

# Ethnomedicine for sexually transmitted diseases by the tribes of Khammam district, Andhra Pradesh

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## Abstract

The paper deals with 27 species of plants covering 26 genera and 20 families used for curing sexually transmitted diseases by the tribes of Khammam district, Andhra Pradesh. Mimosaceae, Capparaceae, Malvaceae, Caesalpiniaceae, Cucurbitaceae, Apocynaceae and Verbenaceae are the dominant families with 2 species each followed by others. Trees and herbs are more with 8 species each followed by shrubs (7 spp.) and climbers (4 spp.). Root is used in maximum practices (9) followed by leaf (8), whole plant (4), and others. Gonorrhoea is cured exclusively by 8 species followed by syphilis and herpes (6 spp. each), gonorrhoea and syphilis (5 spp.) and AIDS (2 spp.). *Gomphrena serrata* and 19 practices were found to be new or less known.

**Keywords:** Andhra Pradesh, Ethnomedicine, Sexually transmitted diseases, Khammam district, Tribes.

## 1. Introduction

The tribes of Khammam district of Andhra Pradesh practice herbal remedies for the treatment of their common diseases and disorders. The district lies between 16° 45' and 18° 35' N latitude and 79° 47' to 81° 47' E longitude occupying an area of 16,029 sq km with a total forest area of 7,594.38 sq km. The largest river of south India, the Godavari passes through this district. The tribal population of India is 8.2% and Andhra Pradesh has 7.0% tribal population (Census 2011). The Khammam district has the highest tribal population (26.47%) in the state with six tribal communities, viz., *Koya*, *Lambada*, *Gond/Naikpod*, *Yerukula*, *Nayak* and *Konda Reddi*. Though there are publications on sexually transmitted diseases in different parts of India (Siddiqui & Husain, 1993; Singh & Pandey, 1996; Sarangi & Sahu, 2004; Reddi *et al.*, 2009) and Central Province of Kenya (Njoroge & Bussmann, 2009) exclusive studies on the

tribes of Khammam district were not reported, necessitating the present investigation.

## 2. Materials and Methods

Ethnobotanical surveys were conducted in tribal rich localities of Khammam during 2008 to 2012. Each trip has a duration of 10-15 days. About 4-7 days were spent with different tribal communities during each trip at their dwellings. After establishing good rapport, the utility of plants and detailed methods of uses were documented. Altogether a total of 102 tribal pockets were covered by consulting as many *vaidyas*. Herbarium specimens were deposited in the Herbarium of the Department of Botany (BDH), Andhra University, Visakhapatnam, after proper identification.

## 3. Enumeration

The plants were enumerated and arranged in an alphabetical order with botanical name followed by family, vernacular and English

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names, locality, voucher number, part(s) used, method, mode and duration of treatment. Plants and practices marked with an asterisk (\*) are considered to be new or less known.

**Acacia ferruginea** DC. (Mimosaceae) VN: Valasandra E: Kant, Chikupalli, 10101, Leaf

Gonorrhoea: 20 ml of tender leaf juice is taken once a day till cure.

**Agave cantala** Roxb. (Agavaceae) VN: Kithanara E: American aloe, Chintur, 10061, Leaf, Root

\*Gonorrhoea: Two spoonful of leaf pulp mixed with one spoonful of sugar is administered twice a day for 7 days.

\*Syphilis: Root juice is applied on the affected areas till the disease is cured.

**Alangium salviifolium** (L.f.) Wang (Alangiaceae) VN: Uduga E: Sage-leaved alangium, Gummadi Doddi, 10166, Stem bark, Seed

\*AIDS: Stem bark decoction and seed oil is applied all over the body.

**Alstonia venenata** Br. (Apocynaceae) VN: Tellaganneru E: Digit bark, Chintur, 10106, Fruit

\*Syphilis: 10 ml of fruit decoction is taken once a day for 5-7 days.

**Anacardium occidentale** L. (Anacardiaceae) VN: Geedimamidi E: Cashew nut, Thaliperu, 10008, Seed

\*Syphilis: Roasted seed coat mixed with stem bark and powder of *Smilax zeylanica* is made into decoction. The affected areas are washed with it once a day till it is cured.

