Medicinal Plant Resources of Rudrakod Sacred Grove in Nallamalais, Andhra Pradesh, India

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ABSTRACT Rudrakod sacred grove, located in Nallamalai hill ranges of Southern Andhra Pradesh harbour rich plant diversity. The Chenchu tribal communities living in and around the sacred groves are endowed with rich traditional botanical knowledge pertaining to medicinal values of plant species. In the present study, we documented 69 vascular plant species of medicinal value used by the tribes. The paper deals with the systematic enumeration of the species with brief description, their distribution, phenology, local names, and medicinal uses along with mode of administration. Over-exploitation and unscientific collection of some medicinal plants threatening the resource and warrants sustainable harvesting by the local communities.

INTRODUCTION

The culture, faith and traditions of the local communities towards the natural resources conservation are gaining prominence over the years. The Global Biodiversity Strategy (Anon. 1992) and the National Biodiversity Strategy and Action Plan of India (Anon. 2000) highlighted the strengthening of research on ethical, cultural and religious issues related to biodiversity. The concept of sacredness attributed to environmental conservation can be observed at different scales and levels: sacred species, sacred groves and sacred landscapes (Ramakrishnan 1996). Sacred groves, the community based repositories of biological diversity are segments of landscape with typical geographical features, virtually represent a clump of trees associated with other forms of life, and affords protection on the basis of religious practice or faith. The groves are dedicated to a deity God, Goddess and it’s a taboo even to cause a simple damage to life in the grove area. The groves are tending to be the fragments of original ecosystem and constitute unique examples of in situ conservation of genetic resources and serve as refuge for many threatened and endemic taxa. Many sacred groves in India are known to harbour significant number of plants with medicinal value.

Hughes and Chandran (1998) have presented an overview of the distribution of sacred groves around the world. India, well known for its varied culture and traditions harbour a large number of sacred groves especially in northeastern India and Western Ghats (Malhotra et al. 1997). The groves were fairly documented in Maharashtra (Gadgil and Varath 1981). Boojh and Ramakrishnan (1983) and Ramakrishnan (1998) highlighted the role of groves in environmental conservation. Andhra Pradesh, is reported to harbor over 800 groves and Southern Andhra Pradesh area (SAP) alone to 543 groves in a WWF preliminary study (Anon., 1996) in which both the authors are part of the investigating research team. Part of the WWF project, the author’s team has done random survey in all the districts of SAP except Chittoor. Sunitha and Rao (1999) have done preliminary studies on the groves of Kurnool district. The sacred groves in the state were referred to Pavithravanaalu (Rao et al. 2001). One of the districts in Southern Andhra Pradesh, Kurnool is currently known with over 125 sacred groves (Sunitha 2002) and 40 of them were recognized as major groves. The study area, Rudrakod is one among them located in Nallamalai forests.

Several studies have been made on the medicinal plant resources of Andhra Pradesh. Important works include Rao and Hemadri (1979), Hemadri (2006), Kapoor and Kapoor (1980), Thammanna and Rao (1990), Rama Rao and Henry (1996), Pullaiah (2002), Jadhav and Red-


**METHODOLOGY**

**Study Area**

Rudrakod sacred grove is located in Nallamalai hill ranges of Southern Andhra Pradesh near Velgode (Fig. 1). Nallamalais is one of the Centres of Plant Diversity. The grove core area is extended over 5 hectares. The nearest village is Nallakaluva. The grove area is owned by temple trust and forest department. The forest is classified as tropical moist deciduous type. The soils are red sandy loam. There is a perennial spring near the sanctum sanctorum believed to have mineral and medicinal properties. The chief deity is Lord Rudrakoteswara. Annual jathara used to hold during Sivarathri. All tribal and non-tribal communities involve in the annual festival. There is a strong belief that these medicinal plants encountered in the grove area have the properties of medicinal plants of Himalayas.

