

THE MEDICAL PLANTS OF KARAMAN-YESILDERE VILLAGE AND IT'S SURROUNDINGS

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ABSTRACT

Present study was carried out between 2014-2015 years at area of Karaman Yeşildere residents and surrounding villages in order to determine the plants which used for medicinal purposes. A total of 21 taxa belonging to 8 families have been identified in the end of the research. According to the survey, Lamiaceae family is the most taxa family for used treatment. The medicinal use of two Salvia species which have not been previously identified as therapeutic use has been demonstrated for the first time in the study.

Keywords: Medical plants, Yesildere, Turkey

INTRODUCTION

Nowadays, the majority of the world population still uses raw material medicine plant for treatment. Especially in developing countries, a large part of the population try to solve the health problems from traditional medicinal plants, firstly. Approximately 80% of the world's population constituted from developing countries, so more than half of the total world population use plants for therapeutic purposes.

The study of traditional uses of plants and their products in the world especially Mediterranean region has been progressively increasing during the past few decades (Rivera et al., 2005; De Natale and Pollio, 2007). The medicinal plants are widely used today's in developing countries for the maintenance of health (UNESCO, 1996).

In Europe, more than 1500 species of aromatic plants are used in Albania, Bulgaria, Croatia, France, Germany, Hungary, Poland, Spain, Turkey and the United Kingdom (Hoareau and Da

Silva, 1999). An increasing reliance on the use of traditional medicines in the industrialised societies is being observed (UNESCO, 1998). The wild plant foods have a key nutritive role in the cuisines of rural populations all over the world. Due to the renewed interest in ethnobotany especially over the past decade, it has become important that we establish a proper knowledge base of these plants, bringing together information on their ecology, habitat and distribution.

Turkey is rich on account of flora and approximately 11.000 varieties of plants are growing naturally (Davis, P.H. 1965-85; 1988; Güner et al., 2000; Özhatay and Kültür 2006; Özhatay et al. 2009). Since local people are using naturally growing plants for many different purposes, interest in the field of ethnobotany is increasing in Turkey (Sezik et al., 1992; Baytop, 1999; Ertuğ, 2000; Bağcı et al. 2001; Şimşek et al., 2002; Öztürk and Dinç 2005; Koyuncu et al., 2010; Cansaran and Kaya, 2010; Uysal et al. 2010; Güneş and Özhatay 2011).

There is any study performed in Karaman-Yeşildere before about the local plant names and ethnobotanical properties of the plants. The aim of the study is to determine the local and latin names of medicinal plants and the using parts of the plants which used as medical by local people in Yeşildere and surroundings.

MATERIAL AND METHODS

The material of the study were collected between April and September of the 2014-2015 years who gathered at Yeşildere village (Karaman) and around the village. Examples of plants used as treatment against diseases. Local names given by villagers, parts of plants used and usage patterns have been identified with face to face interviews. Plant specimens dried in the herbarium and identified from the book of the "Flora of Turkey and the East Eagen Islands" (Davis, P.H. 1965-1985).

RESULTS AND DISCUSSION

The study was carried out at area of Karaman Yeşildere residents and surrounding villages in order to determine the plants which used for medicinal purposes (Fig 1). A total of 21 taxa belonging to 8 families have been identified at the research. The results of the study stated below;

Figure:1 Research Area (Karaman/Yeşildere)



ALLIACEAE

Plant Name: *Allium sativum* L./Samırsak

Used Parts: Leaf and Onion

Using Purposes and Forms: Crushed plant onions sap is applied to the tooth root to resolve the toothache. Crushed onions with salt squeezed on the open wound can provide stop bleeding.

APIACEAE

Plant Name: *Foeniculum vulgare* Mill./Rezene

Used Parts: Leaf and Fruit

Using Purposes and Forms: Plant leaves and fruits boiled and cooled, one or two teaspoons of mix drink are given to infants for eliminate gas pain.

Plant Name: *Anethum graveolens* L./Dereotu

Used Parts: Leaf

Using Purposes and Forms: A cup of water from boiled leaves of the plant will be increase the breastfeeding. However a cup water from this mixture can relief menstruation pains.

Plant Name: *Ferula szowitsiana* DC./Çakşır

Used Parts: Root and Leaf

Using Purposes and Forms: Boiled leafs and roots are using for aphrodisiac and intestin forms.

ARACEAE

Plant Name: *Arum elongatum* Steven subsp. *detruncatum* (C.A.Mey. ex Schott)/Avu

Used Parts: Fruit and Root

Using Purposes and Forms: Swallow two or three plant fruits may relief disease of hemorrhoids. On the other hand, this mix can relief cough.

ASTERACEAE

Plant Name: *Helichrysum arenarium* (L.) Moench subsp. *aucheri* (Boiss.) Davis & Kupicha/Ölmez Ot

Used Parts: Flower

Using Purposes and Forms: A cup of water from boiled flower may use for urinary infection and kidney stones. This mixture can use for rheumatism, arthritis and jaundice. Flowers from plant collect and dried. Using as tea, this plant flowers may soft the chest for cold.

CARYOPHYLLACEAE

Plant Name: *Silene vulgaris* (Moench) Garcke var. *vulgaris*/Yapışkan Ot

Used Parts: Leaf

Using Purposes and Forms: Boiled leaf water used for diuretic and the inflammation of the urinary tract.

CUCURBITACEAE

Plant Name: *Ecballium elaterium* (L.) A. Rich/ Eşşekhiyarı

Used Parts: Fruit

Using Purposes and Forms: A mix of plant fruit water used for sinusitis and migraine.

