly "Flora of Turkey and the East Aegean Islands" (4).

Tablo 2: Other useful (except folk medicine) plants of Gündoğmuş (Antalya)

Botanical name, Family and Voucher number	Local name	Plant part used	Preparation	Usage
<i>Abies cilicica</i> subsp. <i>isaurica</i> (Pinaceae) (MARE 14418)	Gök nar, Ladin	Resin Wood	-	Chewed as a gum Timber, firewood
* <i>Alcea pallida</i> (Malvaceae) (MARE 14356)	Sığırkulağı, Süsen	-	-	Cultivated as an ornamental plant
<i>Arbutus x andrachnoides</i> (Ericaceae) (MARE 14398)	Koz ağacı, Sandal	Fruit	-	Eaten
<i>Astragalus</i> sp. (Leguminosae) (MARE 14378)	Geven	Gum	Stems are cut and flowing gum is gathered	Chewed as a gum
<i>Berberis crataegina</i> (Berberidaceae) (MARE 14408)	Karamık	Fruit	-	Eaten
<i>Capparis</i> sp. (Capparaceae) (obs.)	-	Immature fruit	-	Pickle
<i>Cedrus libani</i> (Pinaceae) (obs.)	Sedir	Stem, branch	-	Timber, firewood
<i>Ceratonia siliqua</i> (Leguminosae) (MARE 14393)	Keçi boynuzu	Fruit	-	Eaten, fodder
<i>Clematis vitalba</i> (Ranunculaceae) (MARE 14360, 14374)	Acitevek	Leaves	Foamed with water after being crushed	Cleaner as a soap
<i>Colutea cilicica</i> (Leguminosae) (MARE 14386)	Patlangıç	Leafy branch	-	Fodder
<i>Cornus mas</i> (Cornaceae) (MARE 14338)	Ergen kirazı	Fruit	Marmalade, jam and syrop	Eaten / drunk
<i>Cotinus cogyria</i> (Anacardiaceae) (MARE 14359)	Boyalı sumak, Gevür sakızlağı	Inflorescence	-	Used to make garland
<i>Dryopteris pallida</i> (Aspidiaceae) (MARE 14411)	Çaşır otu	Leaves	-	Used to lay under fruits (melon, watermelon, citrus) as a fruit mattress
* <i>Ficus carica</i> subsp. <i>carica</i> (Moraceae) (MARE 14422)	İncir	Fruit Fruit (dried)	Fresh / dried Compote	Eaten Drunk (especially in winter)
<i>Gonocytisus angulatus</i> (Leguminosae) (MARE 14399)	Kara borcak	Leafy branch	-	Fodder
<i>Gundelia tournefortii</i> var. <i>armata</i> (Compositae) (MARE 14353)	Kahve diken	Fresh stem Fruit Capitulum	Peeled Ground Placed into the mouth of the funnel	Eaten Used to make coffee Filter for liquids (milk, etc.)
<i>Inula viscosa</i> (Compositae) (MARE 14364)	Sümenit	Leaves	Crushed	Used as a glue
<i>Juniperus excelsa</i> (Cupressaceae) (MARE 14358)	-	Stem, branch	-	Timber, firewood
<i>Laurus nobilis</i> (Lauraceae) (Observation)	Defne	Leaves Leaves	Placed between the figs Put into rice, meat and fish dishes	Used to protect and to give fragrance Spice
* <i>Malus sylvestris</i> (Rosaceae) (MARE 14430)	Elma	Fruit Fruit	Fresh / dried Compote	Eaten Drunk (especially in winter)
<i>Melissa officinalis</i> subsp. <i>altissima</i> (Labiatae) (MARE 14402)	Bal otu	Aerial parts	-	Used as a herbal tea and spice
<i>Mentha longifolia</i> subsp. <i>typhoides</i> var. <i>typhoides</i> (Labiatae) (MARE 14343, 14349)	Yarpız	Aerial parts	-	Cooking and salad
* <i>Mentha spicata</i> subsp. <i>spicata</i> (Labiatae) (MARE 14395)	Nane	Leaves	-	Spice
<i>Myrtus communis</i> subsp. <i>communis</i> (Myrtaceae) (MARE 14433)	Mersin	Branches Fruit	-	Used to make basket Eaten
<i>Nasturtium officinale</i> (Cruciferae) (MARE 14342)	Gerdeme	Aerial parts	-	Cooking and salad
* <i>Nerium oleander</i> (Apocynaceae) (obs.)	Zakkum	-	-	Cultivated as an ornamental plant
<i>Origanum bilgeri</i> (Labiatae) (MARE 14348)	Kekik	Aerial parts	-	Spice
<i>Origanum majorana</i> (Labiatae) (MARE 14401, 14434)	Kekik, Yağ kekiği	Aerial parts	-	Spice