**Methodology**

Rudrakod sacred grove was explored during 2001 and again in 2009. The plant taxa with medicinal importance were documented with the help of Chenchus endowed with Traditional Botanical Knowledge. The key informants are Jamal (age 50 years), Edanna (60), Mallaiah (55), Latchanna (45) who inhabit in a hamlet located near the sacred grove and two local herbalists: Gangi Reddy (65), Sankaracharya (70) and the temple priest, Krishna (60). Voucher specimens of all the plant taxa recorded with medicinal value were collected in quadruplicate samples and made into herbarium following standard methodology. The specimens were identified after a critical study and deposited in Sri Krishnadevaraya University Herbarium (SKU) at Anantapur.

**RESULTS AND DISCUSSION**

A total of 69 angiosperm species belonging to 66 genera and 36 families were recorded with medicinal value.

**Medicinal Use Values of Species**

Out of 69 plant species, *Aegle marmelos*, *Alangium salvifolium* and *Cocculus hirsutus* are having 6 medicinal uses followed by *Chloroxylon swietenia* and *Calotropis gigantea* (5 uses). Nine plant species are recognised to have 4 medicinal uses. These include *Sterculia urens*, *Eclipta prostrata*, *Catharanthus roseus* and *Premna tomentosa*. Six plant species are recognized to have 3 medicinal uses.

**Diseases Cured**

A total of 67 diseases are known to cure by using 69 medicinal plant species. A maximum of 10 plant species are used as antidote to snake bite followed by 8 species for dysentery. Eight species are recorded to have healing properties (vulnerary). Seven species have antidiarrhoeal properties. Fever and skin diseases are known to cure individually by usage of 7 species. Five species are used to relieve from stomach disorders and urinary problems. Boils and blisters, diabetes and menstrual disorders are known to cure with the usage of 4 plant species. Only single plant sources are available to cure a maxi-
Fig. 1. Location map of Rudrakodu sacred grove in Nallamalais
mum number of 28 out of 67 diseases. These include the ailments like allergy, appetizer, bone fractures, eczema and leprosy. A total of 17 diseases are known to cure with 2 plant species individually. This includes abortifacients, refrigerants, purgatives, ulcers and urinary complications. Six diseases are covered by 3 plant species. A maximum of 4 plant sources are available for 5 diseases.

Plant Parts Used

Of all the plant parts, leaves are widely used to cure different diseases. Approximately 34% of the plant material used in different diseases is leaf followed by root / root bark accounting for about more than 22% and 16 % of the material is in form of stem / stem bark.

The taxa are systematically enumerated hereunder following Bentham and Hooker’s classification.

SYSTEMATIC ENUMERATION

MENISPERMACEAE

*Cocculus hirsutus* (L.) Diels


Root powder mixed with other ingredients used for *rheumatism* and *stomach ache* in children. Stem powder mixed with camphor and taken internally to cure *diabetes*. Juice of leaves mixed with water is used as a cooling medicine in *gonorrhoea* and used externally for *eczema*. Entire plant is boiled and its decoction is given is promoting *menstruation*.

MALVACEAE

*Abutilon indicum* (L.) Sweet

Undershrub, to 1.5m. Leaves ovate-elliptic, serrate, apex acute. Flowers solitary, axillary, yellow. Schizocarps globose; mericarps 5.


Leaf juice mixed with goat’s milk is used for curing *paralysis*. Leaf paste is applied for *scorpion sting*.

*Thespesia lampas* (Cav.) Dalz. ex Dalz. and Gibson.

Undershrub, to 2m. Lower leaves palmately 3-lobed, upper ones ovate, entire. Flowers bright yellow with purplish base, axillary, solitary. Capsules ovoid; seeds numerous.


Dried leaf powder with pepper taken orally with water to relieve *stomach ache*.

*Urena lobata* L.

Erect woody shrub, to 1m. Leaves deeply lobed, crenate–dentate. Flowers pale pink with dark colour on the inner side. Fruit a globose schizocarp, seeds reniform.

Root juice used as an external remedy for rheumatism. Decoction of leaves is used for treatment of dysentery.

