

Ethnomedicinal plants used to cure jaundice in Kammam District of Andhra Pradesh, India

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Abstract

Twenty eight species included in 27 genera and 20 families are used to cure jaundice by the tribals of Khammam district, Andhra Pradesh. Half of the plants are herbs and one fourth trees. Euphorbiaceae and Cucurbitaceae are the dominant families. The ethnomedicinal practices involved plants ranging from one to five.

Keywords: Ethnomedicine, Jaundice, Khammam district, Andhra Pradesh

INTRODUCTION

Khammam district came into existence on October 1, 1953. It was carved out from the taluks of Warangal and East Godavari districts and occupies an area of 16,029 km² covering 46 Mandal Praja Parishads. It lies between 16° 45' and 18° 35' North latitude and between 79° 47' and 80° 47' East longitude. The total population of the district is 25, 78, 927 of which 6, 82,617 (26.46%) are scheduled tribes as per 2001 census. The district presents a rough topography with dissected uplands and hills, which some times exceeds 600 m. Temperature varies from 10 to 44° C. The average rainfall of the district is 1045 mm. The main tribes of the district are Koyas, Gonds/Naikpods, Lambadas and Konda Reddis. The district has more than 52.6% forest land with 5 divisions. Dry deciduous, moist deciduous, riparian, scrub and grass land forest types are predominant. Though jaundice is an important disease exclusive studies on it are not many (Nagaraju and Rao 1990, Rajendran *et al.* 1996, Borthakur *et al.* 2004, Padma Rao *et al.* 2007, Binu 2009, Sarkar and Das 2010, Rao *et al.* 2011) necessitating the present investigation in Khammam district of Andhra Pradesh state.

METHODOLOGY

An ethnobotanical survey was conducted during 2008-11 among the tribal communities of the district. Elder people, medicine men, tribal physicians and village old mothers were consulted to record first-hand information on ethnomedicinal uses, methods of preparation and administration of crude drugs. The information from the tribal people was compared with literature. The voucher specimens were deposited in the Herbarium of the Department of Botany, Andhra University, Visakhapatnam.

Enumeration

Acalypha indica L. Euphorbiaceae VN: Muripinda E: Indian acalypha

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Two spoonful of leaf juice mixed with a pinch of salt is administered twice a day for 6 days.

Andrographis paniculata (Burm. f.) Wall. ex Nees

Acanthaceae VN: Nela veemu E: King of bitters

Fifty ml of whole plant decoction mixed with half spoon of dried ginger powder is administered twice a day for 7 days.

Aristolochia bracteolata Lam. Aristolochiaceae VN:

Gadidagapa E: Bracteated birth wort

Twenty ml of leaf juice is administered twice a day for 5 days.

Asparagus racemosus Willd. Liliaceae VN: Pilli peechera, E:

Climbing asparagus

Two spoonful of tuber decoction is administered twice a day for 6 days.

Azadirachta indica A. Juss. Meliaceae VN: Vepa

Two spoonful of stem bark decoction is taken orally twice a day for 5 days.

Balanites aegyptiaca (L.) Del. Balanitaceae VN: Gara E:

Zachun-oil tree

Fruit pulp ground with whole plant of *Boerhavia diffusa* is administered in one spoonful once a day till cure.

Cassia fistula L. Caesalpiniaceae VN: Aru chettu, E: Indian laburnum

Tender leaves ground with tamarind is taken with rice orally once a day till cure.

Cordia dichotoma Forst. f. Boraginaceae VN: Eriki E: Sebesten

plum

Two spoonful of leaf paste mixed with a cup of water is taken orally twice a day for 3 days.

Diplocyclos palmatus (L.) Jeffrey Cucurbitaceae VN: Pinna

chettu, Linga donda

Thirty ml of whole plant decoction is administered twice a day for 3 to 5 days.

Ficus carica L. Moraceae VN: Anjooram E: Common fig.

Twenty ml of leaf juice mixed with a cup of goat milk is administered early in the morning once a day for 3 days.

Holarrhena pubescens (Roxb. ex Fleming) Wall.

Apocynaceae VN: Pala, E: Ivory tree

Stem bark mixed with whole plant of *Andrographis paniculata* is ground and made into peanut seed size pills and one pill is administered twice a day for 6 days.

***Hygrophila auriculata* (Schum.)Heine** Acanthaceae VN:

Guruvidi E: Long-leaved barleria

Root, roots of bajra and male inflorescence of *Borassus flabellifer* are roasted and powdered and 10 g of powder mixed with a glass of water is administered twice a day for 5 days.

***Jatropha gossypifolia* L.** Euphorbiaceae VN: Nalla adavi

amudam E: Bronze leaved physic nut.

