

ETHNO-THERAPEUTICS OF CERTAIN AYURVEDIC MEDICINAL PLANTS OF KONDAPALLI FORT, ANDHRA PRADESH.[†]

K.N. REDDY*, V. MADHURI, G.V. SUBBARAJU AND KOPPULA HEMADRI

*Taxonomy Division, Laila Impex,
R&D Centre, Vijayawada (Andhra Pradesh).*

Introduction

Krishna District of Andhra Pradesh is situated between 15°45' and 17°10' North latitude and 80°00' and 81°33' East longitude. The district is bounded by Khammam District on the North, the Bay of Bengal on the South, Guntur and Nalgonda districts on the West and the Bay of Bengal and West Godavari District on the East. The main tribes in the district are Chenchus, Erukalas and Lambadas (Ramesh, 1979). Kondapalli is famous world over for toy-making from *Givotia rottleriformis* Griff. Kondapalli Fort is situated in Kondapalli Reserve Forest under Vijayawada Forest Range, covering about 90 km². The forests mostly represent deciduous forest with scrub in the fringes. *Bambusa arundinacea* (Retz.) Willd., once a dominant member, is hardly seen sprinkled here and there due to over-exploitation by Paper Industry.

Information on Traditional Ayurvedic Medicinal Plants of this region is poorly known. Hence, the present work was undertaken to enumerate the Medicinal Plants of Kondapalli region. Hemadri (1987) and Hemadri *et al.* (1980, 1987) surveyed Andhra Pradesh, ethno-

botanically including Kondapalli Fort. The present work gives additional information on 36 angiospermic taxa. The area under study was thoroughly covered and the people were interrogated for first hand information. Voucher specimens have been preserved and deposited methodically at the Herbarium of Laila Impex Research and Development Centre, Vijayawada.

In the following enumeration, the taxa are arranged alphabetically followed by family name, Local name (L:), Sanskrit (S:), Trade name (T:), habitat, reproductive season (Fl: Flowering; Fr: Fruiting) and local medicinal uses.

Enumeration

Abrus precatorius L. (Fabaceae)

L: Guriginja, Gurivinda, Yerra guriginja;
S: Gunja; T: Indian liquorice.

Common in hedges and open forests.

Fl & fr: July - February.

Stomachache: One inch of root is chewed and the juice thus obtained is swallowed.

Leucorrhoea: 10ml of leaf juice is taken daily once for 4-5 days. (Tella gurivinda: white variety).

[†] Laila Impex Communication # 23.

* e-mail : reddykamasaninr@rediffmail.com

Talisman : All varieties of seeds are made into necklaces and worn to ward off evil spirits and as a good omen.

***Abutilon indicum* (L.) Sweet (Malvaceae)**

L: Adavi benda, Duvvena kaya, Tutturu benda; S: Atibala; T: Atibala
Common in waste places, hedges.

Fl & fr: Throughout the year.

Epilepsy, Menstrual disorders : 2 teaspoons of decoction prepared with 20g of root is taken daily twice for 4-5 days.

Burning micturition : Leaves are chewed and the juice is swallowed.

***Achyranthes aspera* L. (Amaranthaceae)**

L : Uttareni, Uchulu chettu, Ucchera; S: Apamarga; T: Apamarg
Commonly found along roadsides and waste places.

Fl & fr: July - December.

Asthma : A pinch of plant ash mixed with 4 drops of honey is taken twice daily.

Poison due to Insects, Wasps, Bees : Leaf paste is rubbed over the bitten area for free from pain.

Tumours on body : 10-12g of root powder is taken with honey twice daily, till cured.

Bleeding after abortion : One-teaspoon of root paste is taken thrice a day to arrest bleeding.

***Albizia lebbek* (L.) Benth (Mimosaceae)**

L: Dirishena; S: Sirisah; T: Sirisha
Occasional in forests; also cultivated as avenue tree.

Fl & fr: September - March.

Sprains : Stem bark paste is applied and bandaged with wet cloth and changed once an hour.

***Amaranthus spinosus* L. (Amaranthaceae)**

L: Mullathota kura; S: Tanduliya; T: Tandulya mool

Common weed of cultivated fields and wastelands.

