"TRADITIONAL KNOWLEDGE OF LOCAL POPULATION REGARDING THE USE OF PLANTS IN NEEMACH AND RATLAM"

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ABSTRACT

The present documentation studies have various ethnobotanical uses of different species of plants used by bhil tribe of Ratlam and Neemach district (M.P.). The tribal were contacted and the information on different species belonging to their genera and families from different pockets was documented. For each species, the information regarding Local names, Botanical names, parts used, and ethnobotanical uses have been provided.

Keywords: *Ethnobotanical plants, Documentation, Ratlam, Neemach.*

INTRODUCTION

Ethnobotanical surveys were depends on different tribal inhabited villages of Ratlam and Neemach district (M.P.) and find more than 250 species of ethno medicinal plants were recorded. First hand data regarding various uses and local names of plants were collected through personal contacts established with a large number of tribal informants and "Bhopa" (Traditional rural medicine men). "Bhopa" is to be contacted for collecting information about ethnobotanical plants Oommachan, et.al.,(1992). Tribal people have traditional knowledge of plant species used for different purposes such as food, beverages, colours, resins, gums and medicine. This knowledge was even passed through generation to generation and played an important role in the conservation and sustainable use of biodiversity. These traditional phytoremedies with a considerable extent of effectiveness are socially and economically accepted. Still, one-third of the modern pharmaceutical preparations have botanical origin. International trade on medicinal plants is therefore increasing rapidly mainly as a result of intensified adoption of crude extracts for self-medication by the general public in the developed countries Masih et.al.,(2015). The need for the integration of local indigenous knowledge for a sustainable management and conservation of natural resources receives more and more recognition. Moreover, an increased emphasis is being placed on possible economic benefits especially of the medicinal use of tropical forest products (non woody forest produce) instead of pure timber harvesting. In many developing countries a large part of the population especially in rural and forest areas depends mainly on traditional medicines for their primary health care.

Traditional Knowledge has been defined as "Accumulative" body of know how practices and Presentation maintained and developed by peoples with extended histories of interaction with the

natural environment Masih et.al.,(2015). Which refer to a particular form of place based Knowledge of diversity and introduction among plants and animals Species. Whilst a number of definitions for traditional knowledge and folklore have been put forward there is no widely acceptable definition for either of them Shrivastava et. al.,(2002). We have to analyzed that there are many type of way for differentiate of TK. Such as TK of Agriculture and TK of water conservation, Environmental aspects, good Conservation also Traditional Knowledge of medicinal, Social culture and religious and also forest and forest aspects etc.

MATERIALS AND METHODS

In many surveys were conducted that so many plants use as medicinal plant and Pharmaceuticals medium for treatment to diseases by several tribal Communities like-Bhil ,Bhilala, Barela inhibit in the area. Its uses of the Stomach disorder, Skin disease, aphrodisiacs, fever, tonic, uller, asthama, Shake-bite, respiratory disease leucorrho, dandruff, eye-disease and diabetes etc. Thus use of Plants based drugs and chemicals for curing various ailments and personal adornment is as human cultivation. India is good sources of medicinal plants. If we study on microbial diseases source have to find that some of plants are treated them such as *Aspergillus*'s higher coursing skin diseases and *cassia fistula* L. are excellent use against the fungus. It inhibits the fungus positioned. So there are many knowledge analyzed by documentation from which is show. So many diseases are restricts by plants. On traditional knowledge surveys reveal that a good number of plant species are being used by various tribal communities as emergency food. The present work deals with some parameters regarding nutritive value of leaves of *Oxalis corniculata* L. used as alternative vegetable during emergency by some tribes of central India. The leaves have been found to be in moisture (82.42±0.5%) crude protein (22.28± 0.5 %) crude lipid (23.7 ±0.5%) potassium (2.17 ±0.31%), Calcium (2.5±0.08%), nitrogen (3.56±0.70%) and magnesium (0.25±0.03%).