Table 2: Other useful (except folk medicine) plants of Gündoğmuş (Antalya) (Continued)

Botanical name, Family and Voucher number	Local name	Plant part used	Preparation	Usage
<i>Paliurus spina-christi</i> (Rhamnaceae) (MARE 14385)	Çaltı	Fruit	-	Fodder
<i>Phillyrea latifolia</i> (Oleaceae) (MARE 14377)	Kesme	Leafy branches	-	Fodder
<i>Phlomis leucophracta</i> (Labiatae) (MARE 14384)	Çalba	Nectar	-	Nectar sucked by children
<i>Pinus brutia</i> (Pinaceae) (MARE 14419)	Çam	Resin Wood	-	Chewed as a gum Timber, firewood
<i>Pistacia terebinthus</i> subsp. <i>palaestina</i> (Anacardiaceae) (MARE 14382, 14392)	Çöğre, Sakızlak	Fruit Fruit Immature fruit	- Put into fig after crushed -	Used as an appetizer Eaten Fodder
<i>Platanus orientalis</i> (Platanaceae) (MARE 14387)	Biladan	Leafy branches Leaves	- Foamed with water	Arbour cover Cleaner as a soap
* <i>Portulaca oleracea</i> (Portulacaceae) (MARE 14423)	Semiz otu, Tokmağan	Aerial parts Aerial parts	- -	Cooking and salad Eaten
<i>Prunus spinosa</i> (Rosaceae) (MARE 14388)	Yabani erik	Fruit (dried) Fruit	Compote Sliced and dried	Drunk (especially in winter) Added to meal to give sour taste
* <i>Punica granatum</i> (Punicaceae) (MARE 14425)	Hicaz narı	Seeds	Boiled in water	Used to make a sauce (nar ekşisi)
<i>Pyrus syriaca</i> var. <i>syriaca</i> (Rosaceae) (MARE 14391)	Yabani armut	Fruit	-	Pickle and vinegar
<i>Quercus coccifera</i> (Fagaceae) (MARE 14370, 14414)	Pıynar	Fruit Leafy branches Wood	Ground - -	Mixed with wheat flour in the past Fodder (used especially in winter) Used to make handle, as firewood
<i>Rhus coriaria</i> (Anacardiaceae) (MARE 14389)	Sumak	Fruit Fruit Fruit Leaves	Ground after dried - Ground after dried Dried and powdered	Spice Added to meal to give sour taste Used to make coffee Leather tanning
<i>Rosa canina</i> (Rosaceae) (MARE 14410)	İtburnu	Fruit	-	Used as a herbal tea
<i>Rumex scutatus</i> (Polygonaceae) (MARE 14404)	Ekşimek	Aerial parts	-	Salad
<i>Sambucus ebulus</i> (Caprifoliaceae) (MARE 14409)	Ayı döseği	Leaves	Put on roofs (under the soil)	To keep house cool
<i>Satureja cuneifolia</i> (Labiatae) (MARE 14413)	Taş kekiği	Leaves Aerial parts	- -	Spice Used as a herbal tea
<i>Sideritis libanotica</i> subsp. <i>violascens</i> (Labiatae) (MARE 14350)	Adaçayı	Aerial parts	-	Used as a herbal tea
<i>Spartium junceum</i> (Leguminosae) (MARE 14346, 14412)	Borcak, Sırım borcak	Branches Branches	Laid under the fruits (grape, fig) -	Used to lay under fruits to dry (as a fruit mattress) Used to make basket, cage, broom
<i>Styrax officinalis</i> (Styracaceae) (MARE 14361, 14390)	Tespîh	Fruit Fruit Fruit Fruit (gilik)	Foamed with water after being crushed Strung on thread - -	Used as a soap Used to make rosary Fishing Fodder
<i>Thymbra spicata</i> var. <i>spicata</i> (Labiatae) (MARE 14400)	Mor kekik	Leaves Aerial parts	- -	Spice Used as a herbal tea
<i>Thymus cilicicus</i> (Labiatae) (MARE 14415)	Yer kekiği	Aerial parts	-	Spice
<i>Urtica dioica</i> (Urticaceae) (MARE 14405)	Isırgan	Aerial parts	After boiling in water	Salad
<i>Verbascum glomerulosum</i> (Scrophulariaceae) (MARE 14380)	Siğirkuyruğu	Aerial parts	-	Used to make broom

