

THERAPEUTIC VALUES OF SOME PLANTS USED IN THE TREATMENT OF DIABETES

Rashmi Priya*

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Ethno-botanical survey was conducted to explore plant species used in the treatment of diabetes. A brief account of plant includes botanical name, common name, family and their parts used as drugs has been given. These reported plant species need further clinical investigations.

INTRODUCTION

Diabetes mellitus is a disease characterized by elevated blood glucose level and leads to disturbance of carbohydrate, fats and protein metabolism. Insulin is used to reduce the elevated blood sugar but its use is associated with various side effects. Nowadays, people are frequently using herbal medicines to alleviate the problems associated with diabetes than the allopathic medicines. (Padmanabha *et al.*, 2011; Singh *et al.*, 2014). The present communication brings out several antidiabetic plants belonging to different families. These medicinal plants are fairly accepted and easily available (Anonymous, 1978).

MATERIALS AND METHODS

Research oriented trips were organized to collect the plant species from different ecological niches at Hajipur local. Vaid and hakims were interviewed to know the antidiabetic plants. The said plant eg. *Aristolochia indica*, *Cardiospermum glabrum*, *Centella asiatica*, *Cinnamomum tamala*, *Foeniculum vulgare*, *Herpestris monniera*, *Ipomoea calycina*, *Piper longum*, *Syzygium cuminii* and *Catharanthus roseus* were collected.

They were dried under herbarium press for ten days and poisoned in 5% mercuric chloride solution made in absolute alcohol. The plants were then mounted on herbarium sheet measuring 42 X 28 cm with the help of an adhesive. The mounted plants were identified with the help of literatures (Chopra *et al.* 1956, Kirtikar and Basu, 1935; Jain 1925).

RESULTS AND DISCUSSIONS

In the present study, the plant species of only antidiabetic effects are arranged alphabetically as such:

1. **Aristolochia indica Linn.**

ARISTOLOCHIACEAE

Part used: Entire plant

The decoction of entire plant is served in empty stomach which give positive result in diabetes.

2. **Catharanthus roseus Linn.**

APOCYNACEAE

Parts used: Flower

The decoction of flowers is taken orally to check diabetes.

3. **Cardiospermum glabrum Linn.**

SAPINDACEAE

Parts used: Fruits and roots

The decoction of fruits and roots are used in high blood sugar.

4. **Centella asiatica** Linn.

APIACEAE

Parts used: Leaves

The infusion of dried leaves mixed with hot milk in small doses are administered orally in a regular manner.

5. **Cinnamomum tamala** Ness

LAURACEAE

Parts used: Leaves

The decoction of fresh leaves is given twice a day in severe diabetes.

6. **Foeniculum vulgare** Gaertn

APIACEAE

Parts used: Fruits (Cremocarp)

The infusion of dried seeds is given with hot water to check diabetes.

7. **Herpestris monniera** Linn.

SCROPHULARIACEAE

Parts used: Roots

The paste of roots is used in diabetes.

8. **Ipomoea calycina**

CONVOLVULACEAE

Parts used: Fresh leaves and flowers

The paste of fresh leaves and flowers are used in diabetes.

9. **Piper longum** Linn.

PIPERACEAE

Parts used: Spikes

The infusion of dried spikes mixed with hot water is served orally in the treatment of diabetes.

10. **Syzygium cuminii** Linn.

MYRTACEAE

Parts used: Seeds, and bark

The infusion of bark and seeds is served in regular mode for one year.

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