Several hundred wild edible plants, which not only satisfy hunger of the people but have been proved nutrition's too. It has been noticed that several tribal communities, who still live in undisturbed forest areas posses the traditional food habit. This probably emphasizes on sound nutritional status of wild edible plants, consumed by tribal as regular food or supplementary food. Seed of certain indigenous species rich in protein are more or less equal to that of almonds. The nutritional composition of a large number of plants used in emergency by various tribes in different parts used in emergency by various tribes in different parts of the world has been evaluated.

Neemach, Ratlam known as tribal area, which is situated in a geographic region of central India. The regions are in Madhya Pradesh, with the larger portion lying in Madhya Pradesh. That is popular as medicinal purpose that drugs are evolutes by some important plants these are daily uses by some tribal, local communities such as Bheel, bhelala, gond, Baiga for medicinal, eaten, decoration etc. Shrivastava et. al.,(2002).

The major towns are Neemach, Jawad, Manasa, Singauli, Jiran, Rampur, and Ratlam, near town Sailana, Bajana, Jaora, Piploda, Alot, Tal, Rahiti. Well known place however is west Madhya Pradesh. It is one of the lies between the parallels of latitude 24°.15 and 24°.35 North and between the meridians of longitude 74° .45' and 75°.37 East. As per India Census Neemach had a population and females 47%. It has an average literacy rate of 70%. The population structure of the district is project below.

Raltam is situated in north –West region of Madhya Pradesh from 23° 52’ north longitude and 74°.31’ east to 75°.41’ east latitude. It is bounded by Mandsour district in north, Jhabua and Dhar on the south, Ujjain on the east, Chhitorgharh and Banswara district of Rajasthan on the West Shajapur District of Madhya Pradesh and Jhalawar District of Rajesthan on the North. Total area of Ratlam District is 4861 Sq. Km. which is 1.11% of total area of Madhya Pradesh. Ratlam is divided in 8 tehsils and 6 blocks. Total Population is 846964. It has 1063 villages.

RESULTS AND DISCUSSION

The paper provides the information on ethno botanical uses plant species used by Bhil tribes of Ratlam and Neemach District (M.P.). Most of the species belong to family Sapotaceae followed by Rutaceae, Solanaceae, Cucurbitaceae and Rhamnaceae (3 species each) and Malvaceae, Mimosaceae, Annonaceae, Moraceae, Caesalpiniaceae, Borainaceae and Myrtaceae. This valuable ethno botanical knowledge of tribes needs to be preserved before it is eroded from the memory. These studies of traditional plant lore pave the way for discovering new economic and botanical sources for the welfare of mankind.

Table 1: List of Ethnobotanical uses of local pants species of Ratlam and Neemach District (M.P

S.N	Botanical name	Family name	Local name	Characteristics
1.	*Abelmoschus ficulneus* (L.) W.	Malvaceae	Ranbhindi, Amraj	Herbs, annual erect hispid undershrubs, 0.5-2 m high, sometimes prickly. Leaves suborbicular in outline, cordate, 2-15 cm across, palmetely 3-5 lobed, with spathulate to obovate serrate lobes. Epicalyx lobes 5-6, linear-lanceolate, 5-10 mm lon, usually falling before anthesis. Calyx ca 15 mm long, with 5 linear ca 3 mm long lobes. Corolla white turning pink mauve, with dark purple centre; petals obovate, 2-3 cm long. Staminal column ca 15 mm long. Capsules more or less secund on the lateral branches, ovoid, 5-angled, obtuse or acuminate, 3-3.5 cm long, tomentose; valves inside with long white hairs; seeds globose, ca 3 mm across, black. Fl. & Fr: Sept-Nov.

