

# Phytotherapy for Dyspepsia by the Tribals of East Godavari District, Andhra Pradesh

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Article Info	Summary
Article History	The paper presents a detailed account of the use of 33 taxa of 22 families as ethnomedicine for curing dyspepsia by the tribals of East Godavari district, Andhra Pradesh.
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#### Introduction

In ethnobotanical studies, the major contribution has been in the field of medicine. A large number of ethnomedicinal information remained endemic to certain regions or people due to lack of communication. Dyspepsia is a pain or an uncomfortable feeling in the upper middle part of stomach. The pain might come and go, but it's usually there most of the time. People of any age can get dyspepsia.

The information about medicinal plants is mainly confined to tribal vaidyas, chieftains of different tribal communities and older members of the family. Though there are many publications on ethnobotany of East Godavari district [1-10] specific studies on dyspepsia was not reported, necessitating the present study.

East Godavari district is situated on the North East of Andhra Pradesh in the geographical condition of 16°-30' and 18°-20' of the northern Latitude and 81°-30' and 82°-36' of eastern Longitude occupying an area of 10,807 sq kms. It is bounded on the North by Visakhapatnam district and the state of Orissa, on the East and South by Bay of Bengal, on the West by West Godavari district and on the Northwest by Khammam district. The total population of the district is 49,01,420 of which 1,91,561 are the tribal people comprising 3.91% of the population. Konda reddi, Konda dora, Konda kammara, Konda kapu, Manne dora and Valmikis are the main tribal communities.

### Material and Methods

The study is based on personal interviews with tribals. Plant specimens have been collected from the field and their identities as recognized by the tribal healers have been confirmed. The herbarium specimens are prepared and deposited in the Herbarium of the Department of Botany, Andhra University, Visakhapatnam. Each plant is enumerated with a correct botanical name followed by the author, family, vernacular and English names.

### Enumeration

*Acorus calamus* L. Araceae VN: Vasa E: The sweet flag Two spoonful of rhizome paste is administered orally daily twice for 3 days.

*Amaranthus viridis* L. Amaranthaceae VN: Kodijuttu E: Slender amaranth

\*Root with rhizome of *Zingiber officinale* is taken in equal quantities and ground. A spoonful of paste is administered daily twice for 2 days.

*Ananas comosus* (L.) Merr. Bromeliaceae VN: Anas pandu E: Pineapple

\*Two spoonful of unripened fruit paste mixed with a spoonful of honey is administered daily twice for 2 days.

*Andrographis paniculata* (Burm. *f.*) Wall. ex Nees Acanthaceae VN: Chedhukoora E: King of bitters

Leaves with fruits of *Capsicum annuum* are taken in equal quantities and ground. A spoonful of paste mixed with a spoonful of honey is administered daily twice for 2 days.

Areca catechu L. Arecaceae VN: Poka-vakka E: Areca nut tree

A pinch of nut powder is administered daily twice after meals.

*Caryota urens* L. Arecaceae VN: Jeelugu E: Fish tail palm \*Hundred ml of toddy is taken orally daily once for 10 days.

Cassia fistula L. Caesalpiniaceae VN: Rella chettu E: Indian laburnum

\*Two spoonful of fruit juice is administered daily twice for 2 days.

*Cinnamomum zeylanicum* Garc. ex Bl. Lauracee VN: Dalchina chekka E: Cinnamon tree

\*A spoonful of stem bark powder is administered daily twice for 3 days.

Coleus amboinicus Lour. Lamiaceae VN: Vamu aku E: Indian borage

Leaves with dried rhizome of *Zingiber officinale* and seeds of *Piper nigrum* are taken in equal quantities and powdered. Two spoonful of powder mixed in a glass of buttermilk is taken orally daily twice for 3 days.

Coriandrum sativum L. Apiacee VN: Dhaniyalu E: Coriander

\*Two spoonful of seed powder mixed with a spoonful of seed powder of *Piper nigrum* and a pinch of salt is administered daily twice for 3 days.

*Cyamopsis tetragonaloba* (L.) Taub. Fabaceae VN: Goruchikkudu E: Cluster bean

\*Seeds with leaves of *Coleus amboinicus* and *Ocimum tenuiflorum* are taken in equal quantities and ground. Two spoonful of paste mixed with a spoonful of honey is administered orally daily once for 2 days.

*Cyperus rotundus* L. Cyperaceae VN: Tunga mustalu veru E: Nut grass

Two spoonful of tuberous root powder mixed in a glass of cow milk is administered daily twice for about a week.

Daucus carota L. Apiaceae VN: Gajjaragadda E: Carrot

\*Tuberous root with leaves of *Ocimum tenuiflorum* and bulb of *Allium sativum* are taken in equal quantities and ground. 2 spoonful of paste mixed with a spoonful of honey is administered daily once for 3 days.

*Dichrostachys cinerea* (L.) Wight & Arn. Mimosaceae VN: Velthuru E: Marabu

\*Two spoonful of root bark paste mixed with a spoonful of honey is administered daily twice for 3 days.

*Dioscorea bulbifera* L. Dioscoreaceae VN: Adavi dumpa E: Bulb bearing yam

Two spoonful of leaf juice is administered daily twice after food for 2 days.