Fl & fr: Throughout the year.

Scabies : Root paste is used as an external application.

Snakebite : Half teacup of decoction made from 20g of whole plant is taken twice in a day.

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

L : Nela vemu, Nelangi; S: Bhunimba; T: Kalmegh, Bhuyilim

Common in wastelands and forests.

Fl & fr: August - December.

Stomachache : 10-12g of leaf paste is taken twice in a day.

Malaria : The leaves along with stem of *Tinospora cordifolia* (Willd.) Miers ex Hook. f. et Thoms. (Menispermaceae) and fruit of *Balanites aegyptiaca* (Linn.) Del. (Balanitaceae) are taken each 300g, in eight litres of water boiled to one litre. One teaspoon of this decoction is taken twice daily for five days.

***Annona squamosa* L. (Annonaceae)**

L: Seetha phalamu; S: Sitaphal; T: Sitaphal.

Running wild in open lands and scrub forests.

Fl & fr: June - November.

Asthma : 5g of stem bark and 5 leaves are pounded together, mixed in one cup of water, boiled to ½ cup and is taken daily once for fortnight.

Jaundice : Leaf paste is rubbed over the head twice in a week. Diet: Rice with cow's milk.

Aristolochia indica* L.*(Aristolochiaceae)**

L: Easwari, Nalleswari; S: Ishvari; T: Eshwari

Common in hedges and open forests.

Fl & fr: October – April.*Skin diseases* : Fistful of leaves are ground with black goat urine and the extract thus obtained is applied externally.*Leucorrhoea* : 10-15g of leaf paste is mixed with jaggery, its juice is extracted and taken daily once, till cured.***Asparagus racemosus* Willd.****(Asparagaceae)**

L: Pilliteegal, Pilli peecheera, Noorumtyalu chettu; S: Satavari T: Shatavari

Occasional in forests areas.

Fl & fr: July – October.*Stomachache* : 4-5g of tuber is made into paste and taken daily twice for three days.*Lack of Breast milk* : Half cup of peeled fresh tuber juice is taken with a spoon of sugar daily twice for 3-4 days.*Burning micturition* : 10-15g of tuber is made into paste and taken with a cup of water daily twice for two-three days.***Barleria prionitis* L. (Acanthaceae)**

L: Mulla gorinta; S: Kantakuranta, Kurantaka

Common in open forest areas.

Fl & fr: November - February.*Bronchitis* : 2-3 teaspoons of decoction made of 15g of root is taken daily twice for one week.*Malarial fever* : 1-2 teaspoons of juice obtained from 15g of leaf is taken daily thrice for 3-4 days.*Fissured Feet* : Leaf paste is used as an ointment.***Boerhavia diffusa* L. (Nyctaginaceae)**T: Atuka mamidi; S: Rakta punarnava, Punarnava; T: Punarnava, Satodimool
Common weed in waste places & roadsides.*Fl & fr*: April – November.*Oedema* : 3-4 teaspoons of decoction made of 15g of whole plant is taken daily once, till cured.*Asthma* : 10-12g of root powder is taken with 2g of black pepper powder daily once for a fortnight.***Cardiospermum halicacabum* L. (Sapindaceae)**T: Buddakakara teega; S: Satakratulata
Common climber amongst bushes in forests and roadsides.*Fl & fr*: August - December.*Swellings* : Leaves are warmed with castor oil, applied on the swellings and bandaged.*Rheumatism* : Whole plant paste is used as an ointment daily once for one week.*Earache* : Plant juice is used as eardrops.***Cassia absus* L. (Caesalpiniaceae)**

T: Chanupaala vittulu; S: Chaksushya; T: Chakshu

Occasional weed of waste places and forest paths.

Fl & fr: July – January.*Skin diseases* : Seed paste is used as an ointment.*Constipation* : 3-4g of seed paste is taken twice or thrice in a day.***Cassia fistula* L. (Caesalpiniaceae)**T: Rela; S: Aragvadh; T: Amaltas
Occasionally in plains, forests and disturbed places.*Fl & fr*: April – June.*Intestinal worms in infants* : A pinch of pulp is placed in a teaspoon of water,

kept for five minutes and the infusion thus obtained is given daily twice for two days.