* = cultivated plant

Table 3: The comparison of the uses of the joint plants of Gündoğmuş recorded in two studies (different uses were shown as bold)

Botanical name	Usage	
	Our study	Previous study (2)
<i>Abies cilicica</i> subsp. <i>isaurica</i> (Pinaceae)	Chewed as a gum	Chewed as a gum
<i>Berberis crataegina</i> (Berberidaceae)	Eaten	Eaten
<i>Cedrus libani</i> (Pinaceae)	Timber	Timber
<i>Ficus carica</i> subsp. <i>carica</i> (Moraceae)	Eaten	Eaten
<i>Juniperus drupacea</i> (Cupressaceae)	Shortness of breath, high cholesterol	Strengthening
<i>Juniperus excelsa</i> (Cupressaceae)	Timber, firewood	Timber, firewood
<i>Laurus nobilis</i> (Lauraceae)	Arthralgia	Arthralgia
<i>Myrtus communis</i> subsp. <i>communis</i> (Myrtaceae)	High cholesterol	High cholesterol
<i>Paliurus spina-christi</i> (Rhamnaceae)	Kidney stones, diabetes, fodder	Diarrhea, making hedge, as amulet, ornament
<i>Phillyrea latifolia</i> (Oleaceae)	Fodder	Fodder
<i>Pinus brutia</i> (Pinaceae)	Chewed as a gum Wound	Chewed as a gum Wound
<i>Pistacia terebinthus</i> subsp. <i>palaestina</i> (Anacardiaceae)	Eaten	Eaten
<i>Quercus coccifera</i> (Fagaceae)	Fodder	Fodder
<i>Rhus coriaria</i> (Anacardiaceae)	Spice	Spice
<i>Rosa canina</i> (Rosaceae)	Herbal tea	Cold
<i>Sideritis libanotica</i> subsp. <i>violascens</i> (Labiatae)	Herbal tea	Sedative, carminative, diarrhea, cold, flu
<i>Spartium junceum</i> (Leguminosae)	Broom	Broom
<i>Styrax officinalis</i> (Styracaceae)	Rosary	Rosary
<i>Thymbra spicata</i> var. <i>spicata</i> (Labiatae)	Spice	Spice

