

## Ethnomedicobotany of Viluthi (*Cadaba fruticosa* L. Druce)

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### Summary

This study reports ethnomedicinal uses of *Cadaba fruticosa* collected from Thiruvizhimizhalai, Mayavarum Thaluk, Thiruvarur District of Tamil Nadu, India. Data was gathered by interviewing local traditional healers in the area surveyed.

**Keywords:** Ethnobotany, *C. fruticosa*, folklore claim, traditional uses, Thiruvizhimizhalai.

### Introduction

Ethnomedicobotany has some common approaches of research. Study of a tribal community and local traditional medical practitioners is also one of the approaches (1, 2, 3). Thiruvizhimizhalai is the selected study area (delta area) situated about 360 Km. from Chennai City, Tamil Nadu, India. It is about 20-25 Km. from the 'Temple City' of Kumbakonam. It receives an average annual rainfall of 15-20cm. "Veezhiyar" are the widely spread community in this area. They are basically Tillers or Peasants or Farmers. This community uses number of plants to treat various ailments including Viluthi. Traditional medicine is practiced by local medicine men or women healers, popularly known as 'Vaidhyas' (male) or 'Maruthuvachi' (female). In the present study an attempt was made to study the ethnomedicinal uses of *C. fruticosa* (Syn. *C. indica*) (Viluthi) to provide first hand information. Viluthi is found abundantly in dry land and also considered as a wasteland plant. During the present study in Thiruvizhimizhalai of Thiruvarur district of Southern Tamil Nadu some interesting novel claims pertaining to *C. fruticosa* (Viluthi) were gathered.

### Ethnomedicobotanical data

1. Decoction of the fresh leaves is administered (2-5ml) orally for 3 days in case of conjunctivitis (pain and reddening of the eyes).
2. Aqueous extract of the leaves (2-3drops) are instilled for 3 days into the nose for relieving cold (rhinitis).
3. The aerial part of the plant is air-dried, pulverized and 1 –2.5g administered orally with warm water or milk in case of fever for about 3 days.
4. Fresh leaves at the dose level 0.5 – 1.5g are chewed daily for about 15 days to alleviate gastric disorders.
5. Aqueous extract of roots and leaves are administered to stop the white discharge at the dose of 1 – 1.5g and 0.5 – 1g with hot water once daily for 45 days.
6. Fresh juvenile leaves of Viluthi is eaten along with rice gruel as a side dish during dehydration and fever.
7. Three to five fresh leaves weighing about 0.3 to 0.6g are chewed as fresh twice daily for about 90 days to lower the elevated blood glucose level.

### **Botanical Identification**

Botanically Viluthi is identified as *C. fruticosa* Linn. belonging to the family Capparaceae. A brief botanical description is provided below.

*C. fruticosa* is a rigid wiry unarmed shrub. Leaves simple or 3-foliolate. Flowers solitary, corymbose or racemed. Sepals 4, unequal, in 2 whorls, outer 2 valvate. Petals 4 or 2, clawed, hypogynous. Disk large coloured, encircling the gynophore with its tubular stalk and expanded trumpet like at the top or spatulate. Stamens 4 –6, inserted unilaterally on the slender gynophore. Ovary 1- loculed, stigma sessile, ovules many, on 2-4 parietal placenta. Fruit a slender fleshy cylindrical berry or sometimes dehiscent ultimately by two valves which fall away from the placenta. Seeds globose, testa horny, cotyledons convolute (4).

### **Therapeutic Properties reported**

*C. fruticosa* is reported to possess aperient property. Aqueous extract of the stem possess antiphlogistic property. Leaves are used to alleviate gastric disorders viz., gastritis, ulcer, dyspepsia. The aerial parts of the plant are an emmenagogue and also recommended in uterine obstructions (5-8).

### **Experimental section**

Ethnomedicobotanical data was gathered by interviewing these people especially the healers during the period from April to June of 1999 –2004 as per Rao, 1989.

Detailed information was obtained on the uses of the plant, recipe prescribed for several diseases or conditions, duration and mode of administration and food restriction, if any during the course of treatment. Attempt was made to check the veracity of claims by contacting the actual beneficiaries. Plant material in flowering and fruiting condition was collected, identified by Dr.Ajithadas, Dept. of Botany, Presidency College, Chennai and deposited at the Herbarium of Maharaji College of Pharmacy, Chennai-90 bearing Voucher Specimen No. SM 99. The ethnobotanical information was obtained from local traditional healers.

### **Summary and Conclusion**

This plant was identified as *Cadaba fruticosa* (L.) Druce. From this ethnomedical information of the plant it is evident that the plant may possess some additional medicinal properties like anti diabetic, anti allergic, antipyretic and analgesic. Further investigation in this regard may result in a new potent drug moiety from natural origin. The ethnomedicobotanical uses reported in this communication is the first report on *C. fruticosa* (locally known as Viluthi).

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