Scabies : Root paste is used as an external application.

Dysentery : 25g of stem bark is pounded with 4-5 peppers and its juice extracted and taken daily once for 4-5 days.

Constipation : Soup is prepared with fruit pulp and taken twice in a day.

***Cassia occidentalis* L.
(Caesalpiaceae)**

L: Kasinda; S: Kasamarda; T: Kasondi, Kasamarda

Common weed in open lands.

Fl & fr: Throughout the year.

Swelling due to blood clotting : Leaf paste is rubbed over the swelling.

Tooth decay : Root paste is applied on affected teeth daily once (before going to bed), till cured.

Stomachache : 5g of mashed root is taken with 50 ml of water twice or thrice in a day.

Bone fracture : Leaf paste is applied and bandaged.

***Cassia tora* L. (Caesalpiaceae)**

L: Tantepu; S: Chakramarda; T: Chakramarda, Chakunda

Common weed in wastelands.

Fl & fr: Throughout the year; more so in August - January

Diabetes : 5-6g of seeds are pounded with 1-2 peppers, juice is extracted and taken daily once for one month.

Earache : Leaf juice is used as eardrops in the left ear to cure the affected right ear and vice-versa.

Wasp sting: Leaf paste is rubbed over the area.

***Cissampelos pareira* L.
(Menispermaceae)**

L: Banka tiga, Chiru boddi, S: Laghupatha, Patha; T: Laghupatha

Occasional in forests.

Fl & fr : May-September.

Scabies and septic ulcers : Leaf paste is used as an external application.

Diarrhoea: 10g of root powder along with curd is taken daily twice for two days.

Constipation in children : Root paste is applied on the central part of the head.

***Cleome viscosa* L. (Cleomaceae)**

T: Vaminta, Kukka vaminta; S: Adityabhakta

Common in wastelands.

Fl & fr : Throughout the year.

Fever : 1-2 teaspoons of leaf juice is taken with half a cup of water daily twice, till cured.

Maggot infested sores : Seed paste is used as an ointment.

Lice killer : Seed extract is used as hair oil.

Body pains : Slightly warmed leaf paste is used as an ointment.

***Corallocarpus epigaeus* (Rottler) C.B. Clarke (Cucurbitaceae)**

L: Pamu donda, Naaga sarum; S: Katunahi.

Occasional in hedges.

Fl & fr : November - February.

Asthma, Bronchitis: One-teaspoon of tuber paste is taken daily once, till cured.

***Dalbergia latifolia* Roxb. (Fabaceae)**

L: Jitregi; S: Simsapa; T: Rosewood

Occasional in forests.

Fl & fr: August - October.

Paralysis, Rheumatic pains in cattle : 5 cups of extract made of 100g of stem bark is given daily twice for 5 days.

***Desmodium gangeticum* (L.) DC.
(Fabaceae)**

T: Getanarum; S: Saliparni; T: Salvan
Occasional in forests.

Fl & fr: July - November.

Chronic fevers and asthma: Half cup of decoction made of 15g of root is taken daily once for two-three days.

***Diplocyclos palmatus* (L.) C. Jeffrey
(Cucurbitaceae)**

L: Linga potla, Lingaaku; S: Lingini.
Common on hedges and bushes.

Fl & fr: August - February.

Rheumatic swellings in cattle: Gently warmed leaf juice is applied daily once for three days.

***Euphorbia hirta* L. (Euphorbiaceae)**

L: Reddivaari nanubaalu; S: Dugdhika;
T: Asthma Weed
Common weed.

Fl & fr: Throughout the year.

Constipation, Excess of heat: Leaves used as curry.

Muscular pains: Latex is used as external application.

***Evolvulus alsinoides* (L.) L.
(Convolvulaceae)**

L: Vishnu krantha; S: Vishnukrantha;
T: Sankhapuspi
Common weed of waste places and open forests.

Fl & fr: Throughout the year.

Hiccough: Half teaspoon of dried plant powder is taken with honey daily twice.