**Asclepias curassavica** L. (Asclepiadaceae) VN: Jilledu Mandarum E: Blood flower, Mamuluru, 10010, Root

Gonorrhoea and \*Syphilis: One spoonful of root

decoction is administered once a day for 7 days. Wash the affected areas with root decoction.

**Benincasa hispida** (Thunb.) Cogn. (Cucurbitaceae) VN: Budida gummadi E: Ash gourd, Pallipadu, 10043, Fruit

\*AIDS: Fruit pulp is ground, filtered and mixed with sugar is administered in one spoonful twice a day for 21 days. Take rice with curd and buttermilk without salt. Non-veg and salt are not recommended during treatment.

**Bixa orellana** L. (Bixaceae) VN: Jaffra E: Annatto plant, Peruru, 10485, Stem bark

Gonorrhoea: 30 ml of stem bark decoction is taken twice a day for 30 days.

**Breynia retusa** (Dennst.) Alston (Euphorbiaceae) VN: Chinna purugudu E: Cup saucer plant, Gowridevipeta, 10147, Leaf

\*Gonorrhoea: 10 ml of leaf juice mixed with a cup of water is taken once a day till it is cured.

**Capparis zeylanica** L. (Capparaceae) VN: Tellauppi E: Copper plant, Bethampudi, 10046, Leaf

\*Gonorrhoea: Three spoonful of leaf juice is administered once a day for 7 days.

**Cassia alata** L. (Caesalpiniaceae) VN: Seema mettathamara E: Ring worm cassia, Seripuram, 10080, Leaf

Herpes: Leaf paste is applied on the affected areas till cure.

**C. fistula** L. (Caesalpiniaceae) VN: Aru chettu E: Indian laburnum, Kunchaparathi, 10154, Root

Syphilis: Fine paste of root is applied on the affected areas till it is cured.

**Clerodendrum phlomidis** L. f. (Verbenaceae) VN: Kondatakkali E: Wild killed, Mette

Lankapalli, 10086, Root

\*Herpes: Root paste and leaf paste of *Coccinia grandis* is applied on the affected areas once a day till it is cured.

***Coldenia procumbens*** L. (Boraginaceae) VN: Hamsapadi E: Trailing coldenia, Parnasala, 10128, Leaf

\*Gonorrhoea and Syphilis: Leaf juice is applied on the affected areas once a day till it is cured.

***Crataeva magna*** (Lour.) DC. (Capparaceae) VN: Ulimiri E: Three leaved caper, Chinnanallabelli, 10130, Stem

\*Syphilis: Two spoonful of stem decoction is taken orally twice a day for 5 days.

***Crotalaria verrucosa*** L. (Fabaceae) VN: Giligicha, Tellavusiri E: Wild jute, Chinnanallabelli, 10100, Leaf

\*Herpes: Leaf paste is applied on the affected areas.

***Cynodon dactylon*** (L.) Pers. (Poaceae) VN: Garika gaddi E: Bahama grass, Gondigudem, 10321, Whole plant

Herpes: Whole plant paste is applied on the affected areas once a day till it is cured.

\****Gomphrena serrata*** L. (Amaranthaceae) VN: Chirunallintha E: Coastal globe amaranth, Gummadi Doddi, 10254, Root

Gonorrhoea and Syphilis: One spoonful of root juice is taken once a day for 4 days. Fine paste of root is applied on the affected areas.

***Hemidesmus indicus*** (L.) R.Br. (Periplocaceae) VN: Chinna guda pala E. Indian sarsa, Mukundapuram, 10280, Root

Herpes: Root paste is applied on the affected areas.

***Luffa acutangula*** (L.) Roxb. (Cucurbitaceae) VN: Chedubeera E: Ridged gourd, Tekulaboru, 10273, Root

\*Gonorrhoea: Root is powdered along with the flowers of *Hibiscus rosa-sinensis* and root of *Hemidesmus indicus*. It is administered with cow milk once daily till it is cured.

***Neptunia oleracea*** Lour. (Mimosaceae) VN: Neetiattapatri E: Water mimosa, Bhadrachalam, 10262, Root

\*Syphilis: Two spoonful of root decoction is taken once a day till it is cured.