2.	*Ammannia multiflora* Roxb.	Dadmari		Erect, branched weed, branches slender, quadrangular. Leaves opposite, sessile oblan-ceolate or elliptic. Flowers solitary or in peduncled 3-many flowered. Capsule globose, puple or red. Seeds many turgid.
3.	*Annona reticulata* L.Sp.	Annonaceae	Ramphal	Tree grown in private gardens for its fruits . The oil obtained from the seeds is an insecticide .
4.	*Barleria cristata* L.Sp. Pl.	Acanthaceae	Tedralu	Diffuse erect, perennial herbs or under shrub. Stems more or less apperssedly hairy, densely at the nodes, bark black brown, Leaves petiolate, hairy on both sides. Flowers in axillary and terminal, dense spike. Capsules long, acute at both ends, 4-seeded, seeds, silky hiry.
5.	*Barleria Montana* Nees.	Acanthaceae	Korat	Shurbs Herbs or undershrubs, perennial, erect, up to 1 m high. Leaves narrowly obovate to ovate-lanceolate, 5-10 x 3-5 cm, acuminate at apex, narrowed at base, thinly chartaceous, glabrous or minutely puberulous above. Flowers axillary or terminal, solitary; bracts obovate, shorter than calyx, acute. Outer calyx-segments ovate. Sometimes slightly 2-fid nearly glabrous; inner ones linear to linear-lanceolate. Corolla blue or purple; lobes orbicular-obovate, obtuse. Capsules ca 2 cm long, beaked above, 4-seeded. Seeds orbicular or suborbicular, with silky yellowish hairs.
6.	*Barleria prionitis* L.Sp. Pl.	Acanthaceae	Jhinti, Katsareya	Armed, bushy undershrubs. Stems terete or obscurely 4-angled, glabrous. Leaves petioled tipped with a spinule. Flowers in cymes combined into a terminal sessile, orange-yellow. Capsule ovoid with a tapering beak, 2 seeded, seeds hairy.

7.	*Bignonia acquinoctialis* L.Sp.Pl.	Bignoniaceae		Extensive climbing shrub. Leaflets shining green. Flowers purplish or rose with veins deeper coloured.
8.	*Bignonia unguiscati* L.,Sp.Pl.	Bignoniaceae		Commonly grown in gardens near walls or trees where it climbs. Flowers bright yellow, trupet shaped. Climbing by 3-fid, claw like hooked tendrils.
9.	*Biophytum reinwardtii* (Zuco.) Klotz. in perers.	Oxalidaceae	Munich	Erect, simple, hairy annual herbs. Stem clothed with reflexed hairs. Leaves even pinnate. Flowers in pseudo-umbellate clusters, yellow. Capsule, glandular hairy at the top.
10.	*Blumea oxyodonta* DC.	Asteraceae	Nom, Nud	prostrate,spreading,herbaceous,pubescent branched from the base central root stock and radiating branches. Stem hairy, slender, glandular villous. Leaves all alternate, clothed with silky hairs heads light yellow on slender peduncles, solitary or few in a corymb. Achenes slightly hairy pappus light yellow.
11.	*Boehmeria platyphylla* D.Don.	Urticaceae		Erect, suffruticose, perennial, under shrubs or shrubs. Stems sulcate, suffused with red or dark brown. Leaves opposite, unequal, elliptic ovate to rounded. Flowers clustered in spikes which are often paniculate. Achenes obovoid, compressed, brown, hairy at the top.
12.	*Boerhavia diffusa* L.	Nyctaginaceae	Punarnava, Pathar-chatta, Chatwa Bhaji	Erect or decumbent - ascending or scrambling, somewhat viscid, perennial herbs with woody base. Stems terete, often purple tinged, gland hairy. Leaves unequal sized at each nodes. Flowers dark pink, 4-10 together in small umbels. Fruit clavate, 5-ribbed, glandular along the ribs.

