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**Traditional herbal remedies to cure asthma in Adilabad district,  
Andhra Pradesh, India**

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**Abstract**

An ethnopharmacological survey was carried out to collect information on the use of medicinal plants in rural areas of Adilabad district to cure asthma. Questionnaire surveys, participatory observations and field visits were planned to illicit information on the uses of various plants. It was found that 28 plant species are commonly used by local people for curing Asthma.

Keywords: Traditional, Tribal people, Adilabad District, Andhra Pradesh

**Introduction**

India one of the mega diversity regions of the world has a highly variable flora due to the presence of diverse climatic conditions.<sup>1</sup> A number of investigators have published notes on the medicinal plant wealth of Adilabad district and near areas.<sup>2-5</sup> In India about 2,500 plants species are known to be useful and more than 6,000 manufacturers produce about 1,500 Ayurvedic, Unani and Siddha medicinal preparations from plants. South India In Particular is blessed with diverse medicinal taxa. In the recent past, the Ethno botanical survey has been triggered to gather the medicinal knowledge of tribal as well as non-tribal groups.

Asthma is a common chronic inflammatory disease of the airways characterized by variable and recurring symptoms, airflow obstruction, and bronchospasm. Symptoms include wheezing, cough, chest tightness, and shortness of breath. Some people are hypersensitive to certain substances like pollen grains, house dust, cold wind, rain etc., may get asthmatic attack frequently. Allergic patients are increased due to polluted atmosphere. Asthma is more common in affluent countries, it is by no means a restricted problem; the WHO estimate that there are between 15 and 20 million people with asthma in India. Mostly asthmatic attack occurs in monsoon and winter seasons.

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### Methods:

The study was carried out by adopting the methodology<sup>6</sup>. The first hand information were gathered by conducting field visits to the tribal hamlets such as Echoda, Boath, Indravelly, Utnoor, Mamada, Nirmal, Chennoor, Asifabad and Bejjur. The herbal men and old men were interviewed for preparation and administration of drugs. Herbarium Voucher specimens are deposited in Department of Botany (KUH) at Kakatiya University, Warangal, Anhra Pradesh, India.

### Study Area:

Achalapur district lies between 77° 47' and 80° 0' of the eastern longitudes and 18° 40' and 19° 56' of northern latitudes. The district is bounded on North by Yeotmal, on the East by Chanda districts of Maharashtra and on the South by Karimnagar and Nizamabad and on the West by Nanded district of Maharashtra State. These harbour mainly dry deciduous forest and aborigines. These forests occupy about 44.5 percent of the total geographical area of the district. The total forest area in the district is 7218.86 sq.km. The total population of the district is 24, 88,003 out of which the tribal population is 4, 16,511 (Census of India 2001). The main occupation of the people is agriculture. The important rivers in the district are the Godavari, the Penganga, the Wardha, the Pranahitha, the Kadam and the Peddavagu. The Godavari is the largest river in peninsular India. The most important crop in the district is Jowar, followed by cotton. Other crops include Maize, Pulses, dry Paddy, Soybean and Sunflower.

### Enumeration:

In the enumeration, data on asthmatic uses of plants are arranged in the following sequence: Serial number, Botanical name, Family and Vernacular name followed by mode of administration as gathered from rural and tribal people.

#### 1. *Adhatoda zeylanica* Medic.

F: Acanthaceae, V.N: Addasaramu

2-3 spoonfuls of leaf extract given about a month.

#### 2. *Ailanthus excelsa* Roxb.

F: Simaroubaceae, V.N: Peddamanu

Bark decoction administered orally in 2 spoonfuls thrice a day about one month.

#### 3. *Azima tetracantha* Lamk.

F: Salvadoraceae, V.N: Uppi Teega

Leaf juice administered orally in 2 spoonfuls twice a day for about 20d.

#### 4. *Bambusa arundinacea* (Retz.) Willd.

F: Gramineae, V.N: Veduru

Leaf decoction administered orally in 3 spoonfuls twice a day for about one month.

#### 5. *Barleria cuspidata* Heyne.ex Nees

F: Acanthaceae, V.N: Nelambram

Root decoction administered orally in 2 spoonfuls 3-4 times a day for 7d.

#### 6. *Barleria prionitis* L.

F: Acanthaceae, V.N: Mulla Gorinta

Stem ground with honey and ginger and made into dry pillets and administered in 2 pillets twice a day for a month.

**7. *Blumea mollis* (D.Don.) Merr.**

F: Compositae, V.N: Kukka Pogaku

Dried leaves smoked with wrapping leaves of *Diospyros mealanoxylon*.

**8. *Boerhavia diffusa* L.**

F: Nyctaginaceae, V.N: Atika Mamidi

Root extract is administered orally in a spoonful twice a day for 15d.