*Echinochloa frumentacea* Link Poaceae VN: Bontha samalu E: Shama millet

Leaves with those of *Coleus amboinicus*, seeds of *Piper nigrum* and dried rhizome of *Zingiber officinale* are taken in equal quantities and ground. Two spoonful of paste mixed with a pinch of cammon salt is taken orally daily twice for 2 days.

*Ferula asafoetida* L. Apiaceae VN: Inguva E: Asafoetida \*A spoonful of gum extracted from stem mixed in a glass of cow milk is taken orally daily twice for 2 days.

Foeniculum vulgare Mill. Apiaceae VN: Sompu E: Fennel

\*Two spoonful of fruit paste mixed with a pinch of salt is administered orally early in the morning for 3 days.

*Gardenia gummifera* L. *f.* Rubiaceae VN: Bikki E: Cumbi gum

A spoonful of stem bark gum mixed with a spoonful of flower paste of *Madhuca indica* is administered daily twice for 3 days.

*Ixora coccinea* L. Rubiaceae VN: Manmadibanum E: Jungle-flame ixora

\*Two spoonful of flower paste mixed with a spoonful of honey is administered daily twice for 3 days.

Limonia acidissima L. Rutaceae VN: Elikkaya E: Dog wood apple

\*Two spoonful of fruit pulp mixed with a spoonful of honey is administered daily twice for 2 days.

*Ocimum americanum* L. Lamiaceae VN: Kukkatulasi E: Hoary basil

\*Leaves with those of *Coleus amboinicus*, seeds of *Coriandrum sativum*, *Piper nigrum* and dried rhizome of *Zingiber officinale* are taken in equal quantities and ground. 2 spoonful of paste mixed in a glass of cow milk is administered daily once for 2 days.

*Olax scandens* Roxb. Olacaceae VN: Mekabanda E: Brahmin poison nut

\*Fruits with rhizome of *Zingiber officinale*, seeds of *Caesalpinia bonduc* and *Piper nigrum* and leaves of *Coleus amboinicus* are taken in equal quantities, dried and powdered. 2 spoonful of powder mixed in a glass of hot water is administered daily twice for 2 days.

*Phyla nodiflora* (L.) Greene. Verbenaceae VN: Bokkena E: Purple lippia

\*Two spoonful of whole plant paste mixed with a spoonful of honey is administered daily twice for 3 days.

*Piper betle* L. Piperaceae VN: Tamalapaku E: Betel leaf Two spoonful of leaf paste mixed with a pinch of lime is administered daily twice for 2 days.

*P. longum* L. Piperaceae VN: Pippallu E: Long pepper

\*Roots with fruits of *Terminalia chebula*, *T. bellirica* and *Phyllanthus emblica* are taken in equal quantities and ground with a pinch of asafoetida. Paste is made into pills of peanut seed size. 2 pills are administered daily twice for 3 days.

*Rauvolfia serpentina* (L.) Benth. ex Kurz Apocynaceae VN: Pathala garidi E: Sarpentina root

\*2 spoonful of root paste mixed with a spoonful of leaf paste of *Coleus amboinicus* is administered daily twice for 3 days.

Setaria italica (L.) Beauv. Poaceae VN: Korralu E: Indian millet

Two spoonful of root decoction with a pinch of salt is administered daily twice for 2 days.

*Strychnos potatorum* L. *f*. Loganiaceae VN: Induga, Chilla E: Clearing nut tree

\*Seeds mixed with roots of *Piper longum*, fruits of *Terminalia chebula*, *T. bellirica* and *Phyllanthus emblica* are taken in equal quantities and ground. 2 spoonful of paste mixed in a glass of cow milk is administered daily twice for 5 days.

### Tinospora cordifolia (Willd.) Miers ex Hook. f. & Thoms.

Menispermaceae VN: Amruthavalli E: Gulancha tinospora \*Two spoonful of root paste mixed with a spoonful of rhizome juice of *Coleus amboinicus* is administered daily twice for 2 days. *Toddalia asiatica* (L.) Lam. Rutaceae VN: Konda kasintha E: Wild orange tree

Two spoonful of root bark paste mixed with a pinch of alum is administered daily twice for 3 days.

*Vigna unguiculata* (L.) Walp. Fabaceae VN: Alasandalu E: Cow pea

\*Two spoonful of seed paste along with hot water is taken orally daily twice for 3 days.

Vitex negundo L. Verbenaceae VN: Tella vavili E: Negundo

\*A spoonful of leaf juice is administered daily twice for 2 days.

### **Results and Discussion**

The ethnobotanical survey yielded 33 species belonging to 32 genera and 22 families used for curing dyspepsia by the tribals inhabiting East Godavari district. Apiaceae, Rubiaceae and Verbenaceae are the most commonly used species by these tribes. Of the 33 practices 22 were found to be new [9, 10]. During the course of study, it is observed that the tribal people of the district are quite reluctant and do not want to share their age-old traditional knowledge with other people. It is felt that this valuable and time-tested knowledge on the medicinal uses of plants is disappearing fast due to modernization and destruction of forests. Therefore, investigations on the evaluation of biological activities of plants and isolation of active compounds responsible for their medicinal properties against dyspepsia should be carried out by various pharmaceutical industries and national laboratories to give a lead to development of new herbal drug molecules.

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