CHAPTER- 6

ENUMERATION
ENUMERATION OF ETHNOMEDICINAL PLANTS

There are a total 222 species of medicinal plants collected during this investigation, which have been enumerated family wise along with correct nomenclature and citation of reference of original publication, Genus name, Scientific name, Vernacular name along with the names mentioned in Hindi, Sanskrit and Bengali literature. These are followed by brief description of the collected plants, phenological data, date of collection, collection number and very short ecological note, utilization in ethnomedicine and lastly established reports of utilization of the plant species, if any.

DILLENIACEAE

DILLENIA L.


**Vern name**: Jumphamthai (R), Chaltha (Beng),

Large evergreen trees with a large crown. Leaves elliptic to oblanceolate, acute or acuminate, serrate-dentate, cuneate at the base, nerves prominent beneath. Flowers creamy white, solitary, terminal. Sepals ca 5 cm. long, ovate, fleshy. Petals *ca* 8.0 cm. long, obovate, white. Stamens *ca* 1.5-2.0 cm. long in 2 series.

**Fls. & Frts.**: July - January

**Specimen collected**: Ngasunluang Rongmai punji. 17-09-09. Banasree Nath. Coll No. 126.

**Habitat**: Terrestrial, wild & cultivated.

**Ethnomedicinal uses**:
Fruit is used against stomachache.
Fruit juice mixed with sugar and water is taken in fever.
Established reports of uses in medicine: Bark and leaves are astringent. Fruit is slightly laxative and used in abdominal pain; also in cooling and as tonic. Bark and leaves contain tannin.

MAGNOLIACEAE

MICHELIA


Vern name: Chapa (Beng),

Large trees, 20-25 m high; bark grey to grayish-brown. Leaves with conduplicate deciduous stipules, 10.0-25.0 x 4.0-7.0 cm ovate, lanceolate to ovate acuminate, base cuneate, glabrous and dark green above, pale and glabrescent beneath, lateral nerves 15 pairs on either side of midrib. Flowers 3.0-4.0 cm long, axillary, pale or orange yellow, fragrant; perianth in trimerous whorls, inner ones narrower, oblanceolate; carpels ovoid or ellipsoid. Fruits 7.0-15.0 cm, cone like, drooping.

Fls. & Frts.: May – October.


Habitat: Terrestrial, wild & cultivated.

Ethnomedicinal uses:

*Extract of flowers mixed with oil and used externally on hair to kill the lice.

Fruit is crushed and made juice of it and taken orally in stomach disorders.

Established reports of uses in medicine: Bark febrifuge, stimulant, expectorant and astringent. Dried root and root bark is purgative, in form of infusion useful emmengogue; mixed with curdled milk useful application to abscesses. Flowers and fruits considered stimulant, antiseptic, tonic, stomachic, carminative, bitter and cooling used in dyspepsia, nausea, fever, renal diseases, gonorrhoea and skin diseases. Oil from the flowers useful in cephalalgia, ophthalmia and gout. Juice of
leaves given with honey in colic. Seeds and fruits used for healing cracks in feet. Flowers contain essential oil. Flowers and fruits are one of the ingredients of some important Ayurvedic formulations viz. Baladhatryadi Tail and Chandana Bala Laxadi Tail and Mahalaxadi Tail.

* Additional medicinal utility.

ANNONACEAE

**ANNONA L.**


**Vern name:** Sataw (J), Ata (Beng).

Small evergreen trees, 5.0-6.0 m. high; branches lofty. Leaves oblong to ob lanceolate, 15.0-25.0 cm. long, acute to obtuse, entire, base cuneate, glabrous, glaucous and shining above with dark green colour. Flowers solitary, mostly from the older branches; ca 1.5-2.0 cm. almost drooping, ovoid-conical; sepals small; petals fleshy, thick, broadly conical, 1.5 cm. long and 1.8 cm. broad; stamens and carpels numerous. Fruits large, ellipsoid to ovoid, 8.0-10.0 cm. long, muricate throughout the surface.

**Fls.:** March – May. **Frts.:** July – September.

**Specimen collected:** Mathurapur khasia punji, 16-10-09, Banasree Nath. Coll No. 108.

**Habitat:** Terrestrial, wild & cultivated.

**Ethnomedicinal uses:**
Paste prepared from the leaves applied twice a day in the body of animals for removing lice and leaf juice is also given for small-worm.