13.	*Canscora diffusa* (Vahl.) R.Br.	Gentianaceae	Agya, Bhuin-Neem	Erect, much-branched from the base annual herbs. Stems quadrangular, narrowly margined, glabrous. Leaves in pairs at each fork. Flowers numerous, in lax diffuse paniculate cymes, pink. Capsule compresed, membranous, as long as the calyx. Seeds rounded or angular minutely rugose.
14.	*Capparia zeylanica* Linn.	Capparidaceae	Ulat Kanta	Climbing shrub, armed with recurved, stipular thorns. Young parts brownish red tomentose. Leaves varying in shape from narrow elliptic to broadly ovate , flowers in serial on fresh shoots; pedicel pink, densh-brown, with fatty pulp and woody pericarp.
15.	*Capparis sepiaria* L.	Capparidaceae	Aundi	Straggling large shrub with numerous grey-tomentose; spreading and diffuse. Leaves oblong, lanceolate, sharp paired and recurved stipulary thoms. Flowers in umbels, axillary, white. Berry globose, deep purple, black when ripe 2- seeded.
16.	*Citrus maxima* (Burm.)	Rutaceae	Chokotra	Small tree or large shrub. Leaves large, emarginate, petioles broadly winged. Flowers white. Fruits globose or pear - shaped, pale yellow, pale crimson to pale.
17.	*Citrus medica* Linn.	Rutaceae	Nimbu	Small thory tree. Young foliage and flower buds pinkish. Petals tinged with red. Fruit ovoid, yellow, pulp abundant acid. Cultivated in garden for lemons.
18.	*Cleistanthus collinus* Benth.	Euphorbiaceae	Garrar, Karra	Large shrub or small deciduous tree, bark dark brown, rough, branche stiff, smooth or pustulate. Leaves alternate, bifarious, coriaceous, tender ones chartaceous, main lateral nerves 5-8 pairs. Flowers in axillary clusters. Capsule globose, 3-valved, seeds 3, globose, reddish - brown.
19.	*Cocos nucifera* L.,Sp.Pl.	Arecaceae	Nariyal,coconut	Tall unarmed tree, stems often thickened at the base with a mass of rootlets. Spadix stout, branches bering scattered female flowers towards their bases and numberous male above. Fruit

				1-celled, subglobose drupe. Pericarp fibrous, endocarp bony, albumen lining the endocarp.
20.	*Codiaeum variegatum* Blume.	Euphorbiaceae		Evergreen shrub with alternate leaves often waved and infinitely varialble in size, form and colouring. In certain varieties the leaves are curiously twisted, or have 2 blades separated by a length of midrib.
21.	*Coix lachryma-jobi* L., Sp. Pl.	Poaceae	Garu	Annual pernnial grasses culmes erect rooting at base nodes glabrous leaves lanceolate. Glabrous racemes spiciform, solitary or fascicled consisting one basal female spikelet enclosed in a ovoid-globose involucre and serveral male spikelet borne upwards on the same peduncle. pseudocarps broadly ovoid white or bluish hard, polished.
22.	*Coldenia procumbens* L.	Ehretiaceae	Ban- Andi	Procumbent herb usually lying quite flat on the ground, stem stout, trailing and shaggy with white hairs. Branchlets densely pilose.Young parts covered with densely white silky hairs. Leaves crisped, greyish or ashy green, very hairy on both sides. Flowers pale yellow. Fruit 4-lobed pyramidal drupe, hairy muriculate.
23.	*Daucus carota* L.	Apiaceae	Gajar	Much branched hispid herb . Tap root fleshy and variable in size and shape. Leaves narrow-lanceolate, segmented, dark green in colour.