RESULTS AND DISCUSSION

Total 71 taxa are found in Table 1 and 2. Among them 53 taxa are wild and 14 taxa are cultivated plants. Four taxa (*Cedrus libani*, *Laurus nobilis*, *Nerium oleander*, *Capparis* sp.) placed in the list were based on the observations in field studies. Thirty-seven species were used as remedies. These plants were mostly used for digestive system disorders, respiratory diseases and diabetes. Infusion and decoction methods were commonly used for preparations of the remedies. In addition, other usages of the plants were also recorded as: nutrient (18 wild plants), spice (10 plants), herbal tea (5 plants), coffee (2 plants), gum (2 plants), vinegar, pickle and granate sauce (3 plants), fodder (6

plants), timber (5 plants), firewood (5 plants), cleaner as a soap (3 plants), ornament (2 plants), glue (2 plants), basket (2 plants), broom (2 plants), fruit mattress (2 plants), garland (1 plant), strainer (1 plant), rosary (1 plant), arbour cover (1 plant), roof construction (1 plant), leather tanning (1 plant), fishing (1 plant).

Total 101 plants including also literature records (2) were used in Gündoğmuş. 19 species of them were determined in both studies. The usage of 15 species were similar as shown in Table 3.

The results of this study were compared with the other ethnobotanical records presented in the previous publications (5-8) about Antalya. According to this comparison, ethnobotanical notes of 30 taxa were recorded

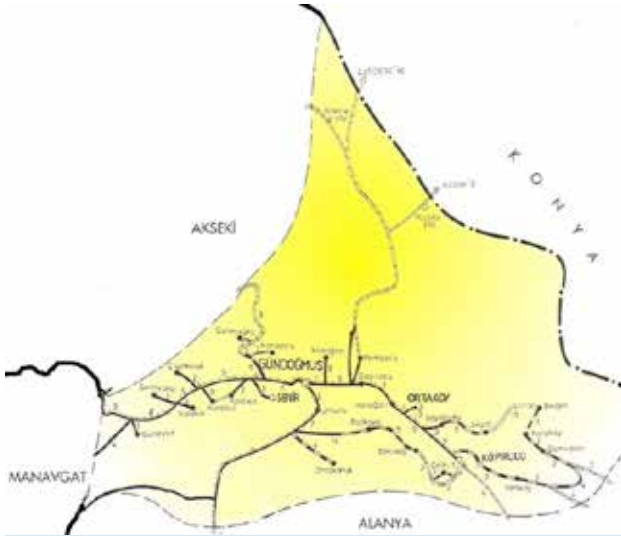


Figure 1: Map of Gündoğmuş (www.antalyakulturturizm.gov.tr)



Figure 2: Gündoğmuş and its surrounding



Figure 3: North-east part of Gündoğmuş



Figure 4: A view from the forest in the North part of Gündoğmuş

in Antalya for the first time in this study. The list of them was given below. In this list 13 taxa are folk medicine plants and these were indicated with an asterisk.

1. *Alcea pallida*: Siğirkulağı, Süsen
2. *Arbutus x andrachnoides*: Koz ağacı, Sandal
3. **Brassica oleracea* var. *capitata*: Lahana
4. *Colutea cilicica*: Patlangıç
5. **Corylus colurna*: Fındık
6. *Cotinus coggyria*: Boyalı sumak, Gevur sakızlağı
7. **Cotoneaster nummularia*: Geyik elması
8. **Diospyros kaki*: Amma, Emma
9. *Dryopteris pallida*: Çaçır otu
10. **Ficus carica* subsp. *carica*: İncir
11. *Gundelia tournefortii* var. *armata*: Kahve dikenini (Fig. 13)
12. **Hypericum lydium*: Kantaron (Fig. 14)
13. **Hypericum perforatum*: Kantaron
14. *Inula viscosa*: Sümenit
15. **Leucocyclus formosus* subsp. *formosus*: Papatya (Fig. 15)
16. *Malus sylvestris*: Elma
17. *Melissa officinalis* subsp. *altissima*: Bal otu



Figure 5: Gelesandra Plain (1500 m) and its surrounding near Pembelik Village



Figure 6: Upper parts of Middle Toros Mountains (North-east of Gündoğmuş)