**Established reports of uses in medicine:** Root is considered antispasmodic and parasiticidal; leaves are given in fever. Unripe fruits are given in chronic dysentery. (Caius, 2003).
MENISPERMACEAE

TINOSpora  Miers in Ann.


Vern name: Laptheinket (J), Aamburush (Beng).

Deciduous succulent climbers with corky bark. Stem woody, Leaves 4.0-8.0 x 2.0-6.0 cm., ovate or roundish, acute to acuminate, cordate, thickly coriaceous, petioles ca 5.0 cm. long. Racemes axillary and terminal, developing when completely leafless. Flowers monoecious, minute, greenish yellow, glabrous. Male flowers clustered and female flowers solitary on longer pedicels; bracts foliaceous. Drupes globose.

Fls. & Frts.: January – May.


Habitat: Terrestrial, Commonly climb upon mango tree.

Ethnomedicinal uses:

Stem cut into small pieces and added with water and kept overnight. The juice so obtained is taken orally in empty stomach. This is good for stomach.

Established reports of uses in medicine: Stem is considered alterative, antipyretic, aphrodisiac, bitter diuretic, febrifuge, stomachic and tonic and used in general debility. It is also useful in diabetes, enteric fever, gonorrhoea, jaundice, leprosy, piles. It is good blood purifier. Stem contains Berberin. Fresh stem contains Giloin and Gilonin. Decoction of leaves given in gout. Pulverised fruit is used as a tonic and also for jaundice and rheumatism. Guduchi satwa-the glucoside extract prepared from the plant is a favourite tonic of Ayurvedic Pharmacopea, much used as an aphrodisiac and tonic. The stem is an ingredient of several other formulation viz; Amritarista, Aswagandha churna, Chandra Prabhavati, Guduchi tail, Chandra Kala ras, etc.
PAPAVERACEAE

ARGEMONE L.


Vern name: Siyalkata (Beng).

Erect prickly herbs; juice yellow. Leaves cauline, elliptic-obovate, sessile, pinnatifid, lobes dentate, spiny. Flowers yellow, solitary, sessile. Sepals 2. Petals 4, ca 2.5-3.0 cm long. Stamens ca 0.3 cm long yellow. Anthers basifixed-stigma lobed. Fruits oblong, prickly capsule.

Fls. & Frts.: January – July.


Habitat: Terrestrial, Common in river side and certain places of the study area.

Ethnomedicinal uses:

Leaf juice is used in jaundice.

Established reports of uses in medicine: Juice of the plant is useful in scabies. (Das, 2006).

Seeds are laxative, expectorant and demulcent. Seed oil is used in cutaneous problems. Decoction of the leaf is used in jaundice. Seeds are said to be antidote against snake bite.

BRASSICACEAE

BRASSICA


Vern name: Sarson (R & Beng).

Erect tall annual herbs. Basal leaves large, pinnatifid or lyrate, upper smaller. Flowers bright yellow in corymbs, elongated or extending in racemes. Pods 5.0-8.0 cm long, conical beak, stout. Seeds yellow or brown.
Fls. & Frts.: January - March.


Habitat: Terrestrial, Cultivated.

Ethnomedicinal uses:
* Seeds of *B. sampestris* and seeds of *Seasamum indicum* are crushed with milk which is applied locally on skin to cure bronho.

Established reports of uses in medicine: Seeds an efficient counter irritant poultice. Oil from seeds combined with camphor forms an efficacious embrocation in muscular rheumatism, stiff neck, in dengue fever and rubbed on the chest in bronchitis. Roots and leaves used as stomachic. (Singh and Ali, 1998). Seeds are crushed with water and is applied once a day on wounds in the body of animals. (Nath, M. 2011).

*Additional medicinal utility.

**CAPPARACEAE**

**CRATAEVA L.**


Vern name: Barun (Beng & A).

Middle sized deciduous trees. Leaves palmately 3 foliate, long petiolate; leaflets *ca* 4.0-15.0 x 1.5-4.5 cm, ovate-lanceolate, acuminate, entire, glabrous. Flowers creamy, in terminal corymbose racemes. Sepals lanceolate. Petals 4, *ca* 1.0-1.5 cm long, ovate or oblong, clawed. Stamens many, *ca* 3.5-5.0 cm long. Gynophore *ca* 3.0-5.0 cm long; stigma sessile. Berries globose, on a woody gynophore, foetid smelling.