Plant Name: *Lagenaria vulgaris* L./Su Kaba

Used Parts: Fruit

Using Purposes and Forms: A part from the interior of plant removing and putted on the ear for ear pain.

LAMIACEAE

Plant Name: *Cyclotrichium origanifolium* (Labill.) Manden. & Scheng./Kokar Ot

Used Parts: Aerial parts

Using Purposes and Forms: The flowers of plants are boiled and drinking as tea. The aerial parts of the plant are washed and boiled, its vapour used as relaxing agent for cough patients.

Plant Name: *Mentha piperita* L./Nane

Used Parts: Leaf

Using Purposes and Forms: Dried plant are boiled and its mix water used for stomach pain and nausea. Mixture of this plant used as painkiller.

Plant Name: *Mentha spicata* L. subsp. *tomentosa* (Briq.) Harley/Yarpız

Used Parts: Leaf

Using Purposes and Forms: Mixture obtained from leafs are using for headache and high blood pressure. For all that, its used for urinary infections.

Plant Name: : *Sideritis libanotica* Labill. subsp. *libanotica*/Ada Çayı

Used Parts: Flower

Using Purposes and Forms: Fresh flowers collected from plants and boiled. The mix water used as tea may give relaxation in the treatment of colds.

Plant Name: : *Sideritis libanotica* Labill. subsp. *violascens* P.H.Davis/Topuklu Çay

Used Parts: Flower

Using Purposes and Forms: Fresh flowers collected from plants and boiled. Mix of water using for oral diseases.

Plant Name: : *Stachys lavandulifolia* Vahl var. *lavandulifolia*/Tüylü Çay

Used Parts: Flower

Using Purposes and Forms: Used part of plant used as tea for mental distress.

Plant Name: *Teucrium polium* L./Acı Yavşan

Used Parts: Flower and Leaf

Using Purposes and Forms: A mixture of boiled water obtained from plant parts and may useful for stomach pain, nausea and stomach flu. Leaves of the plant crushed and wrapped to gas pains for infants and babies. However this mix can use for rheumatism.

Plant Name: *Thymus sipyleus* Boiss. subsp. *sipyleus* var. *Sipyleus*/Gara Kekik

Used Parts: Leaf and Sap

Using Purposes and Forms: Parts of plants are collected especially for sap and used for toothache. Plant leaves are boiled and used for stomache and colic.

Plant Name: *Salvia cryptantha* Montbert & Aucher ex Benth/İccak Otu

Used Parts: Aerial parts and Sap

Using Purposes and Forms: Leaves of plant boiled and used for sun stroke. Drinking as tea or take shower may relief for sun stroke.

Plant Name:: *Salvia hypargeia* Fich. & Mey./İccak Otu

Used Parts: Aerial parts and Sap

Using Purposes and Forms: Fresh leaves of plant boiled and using as tea for heatstroke.

MORACEAE

Plant Name: *Ficus carica* L. subsp. *carica*/İncir

Used Parts: Fruit

Using Purposes and Forms: Milk of the fruit applied on the scorpion poison wound area. Also its rides as cream on the abscess.

Plant Name: *Morus alba* L./Dut

Used Parts: Fruit and Leaf

Using Purposes and Forms: Fresh collected fruits crushed and boiled as syrup and used for wound of mouth sores at children.

CONCLUSION

During two year, 21 plants were identified in the research area and the local names of plants and usage have been defined. The villagers used the plants for treatment diseases such as; gastrointestinal diseases, cough corrector, healing of the abscess, painkiller, skin diseases, urine enhancer, ear pain, depression, sinusitis, human diarrhea, mouth sores, hemorrhoid, heatstroke and rheumatic diseases. Some researchs which applied at nearly region show similatiers related with the local names of plants and usage. (Asil and Eriş, 1988; İlçim and Varol, 1996; Başaran, 2003; Mart 2006). However, *Salvia cryptantha* and *Salvia hypargei* species differs from local names. *Salvia* species used as tea especially with flavoring spices cosmetics, perfumery and meat dishes also used in the chemical industry (Chalchat, 1998). Throughout history, plants were used for foods and health benefits. Nowadays its usage increasingly in progress. Some of biological effects of *Salvia* are as follows; antibacterial, antifungal, antiviral, antiseptic, analgesic, antioxidant, astringent, antispasmodic, hallucinogenic, central nervous system depressant, antidiabetic, anticancer, antituberculous, cardiovascular and insecticide activites. (Kamatou et al, 2008; Tada et al, 1994; Martins et al, 2015; Li et al, 2015; Eidi and Eidi, 2009; Ulueben, 1997). We determined in the study for the first time that *Cryptanth Salvia* and *Salvia hypargeia* used as a treatment for heatstroke.

We observed in the study, some of these plants are still used in the region. Factors such as; poorly economic situation of the local people, being far away from the village center of the city, at times the occurrence of adverse effects of drugs has led to more usage of plants.

Most of the plants has many useful features, some of which have toxic properties. This toxic properties are related with frequency of use, amount and genetic and physical characteristics. Poisoning usually arises from well-known poisonous plant or wrong usage (Yücel, 2012). Many medicinal plants are consumed by the public but must be used according to a certain quantity. For the purpose of more benefits from the medicinal plants, unconscious and uncontrolled exaggerate consume could lead to incorrect results. Wrong or exaggerate usage of medicinal

plants can even lead to death. Therefore, medicinal plants and herbal products should be used taking in advice from the doctor.

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