18. *Mentha longifolia* subsp. *typhoides* var. *typhoides*: Yarpız
19. **Origanum bilgeri*: Kekik (Fig. 16)
20. *Phlomis leucophracta*: Çalba
21. **Platanus orientalis*: Biladan
22. *Prunus spinosa*: Yabani erik
23. **Punica granatum*: Hicaz narı
24. *Pyrus syriaca* var. *syriaca*: Yabani armut (Fig. 17)
25. *Rumex scutatus*: Ekşimek
26. *Sambucus ebulus*: Ayı döşeği
27. **Sideritis pisdica*: Sahil adaçayı (Fig. 18)
28. **Solanum tuberosum*: Patates
29. *Thymus cilicicus*: Yer kekiği (Fig. 19)
30. *Verbascum glomerulosum*: Sığırkuyruğu (Fig. 20)



Figure 7: *Pinus brutia*

In this study a total of 77 local plant names belonging to 69 taxa were presented. Of them local names of 17 taxa were not found in the related dictionaries of Turkish plants (9,10). These were listed below:

1. *Arbutus x andrachnoides*: **Koz ağacı**
2. *Arum* sp.: **Yılan borçağı**
3. *Celtis glabrata*: **Dağın**
4. *Cornus mas*: **Ergen kirazi**
5. *Cotinus coggyria*: **Boyalı sumak, Gevur sakızlağı**
6. *Cyclotrichium origanifolium*: **Nane çayı** (Fig. 21)
7. *Diospyros kaki*: **Amma, Emma**
8. *Dryopteris pallida*: **Çaşır otu**
9. *Foeniculum vulgare*: **Yabani anason**
10. *Gonocytisus angulatus*: **Kara borcak**
11. *Gundelia tournefortii* var. *armata*: **Kahve dikenini** (Fig. 13)
12. *Juniperus drupacea*: **Aygiliği** (Fig. 9)
13. *Origanum majorana*: **Yağ kekiği** (Fig. 22)
14. *Punica granatum*: **Hicaz narı**
15. *Sambucus ebulus*: **Ayı döşeği**



Figure 8: *Juniperus excelsa*



Figure 9: *Juniperus drupacea*



Figure 10: *Quercus coccifera*



Figure 11: *Myrtus communis* subsp. *communis*

16. *Sideritis pisdica*: **Sahil adaçayı** (Fig. 18)
 17. *Thymbra spicata* var. *spicata*: **Mor kekik** (Fig. 23)

Among the plants presented in our study, 7 taxa are endemic to Turkey. These were listed below:

1. *Abies cilicica* subsp. *isaurica*: Gökнар, Ladin
2. *Leucocyclus formosus* subsp. *formosus*: Papatya (Fig. 13)
3. *Origanum bilgeri*: Kekik (Fig. 16)
4. *Phlomis leucophracta*: Çalba
5. *Sideritis libanotica* subsp. *violascens*: Adaçayı (Fig. 24)



Figure 12: *Styrax officinalis*



Figure 13: *Gundelia tournefortii* var. *armata*



Figure 14: *Hypericum lydiu*



Figure 15: *Leucocyclus formosus* subsp. *formosus*

6. *Sideritis pisidica*: Sahil adaçayı (Fig. 18)
7. *Verbascum glomerulosum*: Sığırkuyruğu (Fig. 20)

One of them (*Origanum bilgeri*) is found only in Antalya. Also *Leucocyclus* is a monotypic endemic genus (the genus has

only one species in the world and it is known only from Turkey).

This is a preliminary ethnobotanical study, contains some local information about Gündoğmuş. It is a fact that, more information will be achieved by a future comprehensive research.



Figure 16: *Origanum bilgeri*



Figure 19: *Thymus cilicicus*



Figure 17: *Pyrus syriaca* var. *syriaca*



Figure 20: *Verbascum glomerulosum*



Figure 18: *Sideritis pisdica*



Figure 21: *Cyclotrichium origanifolium*



Figure 23: *Thymbra spicata* var. *spicata*



Figure 22: *Origanum majorana*



Figure 24: *Sideritis libanotica* subsp. *violascens*

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