***Portulaca oleracea*** L. (Portulacaceae) VN: Gangabayilukura E: Common purslane, Bethampudi, 10515, Whole plant

\*Gonorrhoea: 20 ml of whole plant decoction is taken once a day till cure.

***Rauvolfia serpentina*** (L.) Benth. ex Kurz (Apocynaceae) VN: Pathalagaridi E: Serpentina root, Tekulapalem, 10463, Root bark

\*Gonorrhoea: One spoonful of root bark powder mixed with one spoon of castor oil is taken along with a cup of water once a day for 10 days.

***Sida acuta*** Burm. f. (Malvaceae) VN: Munthapulaga E: Horn bean leaved sida, Tekulapalem, 10441, Leaf

Herpes: Leaf paste is applied on the affected areas till it is cured.

***Stachytarpheta jamaicensis*** (L.) Vahl (Verbenaceae) VN: Erra uttaren E: Aaron's rod, Thotalagondi, 10521, Root

\*Gonorrhoea: Root decoction is taken in 10 ml dose once a day till it is cured.

***Thespesia lampas*** (Cav.) Dalz. ex Dalz. & Gibs. (Malvaceae) VN: Kondapatti E: Ran-bendi, Tekulapalem, 10469, Whole plant

Gonorrhoea and \*Syphilis: The affected parts are applied with the whole plant paste for one hour and washed. This should be continued twice a day for 5 days.

*Tinospora cordifolia* (L.) Miers (Menispermaceae) VN: Tippa teega E: Gulancha tinospora, Edugurallapalli, 10476, Whole plant

Syphilis: Affected parts are applied with whole plant paste and washed after one hour twice a day for 10 days.

#### 4. Results and Discussion

The present study deals with 27 species of plants covering 26 genera and 20 families used for curing sexually transmitted diseases, viz., AIDS, gonorrhoea, herpes and syphilis by the tribes of Khammam district, Andhra Pradesh. Mimosaceae, Capparaceae, Malvaceae, Caesalpiniaceae, Cucurbitaceae, Apocynaceae and Verbenaceae are the dominant families with 2 species each followed by others with one species each. Habit-wise analysis showed the dominance of herbs and trees with 8 species each followed by shrubs (7 spp.) and climbers (4 spp.). Morphological analysis showed the maximum utilization of root in 9 practices followed by leaf (8), whole plant (4), stem bark, fruit and seed (2 each) and stem and root bark (1 each). They are administered either in the form of powder, paste, decoction, along with water, castor oil, sugar or cow milk. Gonorrhoea is cured exclusively by 8 species followed by syphilis and herpes (6 spp. each), gonorrhoea and syphilis (5 spp.) and AIDS (2 spp.). *Gomphrena serrata* and 20 practices were found to be new or less known (Jain, 1991; Kirtikar and Basu, 2008). Plants used for similar purpose elsewhere are *Rauvolfia serpentina* for gonorrhoea by the *Banjara*, *Bhottada*, *Bhunja*,

*Binjhal*, *Dal*, *Gond*, *Kondh*, *Mirdha*, *Munda*, *Paraja*, *Saura* and *Sabar* tribes of Kalahandi district of Orissa (Sarangi & Sahu, 2004); *Agave cantula*, *Bixa orellana*, *Rauvolfia serpentina* for gonorrhoea; *Alstonia venenata* for syphilis by the *Koyas*, *Kondadoras*, *Kondareddis*, *Valmikis*, *Chenchus*, *Lambadas*, *Jatapus*, *Savaras*, *Bagatas*, *Porjas*, *Khonds*, *Yanadis*, *Yerukals* tribes of Eastern Ghats, Andhra Pradesh (Reddi et al., 2009); *Cynodon dactylon* for herpes by the folklore of N R Pura Taluk in Chikmagalur district of Karnataka (Prakasha et al., 2010). The study is of great importance to preserve the knowledge of medicinal plants used by the tribal people and sustainably utilize the knowledge in the treatment of sexually transmitted diseases. Moreover, further phytochemical and pharmacological studies of lesser known medicinal plants needed to underlying the mechanism of action of the traditional systems of medicine.

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