**BOMBACACEAE**

*Bombax ceiba* L.

Deciduous tree, to 20m; trunk and branches with hard conical prickles. Leaves digitately 5-7-foliolate. Leaflets elliptic or ovate-lanceolate. Flowers bright red. Capsules sub-cylindrical, oblong.


Root bark crushed with garlic and the extract is taken orally 2 teaspoonfuls once in a day for menstrual disorders. Stem bark ground with urine of infant and the paste is mildly heated and applied on blisters. Gum used as refrigerant.

**STERCULIACEAE**

*Melochia corchorifolia* L.

Erect herb, to 50cm. Leaves ovate-lanceolate, crenate-serrate. Flowers pinkish or white with yellow near the base, in terminal cymes. Capsules sub-globose, hispid.


Stem and leaves are boiled in oil, a remedy for water snake bite.

*Sterculia urens* Roxb.

Deciduous tree, to 10m; bark whitish, papery, peeling off. Leaves palmately 3 or 5 lobed, cordate at base. Flowers greenish yellow in terminal panicles. Fruit follicle, 4 or 5 lobed, densely pubescent with stiff bristles; seeds dark brown.


Stem bark ground with turmeric is administered for rheumatic pains and ulcers. Gum as refrigerant; gum dissolved in water given orally thrice in a day and also used to cure dysentery.

**TILIACEAE**

*Corchorus aestivalis* L.

Annual, erect, much branched herb, to 70cm; sparsely pubescent. Leaves oblong-lanceolate. Flowers yellow in leaf opposite, short peduncled cymes. Capsules elongated, winged, beak 3-fid; seeds blackish-brown.


The plant ashes mixed with honey is used for obstruction of abdominal viscera. An infusion of the leaves used as antipyretic.

*Grewia flavescent Juss.*

Evergreen tree, to 6m. Leaves simple, oblanceolate, stellate pubescent below, crenate. Flowers yellow, in axillary cymes. Drupes globose, 2-lobed, wrinkled; nuts 2.


Stem bark is used in dysentery. The bark powder acts as an antidote to opium poisoning.

*Triumfetta rhomboidea* Jacq.

Erect much branched, pubescent shrub, to 1.5m. Leaves broadly obicular, 3-lobed, upper ovate. Flowers yellow in terminal cymes. Capsules globose, greenish-brown; seeds 1-2 in each locule.


The root is used in dysentery. The bark and fresh leaves are used in diarrhoea.

**ERYTHROXYLACEAE**

*Erythroxylum monogynum* Roxb.

Evergreen tree, to 3m. Leaves elliptic-ovate, entire. Flowers pale green axillary, solitary or in clusters. Drupes oblong-ellipsoid, red.


Leaf juice given orally as a cooling beverage. Leaf juice is administered for jaundice. Leaves crushed with black pepper and the extract is given orally to kill the intestinal worms. Stem bark decoction is used to treat hiccups.
**RUTACEAE**

*Aegle marmelos* (L.) Correa

Deciduous armed tree, to 12m. Leaves 3-foliolate. Flowers white in axillary panicles. Berries globose, seeds embedded in fleshy pulp.


Stem bark ground with black pepper is used against cholera. Stem bark extract ground with jaggery is administered for chest pains. Leaf juice poured into nostrils for cold. Fruit pulp and stem bark decoction is taken internally with cumin seeds to treat stomach disorders. Leaf decoction used antisthmatic. Fruit pulp mixed with honey or sugar is given for immediate relief for hiccups.

*Naringi alata* (Wall. ex Wight and Arn.) Ellis

Armed tree, to 5m. Leaves 3-foliolate, peti-ole winged, leaflets obovate, base cuneate. Flowers creamish in axillary and terminal panicles. Berries globose.


Stem bark is rubbed on a stone with water and the paste is applied at the site of snake bite. Fruit pulp is cooked with honey and taken orally twice a day for 3 days as stomachic and stimulant. Roots as purgative; roots are cut into pieces, boiled in water to get decoction and is taken orally thrice a day.