Jaundice: Two teaspoons of leaf paste mixed with one teaspoon of onion (*Allium cepa* L.) paste are mixed and taken with a cup of cow milk daily twice for three days.

Fever: 4-5 teaspoons of decoction made of 10g root is taken orally.

***Gymnema sylvestre* (Retz.) R.Br.
(Asclepiadaceae)**

L: Podapatri; S: Mesha shringi; T: Gurmar

Common in hedges and forests.

Fl & fr: July - December.

Diabetes: 10g of dried leaves are pounded together with 3g of Coriander fruit (*Coriandrum sativum* Linn.), juice is extracted and given orally, till controlled.

Eye diseases: Root is rubbed on a stone with breast milk and the paste thus obtained is used as eye ointment.

Poisonous bites: 20-30 ml of extract obtained from 10g of root is given orally twice or thrice in a day.

***Helicteres isora* L. (Sterculiaceae)**

L: Nul tada, Adavi chemanthi; S: Avartani.

Common in forests.

Fl & fr: July- October.

Expulsion of placenta in women: Stem bark is placed on the middle of head, in delayed cases.

Ulcers in the ear: Seed paste mixed with castor oil is used as an ointment.

Diabetes: 10g of root bark paste is taken daily once for one month.

***Indigofera tinctoria* L. (FABACEAE)**

L: Neeli; S: Nilini; T: Neeli.

Occasional in waste lands. *Fl & fr*: July- November.

Mad dogbite: Leaf paste is applied over the bitten area.

Jaundice: 3-4 teaspoons of decoction made of 15g of root, is taken daily once for 3-5 days.

Urinary complaints: 2-3 teaspoons of root decoction is given daily once for fortnight.

***Mallotus philippensis* (Lam.) Muell.
(Euphorbiaceae)**

L: Kunkuma; S: Kampillaka; T: Kapila,
Kamala dye

Occasional in forests.

Fl & fr : January - May.

Constipation : Three teaspoons of seed
(10g) decoction is taken daily twice
for two days.

***Martynia annua* L. (Martyniaceae)**

L: Telukondi chettu; S: Kakanasa; T:
Bichuphal

Occasional weed.

Fl & fr : August - December.

Blood purifier : 3-4 teaspoons of decoction
made of 10g of leaf is taken daily once
for fortnight.

Scorpion sting : Leaf paste is used as an
external application.

***Mucuna pruriens* (L.) DC. (Fabaceae)**

L: Dula dundi, Dula gundi; S:
Kapikacchu; T: Kawacha.

Frequent, twining on small trees and
others shrubs.

Fl & fr : November - February.

Intestinal worms : A pinch of itchy bristles
of fruit are mixed with 50-60g of
jaggery, made into pills of red gram
size and swallowed one pill daily twice
(without chewing) for one week. On
the 8th day, one spoon of castor
(*Ricinus communis* L.) oil is taken
orally for purgation.

Headache : Seed paste is applied over the
forehead.

Tooth decay : 4-5 drops of leaf juice is used
as ear drops in left ear to cure decayed
teeth in right side and vice- versa.

***Pavonia odorata* Willd. (MALVACEAE)**

L: Chittibenda; S: Sugandhabala; T:
Kalawala

Common in scrub forests and
disturbed places.

Fl & fr : Throughout the year.

Wounds, Body swellings : Leaf paste is
used as an external application.

***Pergularia daemia* (Forsk.) Chiov.
(Asclepiadaceae)**

L: Dushtapu teega; S: Uttamarani T:
Uttamani

Common in wastelands and
thickets.

Fl & fr : Throughout the year.

Rheumatic pains : Gently warmed leaves
smeared with castor (*Ricinus
communis* L.) oil is bandaged daily
once, till cured.

Scorpion sting : Leaf paste is rubbed over
the bitten area.

***Pongamia pinnata* (L.) Pierre
(Fabaceae)**

L: Ganuga, Kanuga; S: Dhana; T: Karanj.
Common in wild state and also
planted.

Fl & fr : March-October.

