### SOME IMPORTANT PLANTS USED AGAINST DIABETES IN FOLKLORIC MEDICINE IN SAVUR (MARDIN/TURKEY) AREA AND THEIR APPLICATION AREAS

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#### Abstract

In this study; it is aimed to determine the purpose and the mode of use of some important plants used against diabetes in folk medicine in Savur (Mardin). Surveys were carried out in Savur Town Centre, and in some towns and villages of Savur district, during the years of 2012-2013. A total of 207 resource persons were interviewed. As a result of the study, 10 species from different families were determined which have been used for against diabetes. The plants determined in research area were: Bryonia multiflora Boiss. & Heldr. (Ulüngür), Cerasus mahaleb (L.) Miller var. mahaleb (L.) Miller (Mahlep), Hypericum triquetrifolium Turra (Purpurotu), Malva neglecta Wallr. (Çobançöreği), Olea europaea L. (Zeytin), Punica granatum L. (Nar), Teucrium polium L. (Acıyavşan), Thymbra sintenisii Bornm & Aznav subsp. sintenisii (Akzahter), Quercus brantii Lindl. (Karameşe), Cyclotrichium leucotrichum (Stapf ex Rech. Fil.) Leb. (Karaçekme). Local names and the mode of use and necessary doses of therapeutic plants were documented.

Key words: medicinal plants, folkloric medicine, diabetes, Savur, Mardin.

#### INTRODUCTION

Mardin has a limit and this region, the Southeastern Anatolia Region of Turkey, Iran and Turan includes endemic flora characters. The people in our region has a rich flora have benefited from herbs from the past to the present (Akgul, 2008; Ozgokce and Ozcelik, 2004).

Mardin is one of the oldest settled areas of many civilizations. At the same time, it is one of the rare cities living in harmony of the people from different faiths for centuries in the world. Historically and culturally, it is one of the richest cities of Turkey (Anonim, 2013). Therefore it posesses important ethnobotanical data.

The aim of the study, was to determine plants used in folk medicine in Mardin (Savur) and is to provide information regarding their applicability.

#### MATERIALS AND METHODS

Surveys were carried out in the central Savur Town, and in some towns and villages of Savur, during the years of 2012-2013. A total of 207 resource persons were interviewed. In the diagnosis of the collected samples, as the primary source "Flora of Turkey and the East Aegean Islands" (Davis, 1965-1985; Guner et al., 2000) were used.

#### **RESULTS AND DISCUSSIONS**

As a result of the study, 10 species belonging to different families were determined which have been used for therapeutic purposes. The plants determined in research area were:

## 1. Bryonia multiflora Boiss. & Heldr. (Ulüngür)

Familia: Cucurbitaceae.
Local Name of Plant: Amızğa, Ğerzikrêvi,
Lığbê, Rezıkrêvi, Rızıkrêvi.
Collection Period: May–July.
Location: C8, Mardin; Savur, Serenli Köyü,
Dengiza Çavê Amero Mevkii, 37° 33' 02.4" N,
40° 50' 20.2" E, 830 m, 06.05.2013, Ş.Arasan.
Plant Part: Root (Figure 1).

**Recommendation for use:** The of plant roots are consumed in the half rate of chickpea seed against diabetes daily. (Hıdır Öncül).



Figure 1. Bryonia multiflora Boiss. & Heldr.

2. Cerasus mahaleb (L.) Miller var.mahaleb (L.) Miller (Mahlep)

Familia: Rosaceae.

Local Name of Plant: Kenêr, Mehleb, Mahleb. Collection Period: May.

Location: C8, Mardin; Savur, Serenli Köyü, Köy İçi, 37° 33' 51.9'' N, 40° 49' 21.5'' E, 958 m, 18.04.2013, Ş.Arasan. Plant Part: Fruit (Figure 2).



Figure 2. Cerasus mahaleb (L.) Miller var. mahaleb (L.) Miller

**Recommendation for use:** The mature fruit of the plant are consumed against diabet (Nuriye Öncü, Gülnaz Saçan).

# **3.** *Hypericum triquetrifolium* **Turra** (Pırpırotu)

Familia: Guttiferae.

Local Name of Plant: Aran, Botav, Batof, Batov, Bahtof. Collection Period: July.

Collection Period: July.

Location: C8, Mardin; Savur, Bengisu Köyü, Köy İçi, 37° 30' 18.9" N, 41° 06' 28.2" E, 1054 m, 15.07.2013, Ş.Arasan.

Plant Part: Above-ground parts (Figure 3).

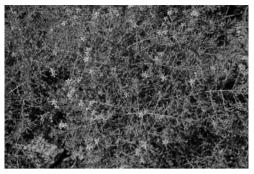


Figure 3. Hypericum triquetrifolium Turra

**Recommendation for use:** Above ground portion of the plant boiled in water and is drunk (Sultani Aksoy, İbrahim, Baki İpek, Gurbet Aytar).

#### 4. Malva neglecta Wallr. (Çobançöreği)

Familia: Malvaceae

Local Name of Plant: Tolık, Tolkê, Ğıbbes, Ğıbbez.