24.	*Delonix regia* (Bojer ex Hook.) Rafin.	Fabaceae	Gulmohar	Tree, medium-sized handsome trees with spreading crown. Leaves feathery, bipinnate, up to 60 cm long; stipules pectinate; pinnae 11-18 pairs; leaflets 20-30 pairs, 6-10 mm long, oblong. Flowers in terminal or axillary corymbose racemes, ca 10 cm across. Calyx lobes 5, subequal, valvate. Petals yellow, imbricate. Stamens 10, much exserted; filaments villous below. Ovary subsessile. Pods long, flat, strap-shaped, woody, 30-75 x 5 cm; seeds 20-40, oblong, mottled. Fl. & Fr.: April-Aug.
25.	*Dendrocalamus strictus* (Roxb.) Nees.	Poaceae	Bans	Culms solid or with a small cavity, culm sheaths with golden brown hairs or glabrescent; leaf blades erect, Inflorescence a compound panicle, with spikelets clustred in globose heads in long spikes. Spikelets spiny, hairy.
26.	*Dendrophtoe falcata* (L. f.)	Loranthaceae	Bandha, Banda	Perennial, large, much branched, leafy, partial stem parasites, glabrous, with woody branches. Leaves opposite variable in shape, lateral nerves 6-8 pairs, leathery, young leaves pink. Flowers bisexual, vermilion, orange, pink or sometimes white in short axillary racemes on leafless nodes. Fruit ovoid-oblong, berry, crowned with a persistent calyculus. Black when ripe.
27.	*Eleusine flagellifera* Nees	Poaceae		Herb, root fibrous, stems prostrate, branched smooth. Leaves linear lanceolate acuminate, rigid. Inflorescence spikelet. Flowers in spikes digitate, rachis slender. Lanceolate, floral glumes long ovate acute the oblong with ciliate keel.

28.	*Eleusine indica* (L.) Gaertn.Fruct.	Poaceae	Pandhar	Erect annual simple or branched culms glabrous leaves hairy or scabrid above. Ligule a minute ciliate rim. Spikes 2-7, elongate, digitate with 1 or 2 below the umbel, sub erect or subrecurved; rachis flatened, spikelets biseriate, pointing forwered at an acute angle. grains, obtusely trigonous.
29.	*Elytraria acaulis* (L.f.) Lindau	Acanthaceae		Stemless herbs. Leaves alternate, crowded, sub-radical,spathulate or bolanceolate. Scapes several, usually exceeding the leaves, clothed throughout their (spikes close) rigid, simple or branched, white or blueish. Capsule ellipsoid, acute. Seeds minute, reticulated, minutely papillose, attached at a minute point without retinacula.
30.	*Elytrophorus articulates* P. Beauv.	Poaceae	Jangli rala	Annual herb. Stem erect leaves larger than stem, linear acute. Inflorescence longer than the plant, spikelet as broad as long. Palea broadly oblong.
31.	*Eulalia trispicata* (Schult.) Henr.	Poaceae	Chhind, Chunai	Grass, Perennials. Culms 50-100 cm tall, leafy at base, turning reddish brown with age. Leaves linear-lanceolate, usually flat, glabrous or sparsely hairy; sheaths terete, glabrous except at mouth; ligules lacerate, truncate. Inflorescence of 3-7, densely silky, digitate racemes. Sessile spikelets lanceolate, 4-5 mm long, obtuse, awned. Lower glume papery, 3.5-4 mm long, hairy at base; upper glume cymbiform, 1-nerved. Lower lemma empty; upper lemma linear, ca 3 mm long, with cleft at apex, awned from sinus; awns 9-12 mm long, ciliate. Palea absent. Anthers 3, yellow, ca 2 mm long. Caryopsis ablong. Fl. & Fr.: Sept-Dec.