Diabetes : 2-3 teaspoons of decoction
obtained from 15g of flowers is taken
daily once, till cured.

Psoriasis : 15-20g of root paste is taken
with a cup of milk daily once, for 15
days.

Leprosy: Seed oil is used as an external
application.

***Strychnos nux-vomica* L.
(Strychnaceae)**

L: Vishamushti, Musti; S: Kupilu T:
Mushti, Nux - vomica
Occasional in forests.

Fl & fr : February - June.

Snakebite : Seed paste is applied over
the bitten area and also 1-2g of seed
paste is given orally.

***Tephrosia purpurea* (L.) Pers.
(Fabaceae)**

L: Vempali; S: Sarapunkha; T: Sarpunkha

Common on wastelands and road sides.

Fl & fr : Throughout the year.

Earache : Gently warmed root paste is applied on the back of ear.

Eczema : Whole plant is crushed with common salt and turmeric (*Curcuma longa* L.), juice is extracted and applied externally.

Cough : 50g of leaves are pounded with 5g each of pepper (*Piper longum* L.), garlic (*Allium sativum* L.) and fed to

cattle daily once for 4-5 days.

***Wrightia tinctoria* (Roxb.) R.Br.
(Apocynaceae)**

L: Tedla paala, Palakodisa; S: Asita kutaja; T: Kala-inderjau.

Common in scrub and deciduous forests.

Fl & fr : March-September

Sore throat and Cough : Three leaves are chewed for a while and spit out.

Asthma : Four drops of leaf juice is used as nasal drops, twice a day till cured.

Toothache : Milky latex is used as an external application with the help of a piece of cloth.

Acknowledgements

The authors thank Shri G. Ganga Raju, Chairman, and Shri G. Rama Raju, Director, Laila Impex for their keen interest and constant encouragement. Thanks are due to Forest Department personnel for their help during fieldwork.

SUMMARY

Phytodiversity studies were conducted on the flora of Kondapalli fort and surroundings in Krishna District (A.P.). Exploration trips were undertaken during the year 2003 for ethnobotanical studies and germplasm collection of the Traditional Ayurvedic Medicinal Plants. 36 medicinal plant species belonging to 21 families have been enumerated, highlighting local medicinal uses practiced by local tribals and villagers since ages.

कोण्डापल्ली दुर्ग, आंध्र प्रदेश के कुछ आयुर्वेदिक औषध पादपों के जाति-चिकित्सागुण
के.एन. रेड्डी, वी. माधुरी, जी.वी. सुब्बाराजू व कोप्पुला हेमाद्री
सारांश

आंध्र प्रदेश के कृष्णा जिले में स्थित कोण्डापल्ली दुर्ग और इसके पासपड़ोस क्षेत्र के पेड़ पौधों की पादपविविधता के बारे में अध्ययन किए गए हैं। पारम्परिक आयुर्वेदिक औषध पादपों के जाति वनस्पति विज्ञान अध्ययन और उनके बीजप्रस संग्रह करने के लिए खेजपरक दौरे वर्ष 2002 में किए गए। क्षेत्र अध्ययन से मिले आंकड़ों के आधार पर 21 कुलों की 36 औषध पादप जातियां गिनी गई हैं और स्थानीय आदिवासियों और ग्रामीणों द्वारा युगों-युगों से चिकित्सा करने के लिए व्यवहार में लाई जा रही औषधियों के उपयोग पर प्रकाश डाला गया है।

References

- Hemadri, K. (1987). *Andhra Pradeshlo Vanamulikalalu. Chemiloids*, Vijayawada.
Hemadri, K. *et al.* (1980). Folklore claims from A.P. *J. Sci. Res. Plants & Med.*, 1(2): 37-49.
Hemadri, K. *et al.* (1987). Medicinal Plant Wealth of A.P. *Anc. Sci. Life*, 6(3) 167-186; 7(1): 55-64.
Pullaiah, T. (1997). *Flora of Andhra Pradesh. Scientific Publishers*, Jodhpur.
Ramesh, N. 1979c (ed). *Andhra Pradesh District Gazetteers - Krishna District. Govt. of. Andhra Pradesh*, Hyderabad.