

SHORT COMMUNICATION

Ethnomedicine for aphrodisiac by the tribes of North Coastal Andhra Pradesh

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The aim of the present study was to document aphrodisiac plants used by the tribes of North Coastal Andhra Pradesh. It resulted in discovering 45 species of plants covering 45 genera and 35 families used as aphrodisiac. Fabaceae is the dominant family with 7 species followed by Malvaceae, Mimosaceae and Meliaceae each with 2 species and others. Habit-wise analysis showed the dominance of shrubs (14) followed by trees and herbs (13 each) and climbers (5). Morphological analysis showed the dominance of seed and root in 7 practices each followed by stem and leaf in 6 practices each; stem bark (4); fruit, root bark and whole plant (3 each); flowers and rhizome (2 each) and others. *Canavalia africana*, *Maerua oblongifolia*, *Zaleya decandra* and 20 practices were found to be new or less known.

Keywords: Aphrodisiac, Ethnomedicine, North Coastal Andhra Pradesh, Tribes.

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Introduction

The study area falls in between 81° 51' and 84° 46' of Eastern longitude and 17° 45' and 19° 40' Northern latitude with a total area of 10,860 sq km covering 23 mandals of Srikakulam, Vizianagaram and Visakhapatnam districts with 4002 scheduled villages with a total population of 8,619,183 (as per 2001 census). It is inhabited by 923,660 tribal people (10.71 %) viz., *Bagata*, *Gadaba*, *Goudu*, *Jatapu*, *Khond*, *Konda dora*, *Konda kammara*, *Kotia*, *Mali*, *Mukha dora*, *Porja*, *Savara*, *Valmiki* and *Yerukula*.

The aim of the present study was to document some ethnomedicinal plants used by the local tribes as aphrodisiac. A total of 23 taxa used for aphrodisiac purposes are mainly confined to tropical and temperate regions¹. Though there are publications on

ethnomedicine for various diseases exclusive publications on aphrodisiac are scanty necessitating the present study²⁻⁴.

Material and Methods

The field work was done during 2008-2012 and interviews were conducted with the tribes at their dwellings. During oral interviews specific questions were asked and the information supplied by the informants was noted. Those familiar with the plants were taken to the field and along with the collection of plants for the voucher specimens; the use of plants as given by the tribal informants was noted. Field trips were selected in such a way so as to cover the selected areas in different seasons of the year. During field trips information was gathered on plants used for aphrodisiac purposes, method and time of collection, ingredients used, mode of application, dosage and duration.

In 95 pockets of the study area, 139 *vaidhyas* and practitioners were consulted. Each medicinal practice was cross checked with at least 3-4 informants. The voucher specimens were collected and deposited in the Herbarium, Department of Botany, Andhra University, Visakhapatnam. Plant identifications were made with the help of Flora of the Presidency of Madras⁵.

Results and Discussion

The plants are arranged in a tabular form alphabetically with botanical name, followed by voucher number, family/locale, vernacular/English name and method of practice. Each ethnomedicinal practice is provided with the part(s) used, method of preparation of the drug, dosage, mode of administration and duration of the treatment. Plant species and practices marked with an asterisk (*) are considered to be new or less known (Table 1).

The study yielded 45 species of plants (Table 1 and Fig. 1) covering 45 genera and 35 families used by the tribes of North coastal Andhra Pradesh for enhancing sexual desire. Fabaceae is the dominant family with 7 species followed by Malvaceae, Mimosaceae and Meliaceae each with 2 species and the rest of the families with one species each. Habit-wise analysis showed the dominance of shrubs (14) followed by trees and herbs (13 each) and climbers (5).