32.	*Evolvulus nummulariu s* (L.)	Convolvulaceae		Prostrate, creeping, perennial herbs, rooting from the nodes, often multicauline. Stems patently hairy. Leaves alternate. Flowers 1-2 in sessile cymes, white. Capsule globose. Seeds small glabrous.
33.	*Exacum pedunculatu m* L.	Gentianaceae		Erect, annual herb stem 4-gonous leaves decussate. Flowers in dischasial cymes, flowers pedicelled, blue or lilac. Capsule globose. Seeds circular. Minute.
34.	*Exacum pumilum* Griseb. In DC.	Gentianaceae		Tiny herbs. Stem erect, branched up wards. Leaves sessile. Flowers less numerous in cymes lax. Flowers subsessile; purple; purple-blue. Capsule globose, septicidally 2-valved. Seeds minuts, subcuboid.
35.	*Exacum carinatum* Roxb.	Gentianaceae		Small, erect, slender annual herb leaves distinctly petiolate. Flowers tetramerous, variable in size white or pale-blue. Capsule globose, smooth shining. Seeds small.
36.	*Flacourtia indica* (Brum. f.) Merr. Inter.	Flacourtiaceae	Kakai, Bilanga, Kanju	Much branched, thorny bush or large shrub with rough whitish-grey bark, armed with spines. Branchlests ending in sharp, rigid, needle like spines. Leaves variable, obovat, acute, serrate. Flowers unisexual, greenish - yellow, clustered in short axillary racemes. Berries globose, dark-red dark purple or black, fleshy when ripe.
37.	*Gliricidia sepium* (Jacq.) Kunth ex.	Fabaceae		Small deciduous tree, with large grey branches glandular, pubescent. Leaves long feathery with small - black spotting glands on the undersides of the leaves, oddpinnate; leaflets opposite, flowers pale pink and is immediately followed by the leaf. Pod oblong, continuous between seeds.
38.	*Globba orixensis* Roxb. Asiat.	Zingiberaceae		Perennial herbs, with a creeping short rhizome which emits fleshy root. Leaves sub-sessile, elliptic. Inflorescence terminal, glabrous or short-hairy, with 1 to 3 flowered branches. Calyx yellow. Corolla tube slender. Lip yellow with a reddish

				brown center. Capsule globose, verrucose. Seeds glabrate or hairy.
39.	*Grevillea pteridifolia* R.Br.ex J.	Proteaceae		Planted as a fast growing shrub by the forest department in its Social forestry programme in front of G.S. College.
40.	*Grevillea robusta* Cunn.	Proteaceae	Silver Oak	Tall, robust with hairy or rusty - tumentose, young branches. Leaves fern like, bipnnate or sometimes tripinnate, pinnae entier or deeply pinnatifid, silvery beneath. Flowers greenish yellow mixed with orange in secund, one sided padicles. Fruits an oblique, coriaceous, follicle, brown, seeds 1.
41.	*Grewia asiatica* L.	Tiliaceae	Phalsa	Small tree with a spreading crown, young parts stellately pubescent, bark grayish white. Leaves broad ovate, irregularly toothed. Hoary tamentose beneath. Flowers small. Drupe indistinctly lobed, pilose, containing one celled nuts.
42.	*Habenaria plantaginea* Lindl. Gen.	Orchidaceae		Tiny terrestrial herb. Stem scapigerous. Tubers ellipsoid. Leaves radical, 3-4 horizontal, more or less flat on the ground. Scape slender bearing many bracts. Spike, laxly flowered. Flowers white. Spur slender, much longer than the ovary, greenish-yellow in colour, Capsule turgid, curved.
43.	*Haldinia cordifolia* (Roxb.) Ridsd.	Rubiaceae	Haldu	Tree, tender parts pubescent. Leaves cordate to orbicular, thick chartaceous. Flowers 5-merous, 1-3 fascicled heads, cream, funnel-shaped. Capsule clustered, breaking into 2 follicular cocci. Seeds elongate, tailed above.
44.	*Hamelia patens* Jacq.	Rubiaceae		Cultivated in gardens as a tall handsome evergreen ornamental shrub. Flowers reddish-yellow.