**MELIACEAE**

*Azadirachta indica* A. Juss.

Semievergreen tree, to 20m. Leaves impari-pinnate; leaflets obliquely lanceolate, acute, cuneate, serrate. Flowers in axillary racemose panicles. Drupes oblong, yellow.


Leaf juice taken externally and internally to cure skin diseases. Leaf decoction taken with honey to cure diarrhoea and dysentery. Stem bark/root bark decoction is used to cure malaria.

**FLINDERSIACEAE**

*Chloroxylon swietenia* DC.

Deciduous tree, to 8m, wood yellowish. Leaves pinnate, leaflets oblong-lanceolate, gland-dotted, obtuse, entire, base oblique. Flowers white in terminal racemes. Capsules ovoid-oblong; seeds winged.


Root bark mixed with goat’s milk is administered for infertility. Stem bark crushed with Strychnos potatorum is used for epilepsy. Stem bark paste is used for scorpion-sting. Gum dissolved in water is taken orally for urinary disorders. The smoke of burnt leaf is used as mosquito repellent.

**RHAMNACEAE**

*Ziziphus xylopyrus* (Retz.) Wild.


Stem bark paste made into pills and taken orally against cholera.

**ANACARDIACEAE**

*Mangifera indica* L.

Large evergreen tree, to 30m. Leaves lanceolate. Flowers yellowish green in terminal panicles. Drupes fleshy, orange-yellow when ripe. Seeds solitary, compressed.


Stem bark made into powder and taken internally twice a day for 3 days to cure post delivery pain. Leaves with the stem bark and seeds of *Ricinus communis* are boiled in water and the decoction is taken orally thrice in a day for 3 days for cough and asthma. Resinous juice is mixed with the white of an egg and a teaspoonful of this mixture is taken orally thrice in a day for 3 days for diarrhoea.
**FABACEAE-FABOIDEAE**

*Abrus precatorius* L.


Seed powder is used antidote to *snake bite*. Leaf juice/seed paste with goat’s milk is used for *menstrual disorders*.

*Crotalaria prostrata* Rottl. ex Willd.


The root extract is used for *giddiness* – 2 spoonfuls twice a day till cure.

*Dalbergia paniculata* Roxb.

Deciduous tree, to 15m. Leaves imparipinnate, leaflets oblong-obovate. Flowers pinkish-purple in long panicles. Pods lanceolate.


Leaves are used as *discutient*. Tender leaves are warmed and placed on swellings and bandaged twice in a day till cured.

*Desmodium gangeticum* (L.) DC.


Root extract of one spoonful is taken twice a day, till cure for *whooping cough*. Leaves ground with a pinch of salt and applied on *boils* and *blisters*.

**FABACEAE-CAESALPINIOIDEAE**

*Bauhinia racemosa* Lam.

Deciduous, tree, to 5m. Leaves, bilobed, cor- date at base. Flowers yellowish-white, in terminal or leaf-opposed cymes. Pods falcate, compressed; seeds ovoid.


Decoction of root bark is used for *antenatal complications* and *diarrhoea*. Stem bark is crushed and the filtrate mixed with goat’s milk is taken orally for *epilepsy*. Two drops of tender leaf juice is poured into eyes for *ophthalmic infections*.

*Cassia fistula* L.

Deciduous tree, to 5m. Leaves pinnate; leaflets glabrous, ovate, acute. Flowers yellow, in axillary racemes. Pods long, cylindrical, terete.


The mixture of stem bark extract and the seed oil of *Sclerischa oleosa* is taken two teaspoonfuls once in a day for three days for *chest pain*. The paste of the leaves and turmeric is used for *skin diseases*.

*Tamarindus indica* L.

Evergreen tree, to 20m. Leaves paripinnate; leaflets narrowly oblong, obtuse at base and apex. Flowers pale yellow in lax racemes. Pods turgid, falcate.


Leaf paste is used as *abortificient*.