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Table 1 — Ethnomedicinal plants used as aphrodisiacs by the tribes of North Coastal Andhra Pradesh

S. No.	Botanical name/ Voucher No.	Family/ Locale	Vernacular name/ English name	Method of practice
1.	<i>Abelmoschus moschatus</i> Medic./8239	Malvaceae/ Somagandi	Yerrabenda/ Musk mallow	Seed powder is administered with cow milk once a day for 10 days
2.	<i>Achyranthes aspera</i> L./ 8121	Malvaceae/ Sirikonda	Ucchuluchettu/ Prickly chaff flowers	The stem is used as tooth brush daily once continuously for 30 days
3.	<i>Adenantha pavonina</i> L./ 8120	Mimosaceae/ Boddama nguda	Bandigurivinda/ Coral wood tree	Two spoonful of dried stem bark powder mixed in a glass of milk is administered daily twice for 5 days.
4.	<i>Andrographis paniculata</i> (Burm. f.) Wall.ex Nees/9492	Acanthaceae/ Cappada	Chedhukoora/ King of bitters	Leaves with whole plants of <i>Eclipta prostrata</i> and <i>Ammannia baccifera</i> are taken in equal quantities and ground. Two spoonful of paste mixed in a glass of goat milk is administered daily once for 15 days.
5.	<i>Asparagus racemosus</i> Willd./8051	Liliaceae/ Kotagaruvu	Chinnapillipecheri/ Wild carrot	A tuberous root is eaten once a day for 3 days to increase potency and to control spermatorrhoea.
6.	<i>Bombax ceiba</i> L./8529	Bombacaceae/ R.V. Nagar	Buruga/ Red silk cotton tree	A glass of decoction obtained from root, stem bark and gum of stem is taken internally half an hour before intercourse to enhance sexual potency.
7.	<i>Borreria articularis</i> (L.f.) Mill./8137	Rubiaceae/ Gopalapuram	MadanaChettu/ Shaggybuttonplant	*One spoonful of dried seed powder is taken with a glass of milk at night for 7-10 days.
8.	* <i>Canavalia africana</i> Dunn./8289	Fabaceae/ Molalanka	Kondathamba/ Wild sword bean	20 ml of fruit juice is taken twice a day for 15 days.
9.	<i>Capparis zeylanica</i> L./ 8253	Capparidaceae/ Pubbada	Adonda/ Caper plant	*Two spoonful of root bark paste mixed in a glass of cow milk is administered daily twice for 15 days.
10.	<i>Caryota urens</i> L./8471	Arecaceae/ Polla	Jeeluga/ Fish tail palm	Half liter toddy tapped from the plant is taken once a day for about one month continuously.
11.	<i>Casearia elliptica</i> Willd. /9101	Flacourtiaceae/ Vantlamamidi	Girugudu/ Toothed leaf chilli	*50 g of root paste is administered daily once for one week to ten days and use tender branches to brush the teeth for improvement.
12.	<i>Cassia fistula</i> L./8711	Caesalpiniaceae/ Lanka pakalu	Rela/Indian laburnum	*A tender branch collected from the plants grown on an ant hill is used to brush the teeth on 3 Saturdays only.
13.	<i>Cassine glauca</i> (Rottb.) Ktze/8220	Celastraceae/ Sundarayy Aguda	Butankus Chettu/ Ceylontea	*Ripe fruits are eaten for effect during winter.
14.	<i>Cicer arietinum</i> L./8210	Fabaceae/ Lothuru	Chanakamula/ Bengal gram	2 spoonful of dried seed powder mixed in a glass of cow milk is administered daily twice for 21 days.
15.	<i>Cipadessa baccifera</i> (Roth) Miq./9142	Meliaceae/ Korraguda	Paradonda/ Ranabili	*Tender branches are used as tooth brushes.
16.	<i>Cocos nucifera</i> L./8146	Palmae/ Pandrasangh	Kobbari Chettu/ Coconut	Endosperm is eaten and said to be very effective.
17.	<i>Commelina paludosa</i> BI./8246	Commelinaceae/ Sapparla	Chengalvakostu/ Spiral ginger	*Males brush the teeth with stem one hour before intercourse for proper erection.
18.	<i>Costus speciosus</i> (Koen.) Sm./8451 (Fig. 1a)	Costaceae/ Devarapalli	Chengalvakostu/ Spiral ginger	*2 spoonful of rhizome decoction and un-boiled egg are mixed in a glass of cow milk and administered daily once for 5 days.
19.	<i>Crotalaria juncea</i> L./8349	Fabaceae/ Jangedavalasa	Chukka gadda/ Black muscale	*A spoonful of leaf juice is taken with 2 fruits (hypocarp) of <i>Anacardium occidentale</i> just one hour before intercourse.