Tender leaves are ground with tomato fruit and the paste is eaten with rice only once.

***Leucas aspera* (Willd.) Link.** Lamiaceae VN: Tummi E:

Thumbe

Flower paste is applied as eyetex once a day till cure.

***Luffa acutangula* (L.) Roxb.** Cucurbitaceae VN: Chedu beera

E: Ridged gourd

Three drops of fruit juice is instilled into the nose once a day for 3 days.

***Merremia aegyptia* (L.) Urban.** Convolvulaceae VN: Eluka

chevi aku

Leaves are ground and 30 ml of the extracted juice is taken once a day till cure.

***Momordica charantia* L.** Cucurbitaceae VN: Kakara E: Bitter

gourd

Leaf juice mixed with a pinch of turmeric powder is administered in two spoonful once a day for 3 days.

***Murraya koenigii* (L.) Spreng.** Rutaceae VN: Karivepaku E:

Curry leaf

Leaf powder mixed with honey is administered daily once for 7 days.

***Nymphaea nouchali* Burm. f.** Nymphaeaceae VN: Kaluva

Three spoonful of tuber powder mixed with one spoon of honey is taken early in the morning twice a day for 7 days.

***Pavetta indica* L.** Rubiaceae VN: Papidi E: White paveta

Ten ml of root decoction is taken twice a day for 5-7 days.

***Phyllanthus amarus* Schum. & Thonn.** Euphorbiaceae VN:

Nela usiri E: Kirineli

Whole plant decoction mixed with cumin seed powder is administered in two spoonful twice a day till cure.

***Solanum nigrum* L.** Solanaceae VN: Nallbuddakasi E: Black

night shade

Two spoonful of whole plant decoction is administered twice a day for 5 days.

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

Menispermaceae

VN: Tippa teega E: Gulancha tinospora

Whole plant decoction is administered in 30 ml dose once day for 7 days.

***Trianthema decandra* L.** Aizoaceae VN: Tella galijeru

Leaves with tuberous roots of *Mirabilis jalapa*, *Boerhavia chinensis*, seeds of *Piper nigrum* and bulbs of *Allium sativum* taken in equal quantities are ground. Two spoonful of paste mixed in a glass of buttermilk is administered daily once early in the morning for

11 days.

***Trianthema portulacastrum* L.** Aizoaceae VN: Yerra galijereu

E: Horse-purslane

Two spoonful of whole plant paste mixed with one spoon of pepper powder is administered twice a day for 7 days.

***Tridax procumbens* L.** Asteraceae VN: Gayapaaku E: Coat-

buttons

Whole plant along with that of *Euphorbia hirta* is made into juice and two spoonful of it mixed with a spoon of old jaggery is taken orally once a day for 7 days.

***Wedelia chinensis* (Osb.) Merr.** Asteraceae VN:

Pasupuchamanthi

Three spoonful of stem decoction is administered with a spoon of honey twice a day till cure.

***Ziziphus mauritiana* Lam.** Rhamnaceae VN: Regu E: Indian

jube

Three spoonful of stem bark decoction mixed with one spoon of honey is administered twice a day for 5-7 days.

RESULTS AND DISCUSSION

The present study yielded 28 species belonging to 27 genera and 20 families used for curing jaundice by the aborigines of the district. Half of them are herbs (14) and the rest trees (7), climbers (4) and shrubs (3). Euphorbiaceae and Cucurbitaceae are the dominant families (3 each) followed by Asteraceae and Aizoaceae (2 each) and others representing one family each. Except six all the practices (22) involved one plant only. The combination practices involved 2-5 plants. *Phyllanthus amarus* is widely used to cure jaundice in different regions of Andhra Pradesh (Nagaraju and Rao, 1990, Rajendran *et al.* 1996, Padma Rao *et al.* 2007, Rao *et al.* 2011) and in Pathanamthitta district of Kerala (Binu 2009). *Andrographis paniculata* is reported to cure jaundice in Andhra Pradesh (Padma Rao *et al.* 2007 and Rao *et al.* 2011) as well as in Assam (Borthakur *et al.* 2004). *Asparagus racemosus* is reported for the same purpose by Nagaraju and Rao (1990), Rajendran *et al.* (1996), Borthakur *et al.* (2004) and Rao *et al.* (2011). *Azadirachta indica*, *Cassia fistula*, *Hygrophila auriculata* (Nagaraju and Rao 1990, Rajendran *et al.* 1996), *Leucas aspera*, *Trianthema portulacastrum* (Padma Rao *et al.* 2007 and Rao *et al.* 2011) and *Tinospora cordifolia* (Nagaraju and Rao 1990, Rao *et al.* 2011) are also used to cure jaundice in different parts of Andhra Pradesh.

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