Collection Period: March-May.

Location: C8, Mardin; Savur, Beşevler Mevkii, 37° 32' 42" N, 40° 50' 42.9" E, 839 m, 25.05.2013, Ş.Arasan.

Plant Parts: Leave, Stem, Root (Figure 4).



Figure 4. Malva neglecta Wallr.

**Recommendation for use:** The plant is consumed against diabetes as raw (Zübeyde Alökmen, M.Said Demir).

#### 5. Olea europaea L.(Zeytin)

Familia: Oleaceae.
Local Name of Plant: Zeytin, Zeytun.
Collection Period: October-November.
Location: C8, Mardin; Savur, Merkez, 37° 32'
38.4" N, 40° 44' 16.7" E, 868 m, 30.09.2013, Ş.
Arasan.
Plant Part: Fruit, Leave, Stem (Figure 5).



Figure 5. Olea europaea L.

**Recommendation for use:** The plant's leaves are boiled in water and are drunk a day twice against diabetes (Saruhan Filiz).

#### 6. Punica granatum L.(Nar)

Familia: Lythraceae.
Local Name of Plant: Hınnar, Hınar, Henar, Hennar, Remuno, Rımman.
Collection Period: June-November.
Location: C8, Mardin; Savur, Koşuyolu Köyü, Köy İçi, 37° 29' 25.5" N, 41° 01' 36.3" E, 1088 m, 25.05.2013, Ş.Arasan.
Plant Part: Fruit, Flower (Figure 6).



Figure 6. Punica granatum L.(Nar)

**Recommendation for use:** Pomegranate juice is drunk against diabetes (Cemil Aslaner).

#### 7. Teucrium polium L. (Acıyavşan)

Familia: Lamiaceae.

Local Name of Plant: Bojna, Bojnak, Bojank, Cadê, Cedê, Gihabibo, Gihabo, Gihagevrık, Giyabojna, Mervent.

Collection Period: April-May.

Location: C8, Mardin; Savur, Dereiçi, Köy İçi, 37° 32' 54.2" N, 40° 57' 36.2" E, 931 m, 15.05.2013, Ş.Arasan.

Plant Parts: Above-ground parts (Figure 7).



Figure 7. Teucrium polium L.

**Recommendation for use:** *T. polium* is one of the most widely used plants in traditional folk medicine. The plant is eaten against diabetes as raw or it infused in hot water and is drunk (Şerif Bozkurt; Nuray Bozkurt, Şeyhmus Yıldız).

**8.** *Thymbra sintenisii* Bornm & Aznav subsp. *sintenisii* (Akzahter)

Familia: Lamiaceae.

Local Name of Plant: Cehter, Cehteri, Zahter, Zehter.

Collection Period: July-Agust.

Location: C8, Mardin; Savur, Yaylayanı Köyü, Köy Çevresi, 37° 35' 55.9" N, 40° 59' 26.6" E, 1118 m, 15.07.2013, Ş.Arasan.

Plant Part: Above-ground parts (Figure 8).



Figure 8. *Thymbra sintenisii* Bornm & Aznav subsp. *sintenisii* 

**Recommendation for use:** *T. sintenisii* infused in hot water and is drunk two cups a day against diabetes (Koçere Demirtaş).

#### 9. Quercus brantii Lindl. (Karameşe)

Familia: Fagaceae. Local Name of Plant: Ballot, Balutê, Beru, Bellot, Çılo. Collection Period: September-October. Location: C8, Mardin; Savur, Bağyaka Köyü, Diyarbakır - Savur Yolu, 37° 33' 39.5" N, 42° 47' 49.4" E, 997 m, 02.09.2013, Ş.Arasan. Plant Part: Fruit-Coat (Figure 9).



Figure 9. Quercus brantii Lindl.

**Recommendation for use:** Acorn fruit is eaten one or two in day against diabetes (Murat Yılmaz, Yamane Acar, Cengiz Çelebi, Emine Yılmaz).

#### 10. Cyclotrichium leucotrichum (Stapf ex Rech.f.) Leb. (Karaçekme)

Familia: Lamiaceae.
Local Name of Plant: Rihana tehtan.
Collection Period: June.
Location: C8, Mardin; Savur, Yenilmez Köyü, 37° 30' 28.3" N, 40° 59' 48.8" E, 1133 m, 05.06.2013, Ş.Arasan.

Plant Part: Above-ground parts (Figure 10).



Figure 10. Cyclotrichium leucotrichum (Stapf ex Rech.f.) Leb.

**Recommendation for use**: A few branches of this plant boiled in water and is drunk (Abdülhamit Erkek).

#### CONCLUSIONS

In this study, a total of 207 resource persons were interviewed. As a result, 10 species from different families were determined which have been used against diabetes for therapeutic purposes. Plant species were grouped with local and common names. Therapeutic application, dosage, mode of use and mode of treatment were documented. Thus, it has been tried to be transmitted to generation to the next of experience and knowledge accumulated of thousands of years of local people from past to present.

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