(Contd.)

Table 1 — Ethnomedicinal plants used as aphrodisiacs by the tribes of North Coastal Andhra Pradesh (Contd.)

S. No.	Botanical name/ Voucher No.	Family/ Locale	Vernacular name/ English name	Method of practice
20.	<i>Curculigo orchioides</i> Gaertn./8547	Hypoxidaceae/ Madagada	Chukka gadda/ Black muscale	*Whole plant ground with 10 g of sugar candy and mixed in a glass of cow milk is administered daily once just before dinner for 8 days.
21.	<i>Curcuma caesia</i> Roxb./8219	Hypoxidaceae/ Madagada	Chukka gadda/ Black muscale	*Whole plant ground with 10 g of sugar candy and mixed in a glass of cow milk is administered daily once just before dinner for 8 days.
22.	<i>Diplocyclos palmatus</i> (L.) Jeffrey/9131 (Fig. 1b)	Cucurbitaceae/ Chilakalagedda	Pinna chettu/ Lollipop clmber	*Root decoction is administered once a day till cure.
23.	<i>Ehretia laevis</i> Roxb./8944	Boraginaceae/ Diguvasoba	Gidigirichettu/ Ivory wood	*Brush the teeth with tender stem for 3 times on Saturdays only.
24.	<i>Erythrina variegata</i> L./8251	Fabaceae/ Donubai	Badidha/Indian coral tree	8 to 10 flowers pound with milk are given for one week.
25.	<i>Guazuma ulmifolia</i> Lam./8062	Sterculiaceae/ Dharakonda	Rudraksha/ Musket tree	*2 or 3 dried fruits are eaten daily once for 2 months.
26.	<i>Heynea trijuga</i> Roxb./9085	Meliaceae/ Boddaputtu	Yelakathokakarra/ Heynia	*2 or 3 dried fruits are eaten daily once for 2 months.
27.	<i>Hibiscus cannabinus</i> L./9033	Malvaceae/ Jeedipagada	Gogu/Bimlipatam- jute	Leaves with those of <i>Eclipta prostrata</i> and seeds of <i>Piper nigrum</i> are taken in equal quantities and ground. 2 spoonful of paste mixed in a spoonful of honey is administered daily twice for 5 days.
28.	<i>Hybanthus enneaspermus</i> (L.) Muell./9250	Violaceae/ Labbangi	NelaKobbari/ Spadeflower	*Whole plant poultice is taken in 2-3 spoonfuls with a glass of milk at bed time.
29.	<i>Ipomoea obscura</i> (L.) Ker- Gawl./9319	Convolvulaceae/ Marriputtu	Puritiaku/Morning glory	Leaves with those of <i>Hibiscus rosa-sinensis</i> and <i>Eclipta prostrata</i> taken in equal quantities are ground. 2 spoonful of leaf paste mixed in a glass of cow milk is administered daily once for 10 days.
30.	* <i>Maerua oblongifolia</i> (Forsk.) A. Rich/9083	Capparaceae/ Karaka konda	Bhuchakram/ Irula	A pinch of powder of dried root bark with half spoon of honey is administered once a day for 2 months.
31.	<i>Marsilea quadrifolia</i> L./9240	Marsileaceae/ Kappada	Ciklintakura/ Flour leaf clover	A pinch of powder of dried root bark with half spoon of honey is administered once a day for 2 months.
32.	<i>Moringa oleifera</i> Lam./8587	Moringaceae/ Dumbriguda	Munagachettu/ Drum stick tree	*10 g of flowers boiled in a glass of milk is administered before going to bed.
33.	<i>Mucuna pruriens</i> Walls.ex Wight/9141 (Fig. 1c)	Fabaceae/ Devarapalli	Dulagondi/ Cowitch	Seeds and wheat grains are boiled in cow milk and eaten with ghee and left over milk is also taken orally. 2 spoonful of seed paste mixed in a glass of milk is administered daily once before bed. One spoonful of root powder with a glassful of milk is taken once a day at bed time for 7 days.
34.	<i>Pennisetum typhoides</i> (Burm. f.) Stapf ex Hubb./9261	Poaceae/ Thotalagondi	Gantelu/Pearl millet	Grains and dried rhizome of ginger are taken in equal quantities and ground. 2 spoonful of paste mixed in a glass of cow milk is administered at bed time for 5 days.
35.	<i>Phyllanthus reticulatus</i> Poir./9237	Euphorbiaceae/ Boddu mamidi	Nallapulicheru/ Black honey	*Bark paste mixed with half tea glass of hot water is administered twice a day for 3 days.