Fls. & Frts.: April - July.

Habitat: Terrestrial, common along the roadside.

Ethnomedicinal uses:
Leaf extract is taken orally in stomach disorders.
Stem juice is used in skin diseases.

Established reports of uses in medicine: Fresh leaves and root barks are rubefacient; flowers are astringent and cholagogue. Bark demulcent, stomachic laxative, diuretic, antipyretic, alterative, tonic, useful in urinary disorders. Paste of stem bark is applied on skin for improving complexion.
Leaf and fruit paste is put on forehead to reduce pressure. (Das. 2009)

CLEOMACEAE

CLEOME L.

Kanjilal et al., Fl. Assam 1: 73.

Vern name: Sadahur (Beng).

Erect glandular, pubescent herbs ca 80.0 cm-1.5 m high. Leaves digitately 3-5 foliate; leaflets obovate, acute entire, sessile. Flowers purplish white, in corymbose racemes; bracts 3 foliate. Sepals ca 0.4 cm. long, ovate elliptic. Capsules ca 1.0-5.0 cm. long. Seeds brownish black.

Fls. & Frts.: June – September.


Habitat:

Ethnomedicinal uses:
Stem juice is used to get relief from rheumatic pain.

Established reports of uses in medicine: Stem juice is used for rheumatic pain.
**FLACOURTIACEAE**

**FLACOURTIA L’ Herit. Strip.**


**Vern name**: Lukluki (Beng).  

Medium sized evergreen trees. Young branches with axillary simple thorns. Leaves obovate, acute at base, crenate towards the apex. Racemes short, axillary. Flowers usually 1 or 2 short shoots. Fruits round *ca* 1.2 cm across.  

**Fls. & Frts.**: March – July.  

**Specimen collected**: Damcherra, Uttarkrishnapur Rongmai punji, 11-06-08. 14-09-08. Banasree Nath. Coll. No. 60.  

Commonly found in secondary forest and also cultivated in homestead complex.  

**Habitat**:  

**Ethnomedicinal uses**:  

Fruits are taken raw in jaundice.  

**Established reports of uses in medicine**: Fresh leaves pounded in a mortar and made a paste. The paste is applied externally in the form of poultice around carbuncle to enhance the process of healing. (Dutta Choudhury, 1999).  

Fruits are used in jaundice and enlarged spleen.  

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**CLUSIACEAE**

**GARCINIA L.**


**Vern name**: Saslung (J), Dephol (Beng).
Middle sized evergreen trees; branches drooping; larex yellow. Leaves ca 12.0-35.0 x 3.0-8.0 cm, linear-oblong, acute, cuneate at base. Flowers whitish, in axillary fascicles. Fruits globose, ca 3.0 cm in diam. With persistent calyx.

**Fls. & Frts.:** March – September.

**Specimen collected:** Machkhal klhasia punji, 21-06-07. Banasree Nath. Coll. No. 27.

**Habitat:** Terrestrial, common in the forest.

**Ethnomedicinal uses:**

Fruits are edible. Seeds are crushed along with water and taken orally in dysentery.

**Established reports of uses in medicine:** Fruits are taken in dysentery.

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**THEACEAE**

**CAMELLIA**


**Vern name:** Cha (J & Beng).

Large shrubs or small trees, 1-4 m tall. Leaves oblong-elliptic to obovate, 5.0-12.0x2.5-5.0 cm, acuminate or acute at either ends, serrate along margins, glabrous above, pilose along the nerves beneath; lateral nerves 8-12; petioles ca 2.0 mm long. Flowers axillary, 3.0-3.5 cm across, white; pedicles 1.0-1.5 cm long; sepals 5, 3.0-4.0c ca 2.0 mm dia., suborbicular, leathery, persistent, hairy outside; petals obovate, 5-8, 1.0-1.5 cm long; stamens many, glabrous, outer ones connate at base; ovary 1-3 celled, villous. Capsules ovoid, 1.5-2.0 cm dia., trigonous; seeds globose, 1.5 cm dia., one in each cell. Brown.

**Fls. & Frts.:** October – April.

**Specimen collected:** Ragailuang Rongmai punji, 01-02-08. Banasree Nath. Coll. No. 56.

**Habitat:** Terrestrial, cultivated.

**Ethnomedicinal uses:**
Leaf juice is taken in high blood pressure.

**Established reports of uses in medicine**: Leaves are used in cuts, injuries and foul smell in mouth. (Kumar, 2002). Leaves applied over the burning place for curing burning sensation. (Nath, 2011).