**FABACEAE-MIMOSOIDEAE**

*Acacia torta* (Roxb.) Craib.

Straggling armed shrub. Leaves bipinnate. Flowers in globose heads.


A tea-spoonfull of leaf juice is given orally to children for *cough*.
COMBRETACEAE

*Combretum albidum* G. Don


The leaf paste is used to cure wounds and cuts.

MYRTACEAE

*Syzgium cumini* (L.) Skeels

Evergreen tree, to 20m. Leaves elliptic-oblong. Flowers white in paniculate cymes. Berries oblong, black.


Seeds are used for diabetics. Seeds are dried, powdered and a decoction of this powder is given half cup twice in a day for 15 days. One teaspoonful of seed powder is taken in orally with water, twice a day for gonorrhoea until cured.

LEYCITHIDACEAE

*Careya arborea* Roxb.

Deciduous tree, to 15m. Leaves simple, obovate. Flowers yellowish-white, in terminal spikes. Berries globose.


The mixture of stem bark and black pepper is made into an extract and the extract is mixed with curd in equal ratio and 5 teaspoonfuls are taken in orally twice a day for 10 days to cure diarrhoea.

LYTHRACEAE

*Ammania baccifera* L.

Erect herb, to 40cm. Leaves oblong-elliptic, acute, base cuneate. Flowers white in condensed axillary racemes or clusters. Capsules red when ripe.


The plant is used to prepare a liniment, and applied as a remedy for burning pain in the eyes. Fresh leaves are used in skin diseases as a rubefacient.

ALANGIACEAE

*Alangium salvifolium* (L.f) Wang.

Deciduous tree, to 10m. Leaves oblong-lanceolate, ovate, base obtuse. Flowers white, in axillary cymes or clusters. Berries globose, creamish; seeds solitary, ovoid.


The root bark is antihelmintic and purgative. The root bark powder is used in fever and skin diseases. Stem bark as discutient. The stem bark paste is applied at the site of snakebite, twice in a day until cured.

RUBIACEAE

*Hedyotis puberula* (G. Don) Arn.


Leaves as antidote. A cup of decoction from leaves, given in orally immediately after snakebite. Leaves as antiasthmatic and dried leaf powder is mixed with flour and made into cakes, two cakes are eaten each day for 15 days.

*Morinda pubescens* Smith

Deciduous tree, to 20m. Leaves elliptic-ovate. Flowers white, in globose umbellate heads. Syncarpia globose, with 4-6 fleshy pyrenes.


Fresh stem bark is crushed and stained in a glass of water through out the night. The infusion is given in orally in the morning for 7 days for jaundice.
Pavetta tomentosa Roxb. ex Smith

Large shrub, to 2m. Leaves elliptic-lanceolate, acute, base obtuse. Flowers white or greenish white in terminal corymbbs. Drupes globose, black.


Katika papari. Repr. Spec.: BR and SS, 21231

Leaves as analgesic. Leaves are beaten and squeezed through a thin cloth to get leaf sap, applied gently at the place of pain, thrice in a day for 3 days.

Spermacoce hispida L.

Procumbent hispid herb. Leaves elliptic-lanceolate, leathery. Flowers pale violet or purplish in axillary whorls. Capsules septate between 2 mericarps; 2-seeded.


The seeds are aphrodisiac.

ASTERACEAE

Ageratum conyzoides L.

Erect herb, to 80cm: pubescent. Leaves opposite, broadly ovate, hairy, crenate, acute, base truncate. Flowers pale blue in terminal heads. Achenes angled.

Common in moist places. Fl. and Fr.: Round the year. Vern. 


The leaf paste is externally used for cuts.

Eclipta prostrata (L.) L.

Annual prostrate or erect herb. Leaves lanceolate. Heads heterogamous, solitary, axillary or terminal with white florets. Achenes compressed with pappus.

Common in moist places. Fl. and Fr.: All seasons. Vern. 