(Contd.)

Table 1 — Ethnomedicinal plants used as aphrodisiacs by the tribes of North Coastal Andhra Pradesh (Contd.)

S. No.	Botanical name/ Voucher No.	Family/ Locale	Vernacular name/ English name	Method of practice
36.	<i>Pithecellobium dulce</i> (Roxb.) Benth./9179	Mimosaceae/ Guntaseema	Seemachintha/ Manila tamarind	*20 g of pulp aril is administered once a day for one week.
37.	<i>Psoralea corylifolia</i> L./9332	Fabaceae/ Pilliputtu	Bavanchalu/ Babchi	A spoonful of seed paste mixed with honey is administered daily once for 15 days.
38.	<i>Pueraria tuberosa</i> (Willd.) DC./9551(Fig. 1d)	Fabaceae/ Rallaputtu	Nelagummati/ Indian kudzu	2 spoonful of tuber paste is taken with honey daily once for 7 days.
39.	<i>Rauvolfia serpentina</i> (L.) Benth.ex Kurz/9050 (Fig. 1e)	Apocynaceae/ Gurupalli	Pathalagaridi/ Sarpentina	Root with leaves of <i>Jasminum grandiflorum</i> , tuberous roots of <i>Mirabilis jalapa</i> and <i>Asparagus racemosus</i> are taken in equal quantities and ground. 2 spoonful of paste mixed in a glass of goat milk is administered daily once for one week.
40.	<i>Smilax zeylanica</i> L./9403	Smilacaceae/ Jeedipagada	Phirangi Mokka/ Rough bind weed	Roots are ground with jaggery and the paste is taken in 20 g once at night for 15 days.
41.	<i>Terminalia arjuna</i> (Roxb. ex DC.) Wight & Arn./9407 (Fig. 1f)	Combretaceae/ Sapparla	Phirangi Mokka/ Rough bind weed	*20 g of stem bark paste mixed in food is administered to stimulate sexual desire in men and women.
42.	<i>Vitex negundo</i> L. /8586	Verbenaceae/ Chintapalli	Vavili/ Negundo	Fumes of burning leaves are inhaled to increase sexual desire in males.
43.	<i>Viscum orientale</i> Willd./ 9469	Loranthaceae/ Chedala padu	Kadabadanika/ Poor man's orchid	Spathulate leaves are chewed by males and said to be effective.
44.	<i>Withania somnifera</i> (L.) Dunal /9412	Solanaceae/ Munagadaputtu	Pennerugadda/ Aswagandha	*2 spoonful of root powder mixed in a glass of milk is administered to both male and female before intercourse for 5 days.
45.	* <i>Zaleya decandra</i> (L.) Burm.f./9273	Aizoaceae/ Gadiguddi	Tella galijeru/ Horse purslane	Root bark is soaked in water and 50 mL of decoction is taken once at night.

