

# A Catalogue on Endemic Plants at Tirumala Hills, Andhra Pradesh, India

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## ABSTRACT

Medicinal plants play a vital role in health care. The use of medicinal plants for treatment is growing in view of cost and non-compliance of modern medicine as in case of non-communicable diseases. Plants like *Boswellia ovalifoliolata*, *Cycas beddomei*, *Pimpinella tirupatiensis*, *Pterocarpus santalinus*, *Shorea thumbuggaia*, *Syzygium alternifolium*, *Terminalia pallida* are endemic to Tirumala hills of Seshachalam range falling under the Eastern Ghats of India. These plants species have medicinal properties such as anti-tumorigenic, anti-microbial, purgative, hypoglycemic, abortifacient, analgesic, anti-septic, anti-pyretic and anti-inflammatory.

**Keywords:** Endemic plants; Tirumala hills; Medicinal importance.

## INTRODUCTION

Medicinal plants play a vital role in health care. The demand for medicinal plants in health care is about 70-80%. Increasing acknowledgment of medicinal plants is due to numerous factors like cultural adequacy, availability, affordability and facility to meet psychological needs. Medicinal plants are the local heritage with universal significance. There are number of plants used for treating diseases which are not systematically recognized due to a lack of communication and low frequency of their use. The traditional use of low outline and less known medicinal plants should be recognized to distribute the therapeutic effectiveness to cover the way for preparation of acceptable medicine and to reduce the pressure on over exploited species. Catalogues on medicinal plants are available. However, a catalogue on endemic plants of Tirumala hills and their medicinal values is not existing. Seven endemic plants namely *Boswellia*, *ovalifoliolata*, *Cycas beddomei*, *Pimpinella tirupatiensis*, *Pterocarpus santalinus*, *Shorea thumbuggaia*, *Syzygium alternifolium*, and *Terminalia pallida* are endemic plants on Tirumala hills of Seshachalam range of Eastern Ghats, Andhra Pradesh, India. These plants have medicinal properties and are used in herbal treatment to cure a varied range of health difficulties. There is a need to connection the gap for data access on these plants to the systematic public.

### Value:

The catalogue encloses information on seven species of endemic plants in Tirumala Hills. One of them is a gymnosperm and the remaining six are angiosperms. Different parts of the plants are used in herbal treatment. *Boswellia ovalifoliolata* stem bark is a mosquito repellent and its resin is used for peripheral applications. The male cones of *Cycas beddomei* are collected for medicinal use in Ayurveda system of medicine. *Pimpinella tirupatiensis* seeds are used for treatment of Bronchitis; fruits as diuretics for curing ulcers of stomach, throat and genital organs, management of scorpion sting, rheumatic ailments and as abortifacient agent. Fruit decoction of *Pterocarpus santalinus* is controlled as astringent tonic in dysentery; its wood and fruit to treat diaphoretic, sickly infections and chronic dysentery; heart wood as anti tumorigenic, for treatment of headache, skin diseases, fever, boils, scorpion string and to improve eye-sight; stem bark in mixture with leaf as antimicrobial agent and as anti-hyperglycemic. *Syzygium alternifolium* fruit is used for curing stomach ache, ulcers and controlling of rheumatic pains; seeds as anti-diabetic agents; leaves to treat dry cough and dysentery; and stem bark as antiseptic. Plant extracts and leaf juice of *Shorea thumbuggaia* are controlled for ear ailments. Roots of *Terminalia pallida* in mixture with its fruit kernel is used to treat venereal diseases and digestive ulcer; fruit to

cure diarrhea, cough, cold, swellings, piles, fever, ulcers and as antipyretic, purgative; while the bark is used as anti-inflammatory agent.



Fig: 01. *Boswellia ovalifoliolata* (Burseraceae)



Fig: 02. *Cycas beddomei* (Cycadaceae)



Fig: 03. *Pimpinella tirupatiensis* (Apiaceae)



Fig: 04. *Pterocarpus santalinus* (Fabaceae)



Fig: 05. *Shorea thumbuggaia* (Dipterocarpaceae)



Fig: 06. *Syzygium alternifolium* (Myrtaceae)



Fig: 07. *Terminalia pallida* (Combretaceae)

### Forthcoming improvements:

We propose to apprise and additional advance of the catalogue. We are also organization to afford online hyperlinks to the corresponding open access articles in the neighboring imminent. The catalogue will also be improved to advance requirements for search to view chemical structure of compounds isolated from these plants. The catalogue comprises just seven accounts based on available information affecting to the endemic plants of Tirumala hills, Andhra Pradesh, India.

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