Stems and twigs are odontralgics. Leaves are squeezed in the fist to get leaf sap and a tea-spoonful of sap is given in orally, thrice in a day for 15 days to cure jaundice. Whole plant in its fresh state is ground well, mixed with gingelly oil, boiled to get an ointment, applied externally at the symptom, thrice in a day for elephantiasis until cured. Whole plant as antidepilatory and plants are crushed to get sap and equal quantities of sap and coconut oil are mixed, boiled to get an ointment, massaged the scalp once in a day for 40 days.

APOCYNACEAE

Catharanthus roseus (L.) G. Don

Erect perennial herb, to 1m. Leaves elliptic-ovate. Flowers white or pink, axillary, solitary or in pairs. Follicles with cylindrical mericarps.

Often run wild. Fl. and Fr.: Round the year. Vern. 


Roots are cut into pieces, boiled in water, filtered to get decoction, and is given in orally, at bed time for 3 days to reduce blood pressure. The plant is used for diabetes. The juice of the leaves is used as an application for wasp stings. An infusion of the leaves is used in the treatment of menstrual disorders.

Wrightia tinctoria (Roxb.) R. Br.

Deciduous tree, to 10m, latex milky. Leaves opposite, elliptic-oblong. Flowers white, scented in terminal dichotomous cymes. Follicles paired.

Common. Fl. and Fr.: April-October. Vern. 


Mouth ulcers; A little cotton is dipped in the latex and applied on the mouth, thrice in a day for 3 days. Stem bark is used for piles and stem bark is cut into pieces, boiled in water to get decoction, a cup of decoction is given in orally, twice in a day for 10 days.

ASCLEPIADACEAE

Calotropis gigantea (L.) R. Br.

Shrubs, to 2m, latex milky. Leaves subsessile, decussate, elliptic-oblong, base auriculate. Flowers white in terminal umbellete cymes. Follicles oblong, inflated; seed oblong with silky white coma.


Roots as vulnerary; the dried roots are pulverised, boiled in coconut oil, made into an
ointment, and applied on wounds, thrice in a day until cured. Latex as odontic; collected from young floral buds are put in affected teeth, twice in a day for 3 days. Leaves as analgesic and rubefacient: thin layer of castor oil is applied on leaves, warmed on fire and bandaged for 3 days.

**LOGANIACEAE**

*Strychnos potatorum* L.f.

Deciduous tree, to 10m. Leaves elliptic, chartaceous. Flowers white in cymes on old wood. Berries globose, deep blue-black when ripe seeds 1 or 2.


Stem bark as antidote to snake; stem bark is crushed, boiled in water to get decoction is taken orally, immediately after snakebite. Seeds are used for boils.

**SOLANACEAE**

*Physalis minima* L.

Erect, glabrescent herbs, to 60cm. Leaves elliptic-ovate, sparsely strigose. Flowers yellow, axillary, solitary. Berries globose with persistent calyx.


Leaves as vulnerary; leaves and ginger are ground well to get thick paste, gently applied on tumours, twice in a day until cured. Roots as diuretic; roots are cut into pieces, boiled in water to get decoction; a cup of decoction is taken in orally for 3 days.

**ACANTHACEAE**

*Elytraria acaulis* (L.f.) Lindau

Acaulescent herbs, to 20cm. Leaves radical in close spirals, obovate, obtuse, crenate. Flowers white in axillary, slender spikes. Capsules oblanceolate; many-seeded.


Lepidagathis cristata Willd.

Procumbent herb. Leaves linear-lanceolate, pubescent, acute. Flowers creamish with pink tinge in condensed ovoid spikes crowded at the base of the stems. Capsules oblong, compresses; 2-seeded.


The plant tonic is antipyretic. It is also applied to itchy affections of the skin.

**VERBENACEAE**

*Premna tomentosa* Willd.

Deciduous tree, to 15m. Leaves broadly ovate-cordate. Flowers creamish-yellow in axillary or terminal panicles. Drupes globose.
Roots as antidote; root is rubbed on a flattened rough surface with a little water to get a paste, applied on the tongue of the patient immediately after snakebite. The leaves are considered to possess diuretic properties and are used in dropsical affections. The leaf decoction is given after child birth for labour pains.