Morphological analysis of the parts used shows the dominance of seed and root in 7 practices each followed by stem and leaf in 6 practices each; stem bark (4); fruit, root bark and whole plant (3 each); flowers and rhizome (2 each) and gum, toddy, endosperm, aril and tuber in one practice each. They are taken either in the form of powder, paste, decoction, juice, poultice, fumes or toddy along with either cold water, hot water, milk, cow milk, goat milk, sugar candy, honey, ghee, jaggery, food, egg or fruit of cashew. The duration of treatment mostly depends on the effectiveness of the drug and it varies from 3 days to 2 months. These plants are used as aphrodisiac and tonic. These plants may be having some action on sex hormones and may do general toning of the body. The stems of *Achyranthes aspera*, *Cassia fistula*, *Cipadessa baccifera*, *Commelina paludosa*, *Ehretia laevis* and *Heynea trijuga* are used for brushing teeth to enhance vigour. *Canavalia africana*, *Maerua oblongifolia*, *Zaleya decandra* and 20 practices were found to be new or less known^{1,6}. Plants used for similar purpose elsewhere by various tribes and people in different parts of India are *Mucuna pruriens* seeds and roots, *Pueraria tuberosa* tuberous root by the folklore of Garhwal Himalaya,

Uttarakhand⁷; *Withania somnifera* rhizome by the *Malasar* tribe of Velliangiri hills, Western Ghats, Tamil Nadu⁸; roots by the people in Gulbarga district, Karnataka⁹; roots and fruits by the *Kangrian* tribes of Kangra Valley, Himachal Pradesh¹⁰ and roots by the *Gond*, *Madia*, *Pardhan* and *Kanwar* tribes of Gadchiroli district of Maharashtra¹¹; roots of *Abelmoschus moschatus* and *Bombax ceiba* by the *Tharu* and *Van-Gujjar* tribes of Kashipur of Uttarakhand¹² *Asparagus racemosus* tubers and *Curculigo orchoides* rhizome by the *Tharu*, *Oraon*, *Munda*, *Hohra* and *Bhuiya* tribes of West-Champaran district, Bihar¹³ and the people in Kullu district of Himachal Pradesh¹⁴; *Mucuna pruriens* seeds by the *Pawara*, *Bhil* and *Pardhi* tribes of Satpuda region of Dhule and Jalgaon districts of Maharashtra¹⁵, and seeds by the *Tharus*, *Bhoxas* and *Khaturias* tribes of Lakhimpur-Kheri district, Uttar Pradesh¹⁶; *Asparagus racemosus* tubers, *Maerua oblongifolia* roots, *Pueraria tuberosa* tubers by the *Chenchu* and *Sugali* tribes of Nallamalais, Andhra Pradesh¹⁷; *Asparagus racemosus* roots and young shoots by the *Naga* tribe of Nagaland¹⁸ and tubers by the inhabitants of Nargu Wildlife Sanctuary, North Western Himalaya¹⁹; *Asparagus racemosus*, *Bombax ceiba*, *Curculigo*