45.	*Hedychium coronarium* J. Koenig.	Zingiberaceae		Erect perennial herbs, with stout rhizome. Leafy stems upto 3 cm. tall leaves sessile, distichous, lanceolate-oblong, often with revolute margins. Inflorescence erect, dense. Corolla pale yellow. Capsule globose.
46.	*Hibiscus schizopetalus* (Mast) hook	Malvaceae		Glabrous shrub with drooping branches. Leaves narrowly ovate. Flowers light scarlet, red or purplish red.
47.	*Hiptage benghalensis* (L.) Kurz in JASB	Malpighiaceae	Kampthi, Madhumalti	Much - branched, evergreen liance or shrub, stem reddish - grey, densely woolly. Leaves ovate, elliptic, 2 glands at leaf-base. Flowers bisexual, irregular, fragrant. White tinged with yellow or pink. Samara with 3 unequal wings, one wing longer than the other two.
48.	*Holarrhena pubescens* (Buch-Ham)Wallich ex G. Don, Gen. Hist	Apocynaceae	Dudhi, Kurchi, Kudo	Shurbs or small trees, deciduous; bark brown. Leaves broadly ovate to elliptic - oblong, 10-20 x 6-9 cm, acuminate at apex, rounded or tapering at base, glabrous or more or less tomentose especially beneath. Flowers in terminal, many-flowered, 7.5-15 cm across cymes, fragrant. Calyx - lobes lanceolate, 2.5 - 3 mm long, acuminate ciliate. Corolla white; lobes oblong, 12 - 14 mm long; throat without ring of hairs; tube ca 1 cm long, pubescent. Follicles 20-40 x 0.5-0.8 cm, usually marked with narrow, white specks. Seeds linear, ca 1.5 cm long; coma brown, about twice as long as the seeds.
49.	*Hibiscus schizopetalus* (Mast) hook	Malvaceae		Glabrous shrub with drooping branches. Leaves narrowly ovate. Flowers light scarlet, red or purplish red.
50.	*Iphigenia indica* (L.)A. Gray.	Liliaceae	Santhal-chutia	Erect, perennial herbs, with an ovoid, tunicate corm which is narrowed into a short neck at the top, stem unbranched, glabrous, terete and emits many fibrous roots from the base. Leaves sessile, alternate. Flowers purple or violet, few or many in a terminal erect raceme,

				bracts leafy. Capsule oblong-ellipsoid. seed ovoid, warty.
51.	*Ipomoea cairica* (L.) Sweet. Hort.	Convolvulaceae		Twining, robust, branched herbaceous, cylindrical, glabrous, solid with tuberous root stock. Leaves palmately 4-6 partite. Flowers in 1 to 3 flowered peduncle, hermaphrodite, actinomorphic, hypogynous, purple with red purple inside. Capsule globose, glabrous.
52.	*Iphigenia indica* (L.)A. Gray.	Liliaceae	Santhal-chutia	Erect, perennial herbs, with an ovoid, tunicate corm which is narrowed into a short neck at the top, stem unbranched, glabrous, terete and emits many fibrous roots from the base. Leaves sessile, alternate. Flowers purple or violet, few or many in a terminal erect raceme, bracts leafy. Capsule oblong-ellipsoid. seed ovoid, warty.
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54.	*Jasminum humile* L.	Oleaceae	Pili Chameli	Shrubs erect, diffuse, glabrous; branches angular. Leaves alternate, imperipinnate, variable in size, 3-7 c.m. long; leaflets 3-5, ovate, elliptic or lanceolate, variable in size, acute at apex, obtuse at base, flowers in terminal, corymbose cymes; bracts linear, minute.
55.	*Jasminum multiflorum* (Burm. F.) Andr.	Oleaceae	Kund phool, Safed chameli.	Shrubs,Scandant, densely pubscent. Leaves opposites, 3.8x2.4C.m. Acute or acuminate at apex, , glabrous with age, tomentose or pubscent beneath. Flowers in dense, subssesile, capituliform cymes fregrent, sessilre.

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