**LAMIACEAE**

*Anisomeles indica* (L.) O. Kuntze

Erect herb, woolly, to 1.5m. Leaves ovate, chartaceous, acuminate, crenate-serrate, base truncate. Flowers pink in axillary, dense spiked. Nutlets black.
The plant is astringent and stimulant. The oil from the plant is used in uterine affections. The leaves are grounded with turmeric powder and camphor and this mixture is put on the fire, the smoky fumes are inhaled for cold.

*Leonotis nepetifolia* (L.) R. Br.

The plant is used for skin affections. Ashes of flowers are applied to burns. The leaf decoction is taken orally for fever.

**NYCTAGINACEAE**

*Boerhavia diffusa* L.

Tuberous roots are used as discutient. Fresh tubers are ground well, boiled in water to get decoction. One cup of decoction taken orally twice in a day until cured. Root tubers as aphrodisiac; tubers are cooked and eaten along with goat milk, at bed time for 40 days.

**AMARANTHACEAE**

*Achyranthes aspera* L.

Erect herb, to 50cm. Leaves elliptic-ovate to orbicular, pubescent, base cuneate. Flowers pink or greenish white, in terminal elongate spikes.
Leaves as antifilariae; leaves, camphor coconut oil are mixed and ground well to get a paste, applied on the symptoms, thrice in a day until cured. Roots as odontralgic; teeth are brushed with fresh root, twice in a day, until cured. Seeds and leaves as antidote; seeds are dried and powdered; one teaspoonful is given in orally immediately after bite.

*Aerva lanata* (L.) Juss.

Prostrate or diffuse herb, to 75cm. Stems and branches pubescent when young. Leaves elliptic-ovate, white wooly below, base tapering. Flowers white with pink tinge in axillary and terminal group of spikes.
Roots as diuretic; roots are ground well, boiled in water to get decoction, a cup of decoction given in orally thrice in a day for 3 days.

**EUPHORBIACEAE**

*Euphorbia hirta* L.

Erect or ascending hispid herb, to 60cm, latex milky. Leaves elliptic-ovate, serrate, cyathia greenish-red in axillary and terminal crowded cymes.
Entire plant as antidysenteric; the plants are ground well, squeezed through a thin cloth, to get sap, one teaspoonful of sap is given in orally twice in a day for 3 days. Latex is applied for cuts and injuries twice a day until healed.
**Euphorbia indica** Lam.

Erect herb with milky latex, to 60cm. Leaves broadly oblong, obtuse, minutely serrate, base unequal. Cyathia in lax racemes, pink or greenish white with red tinge.


An infusion of the dried leaves used in dysentery.

**Glochidion ellipticum** Wight

Evergreen tree, to 8m. Leaves elliptic-oblong, glabrous on both surfaces, coriaceous. Male and female flowers mixed, greenish yellow. Capsules depressed globose.


Seed paste is used for allergic complications.

**Mallotus philippensis** (Lam.) Muell.-Arg.

Deciduous tree, to 10m. Leaves ovate-lanceolate, glabrous above, pubescent below. Flowers yellow with red spots in terminal panicles. Capsules smooth.


Fruits as vulnerary: ground well with coconut oil to get a paste applied on wounds. Fruits as vermifuge - shade dried and powdered and one teaspoonful is taken in orally with honey, twice in a day for 3 days.

**Phyllanthus urinaria** L.

Erect herb, to 75cm. Leaves oblong, apiculate, ciliate, base obtuse. Flowers white, male in upper axils and female in lower axils. Capsules 3-valved, globose.


The plant is considered to be an excellent diuretic. The juice of the leaves is given in coconut milk as an appetizer to children.

**Tragia involucrata** L.

Twining herb with stinging hairs. Leaves elliptic-ovate to obovate, acuminate, serrate, base truncate. Flowers greenish yellow in axillary and terminal racemes.