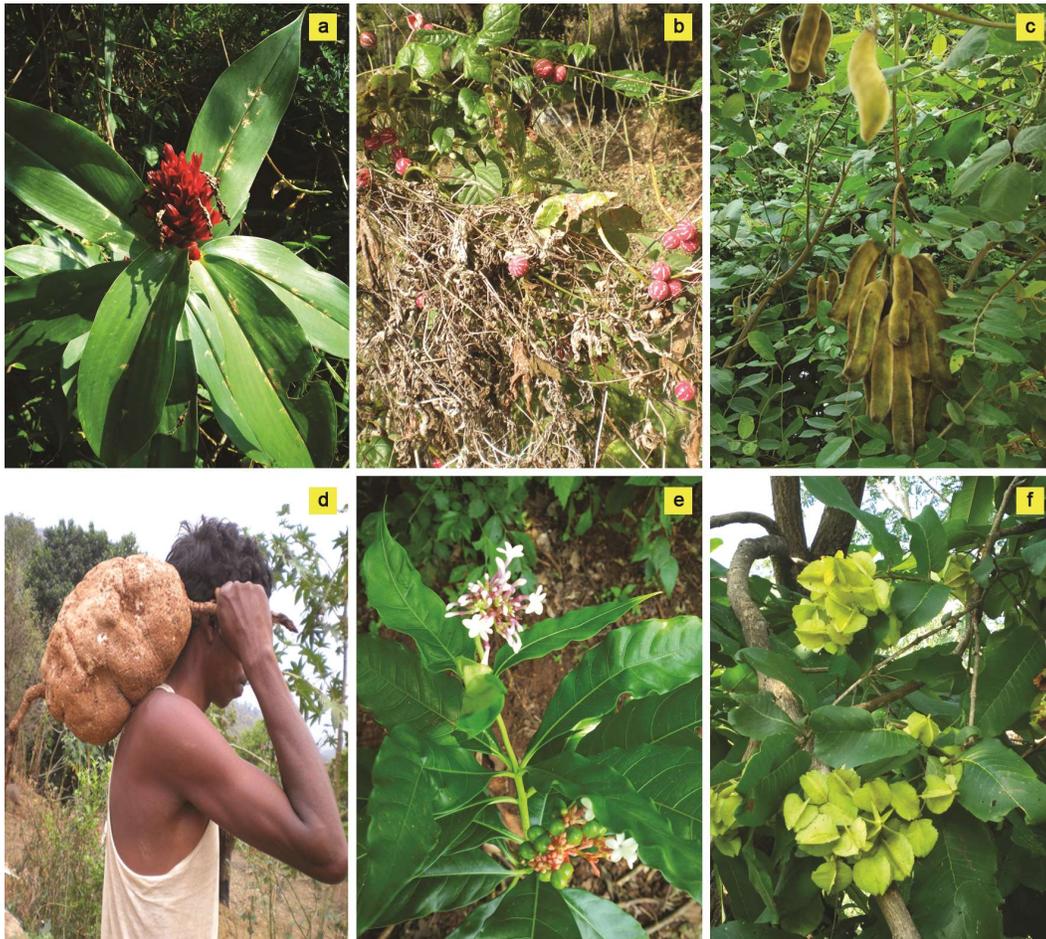


Fig. 1 — Some plants used as aphrodisiac by the tribes of North Coastal Andhra Pradesh. a) *Costus speciosus*, b) *Diplocyclos palmatus*, c) *Mucuna pruriens*, d) *Pueraria tuberosa*, e) *Rauwolfia serpentina* and f) *Terminalia arjuna*.

orchioides, *Ipomoea obscura*, *Mucuna utilis*, *Withania somnifera* by the tribes of Rajasthan²⁰; *Bombax ceiba* stem bark by the *Garasia* tribe of Sirohi district, Rajasthan²¹; roots by the folklore in Nanda Devi Biosphere Reserve, Chamoli district, Uttarakhand⁴ and flowers by the *Paniya*, *Adiya*, *Kattunayakan*, *Kurichiyar Kuruma* and *Oorali* tribes of Wayanad district, Kerala²² and stem bark, roots and gum by the people in Shivalik Range of Panchkula, Haryana²³; *Curculigo orchioides* rhizome by the people in Shikari Devi Wildlife Sanctuary, North Western Himalaya²⁴ and *Pueraria tuberosa* roots by the *Chenchu* tribe of Gundlabrahmeswaram in Nallamalai hills of Andhra Pradesh²⁵ and dried twigs by the *Baiga* tribe of Dindori district of Madhya Pradesh²⁶. Aphrodisiacs do have definite physiological components. Accordingly, herbals improved emotional stability as well as hormonal activity and it is more powerful than any other sexual energy booster. The synergetic uses of the plant

species promote hormonal activity in the body and improve the quality and quantity of semen. Definitely herbal medicine scored over allopathic medicine since it is safe and as effective as the latter. These herbal remedies have natural impotence treatment that has been used by the herbal healers without a prescription through their ancestors from ancient time. Unfortunately there is no provision or law for the protection of knowledge rights of the native tribes of the North Coastal Andhra Pradesh. Natural Resource Property Rights (NRPR) and Intellectual Property Rights (IPR) for the aborigines are the need of the hour. All natural resources and related knowledge are very important; therefore, both should be protected for native people where they do not have modern facilities.

Conclusion

The present survey reveals that the tribes of North Coastal Andhra Pradesh are aware of the indigenous

knowledge of employing *Asparagus racemosus*, *Bombax ceiba*, *Curculigo orchioides*, *Mucuna pruriens*, *Pueraria tuberosa*, *Withania somnifera* for aphrodisiac purposes. There is a wide scope for further scientific study on these plants.

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