**9. *Calotropis procera* (Ait.) R.Br.**

F: Asclepiadaceae, V.N: Jilledu

Flower powder mixed with honey and administered in 2 spoonfuls twice a day for a month.

**10. *Cassia fistula* L.**

F: Leguminosae, Sf; Caesalpinoideae, V.N: Rela

Fruits ground with roots of *Hemidesmus* and the paste administered in 10g twice a day about 20 d.

**11. *Curculigo orchoides* Gaertn.**

F: Hypoxidaceae, V.N: Nela Tadi

Rhizome extract administered in 2 spoonfuls twice a day for about 2 months or till cure.

**12. *Datura metal* L.**

F: Solanaceae, V.N: Erri Ummetta

Fruits ground and made into small pills with honey and in 2 pills taken twice a day for about 3 months.

**13. *Desmodium triflorum* (L.) DC.**

F: Leguminosae, Sf; Papilionatae, V.N: Munta Manda

Root decoction given in 2 spoonfuls twice a day for about 10d.

**14. *Lepidagathis cristata* Willd.**

F: Acanthaceae, V.N: Suryakanta

Powder of shade dried whole plant mixed with honey in 2 spoonfuls is administered twice a day for a bout 20d.

**15. *Nerium oleander* (L.)**

F: Apocynaceae, V.N: Ganneru.

Flowers ground with jaggery and the extract administered in 2 spoonfuls twice a day for about 2 months.

**16. *Opuntia stricta* (Haw.) Haw.**

F: Cactaceae, V.N: Naga Phanni

Fruits are warmed and the juice given in 2 spoonfuls thrice a day for about 2 weeks.

**17. *Passiflora foetida* L.**

F: Passifloraceae, V.N: Tella Jumiki

Leaf decoction administered in 2 spoonfuls with fruit juice of *Terminalia chebula* thrice a day for about one month.

**18. *Pergularia daemia* (Forssk.) Chiov.**

F: Asclepiadaceae, V.N: Dustapa teega

Leaf decoction taken in 2 spoonfuls 2-3 times a day for about 15d.

**19. *Phyllanthus emblica* L.**

F: Euphorbiaceae, V.N: Pedda Usiri

Fruits ground with tubers of *Cyperus rotundus* and leaves of *Tinospora cordifolia* and the paste administered with honey in 2 spoonfuls twice a day for about one month.

**20. *Phyllanthus reticulatus* Poir.**

F: Euphorbiaceae, V.N: Puli Chettu

Root decoction with honey administered in 2 spoonfuls twice a day for one month.

**21. *Piper longum* L.**

F: Piperaceae, V.N: Pippallu

Whole plant ground with leaves of *Adhatoda zeylanica* and made into **powder**. A spoonful of powder is taken once in day for 20d.

**22. *Portulaca quadrifida* L.**

F: Portulacaceae, V.N: Sanna pappu koora

Whole plant extract mixed with honey and administered in 2 spoonfuls thrice a day for about 20d.

**23. *Solanum surattense* Burm.f.**

F: Solanaceae, V.N: Mulla vankaya, Vankudu

Root decoction administered in 2-3 times a day for about one month.

**24. *Tragia involucrata* L.**

F: Euphorbiaceae, V.N: Durada gondi

Root powder cigared with leaves if *Diospyros melanoxylon* and smoked to reduce suffering.

**25. *Tylophora fasciculata* Ham.**

F: Asclepiadaceae, V.N: Veripala teega

Tender leaf juice administered in 2 spoonfuls twice a day for 20 – 30d.

**26. *Vicoa indica* (L.) DC.**

F: Compositae, V.N: Adavi poddu tirugudu

Leaf juice administered in 2 spoonfuls twice a day for 15d.

**27. *Vitex negundo* L.**

F: Verbenaceae, V.N: Vavili

Leaf juice with dried powder of *Zingiber officinale* given in 2 spoonfuls twice a day for about 20d.

**28. *Zaleya decandra* (L.) Burm.f.**

F: Aizoaceae, V.N: Tella garijelu

Root juice administered in 2 spoonfuls twice a day for about 20d.

### Results and Conclusion

In the present investigation we reported about 20 medical indications for the use of these plants in traditional medicine to cure asthma. The majority of the remedies were prepared from freshly collected plant material from the wild and from a single species and some times they mixed with other plant materials. When fresh plant parts are not available, dried parts are also used. They were mainly taken orally, but some applications were prepared with a mixture of plants or ingredients such as honey and ginger. Decoction of the leaves was the main form of preparation and leaf powder was mostly used for the preparation of infusions. The parts of the plants most frequently used were the leaves, roots, flowers, stem bark, rhizome and whole plant also. The species from acanthaceae family are predominantly used for curing asthma. There was a high degree of informant consensus for the species and their medicinal indications between the healers interviewed. The results of this study showed that people are still dependent on medicinal plants in these rural areas of Adilabad district, Andhra Pradesh, India for curing asthma.

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