The decoction of the entire plant is used as a powerful tonic in fever to reduce thirst, to arrest vomiting and to cure brain fevers and nervous disorders. Inhalation of the fine powder of the root cures nasal bleeding.

**ULMACEAE**

**Holoptelia integrifolia** (Roxb.) Planch.


Stem bark in paste form used as vulnerary.

**MORACEAE**

**Ficus hispida** L. f.

Evergreen small tree, to 5m, branches hispid. Leaves opposite, broadly oblong, coriaceous, scabrid above, hispid below, acute, base truncate. Figs depressed globose, grey - tomentose.


A cup of latex collected from the roots is given in orally thrice in a day for 3 days for urinary stones. Stem bark is as antidiabetic. Stem bark is cut into pieces, boiled in water to get an infusion. A cup of infusion is given orally for thrice is a day for 15 days. Young leaves are shade dried and powdered and a teaspoonful of powder, mixed with honey is given orally thrice in a day for 3 days for bilious affections.
**Ficus religiosa L.**

Evergreen tree, to 30m. Leaves broadly ovate, coriaceous, shining, acuminate, entire, base truncate. Figs globose, axillary, paired.


Root / stem bark extract mixed with butter-milk and taken orally 2 teaspoonful twice a day for 30 days for paralysis.

**URTICACEAE**

*Pouzolzia zeylanica* (L.) Bennett


Roots as diuretic. A cup of decoction is given internally twice a day for 10 days.

**ORCHIDACEAE**

*Vanda tessellata* (Roxb.) G. Don

Epiphytes on large trees. Leaves channeled. Flowers brown, scented, sepels and petals tasellated on the inside.


The aerial roots and leaves are ground and paste in plastered for bone fracture, and the extract is given orally 5 spoonfuls twice a day until cured. Leaf juice is powdered and applied on skin diseases.

**HYDOXIDACEAE**

*Curculigo orchioides* Gaertn.


Raw tubers are eaten twice in a day for filarial swellings until cured. Tubers are also used as aphrodisiac. Root tubers are boiled in water and eaten with milk twice in a day upto 40 days for potency. Roots are boiled in water and a cup of decoction is taken in orally for gonorrhoea.

**DIOSCOREACEAE**

* Dioscorea wallichii* Hook. f.

Prickly vine; tubers growing out directly from the base of the stem. Leaves opposite, ovate-orbicular. Male flowers in axillary and terminal panicles. Capsules broadly obovate, apex emarginate; seeds orbicular, broadly winged.


The root tubers are used by tribals as deap-petizer.

**COMMELINACEAE**

*Commelina benghalensis* L.

Branched, diffuse herbs with dimorphic flowers. Leaves ovate to ovate-oblong, glaberscent. Aerial flowers blue in spathes; underground flowers white, cleistogamous.


Stimulant; tender leaves are cooked and eaten with meal for a week.

**POACEAE**

* Dactyloctenium aegyptium* (L.) Beauv.

Ascending or decumbent herb. Leaf blades linear, acute, margin with tuberculate hairs; ligule ciliate. Panicle digitate. Spikes 3-5, spikelets sessile, secund, 5-flowered, glumes mucronate. Caryopsis reddish, subglobose.


Grains are parched and eaten by women, who suffer from stomachache after childbirth. Decoction of seed is used for kidney complications.

**CONCLUSION**

The present study on Rudrakod sacred grove clearly indicates the presence of rich diversity of medicinal plants. The collection of huge amount of plant material, especially roots and
bark, sometimes even the whole plant (in case of herbaceous plants) is questioning the very survival of many species of medicinal value. The unscientific tapping of gum of Sterculia urens, an important minor forest product of the study area has left many trees dead. Unsustainable harvesting of medicinal plants and large scale biotic interference during Sivarathri festival days is affecting the medicinal flora of the sacred grove. The sustainable harvest of these resources from grove area is need of the hour.

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