**EURYA Thunb.**

*Eurya japonica* Thunb.  
**Vern name**: Not known.  

Small tree up to 10-15ft. in height, branchlets angular with prominent decurrent lines from both sides of the base of the petioles, usually glabrous. Bark thin, dark brown with lines of lenticles. Leaves dark green, alternate, very narrow oblong or elliptic linear lanceolate, acute some acuminate narrowed towards the base. Flowers white, axillary, sepals 5, petals 5, white, glabrous outside, pubescent inside about double the sepals, obovate.  

**Fls. & Frts.**: June – January. Probably throughout the year.  


Found in forest areas.  

**Habitat**:  

**Ethnomedicinal uses**:  

Leaf juice is taken orally to cure diabetes.  

**Established reports of uses in medicine**: Not recorded so far.

**MALVACEAE**  

**HIBISCUS** L.  

*Hibiscus radiatus* Cav., Diss. 3 : 150, t. 54.f. 2. 1787.  

**Vern name**: Not known.  

Undershubs, *ca* 1.5 m. high with short scattered prickles. Leaves 2.5-10.0 x 1.5-10.0 cm. long, usually palmately 3-5 lobed, serrate with few scattered bristles along the nerves beneath. Flowers yellow with purple centre *ca* 5.5 cm. long.
Solitary on short stout axillary peduncles. Epicalyx segments 15.0-17.0 mm. long, about 10, often unequally forked, bristly along the margins. Calyx membranous accrescent in fruit, lobes ovate acuminate, armed with bristle pointed prickles on the margins, upper prickles hooked. Corolla bell shaped. Capsules ovoid, densely setose; seeds smooth.

**FIs. & Frts.:** Throughout the year.

**Specimen collected:** Kachukhal part II, 05-11-09, Banasree Nath. Coll No. 178.

**Habitat:** Terrestrial, wild.

**Ethnomedicinal uses:**

*Leaf juice* is taken orally against snake bite.

**Established reports of uses in medicine:** Not recorded so far.

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**Hibiscus collinus** Roxb.

**Vern name:** Ganakiang (R).

Herbs, shrubs, or less often trees; indumentum usually with peltate scales or stellate hairs. Leaves alternate, stipulate, petiolate; leaf blade usually palmately veined, entire or various lobed. Flowers solitary, less often in small cymes or clusters, axillary or subterminal, often aggregated into terminal racemes or panicles, usually conspicuous, actinomorphic. Epicalyx often present, forming an involucre around calyx, 3- to many lobed. Sepals 5, valvate, free or connate. Petals 5, free, contorted, or imbricate, basally adnate to base of filament tube. Carpels sometimes with an endoglossum. Seeds often reniform, glabrous or hairy, sometimes conspicuously

**FIs. & Frts.:** October – April.

**Specimen collected:** Languangluang Phulertal Rongmai Punji, 15-11-08, Banasree Nath. Coll No. 36. (Pl.-40).

**Habitat:** Terrestrial, cultivated in the homestead complexes.

**Ethnomedicinal uses:**

Mature seeds are fermented in order to make spice. Stem is also used as fibre.

**Established reports of uses in medicine:** Not recorded so far.

**Vern name**: Sasantu (J), Joba (Beng).

Shrubs, large or small bushes. Leaves ovate acuminate more or less serrate, 3-nerved at base, 4.0-12.0 x 2.0-6.0 cm. Flowers solitary axillary, on joined peduncle; epicalyx 6-10, free, calyx gamosepalous, sepal 5, imbricate petals 5, twisted, united at the base and with the staminal column; stamens many, monodelphous, anthers unilocular, reiform. Carpels 5, style 1, stigma 5, ovary 5 chambered, axile placentation.

**Fls. & Frts.**: Flowers almost throughout the year.

**Specimen collected**: Dinonathpur khasia punji , 15-11-09, Banasree Nath. Coll No. 136.

**Habitat**: Terrestrial, cultivated in the homestead complexes

**Ethnomedicinal uses**:

Flowers are pounded and made paste and applied locally on fresh cut or wounds to stop bleeding.

Extract of flowers are mixed with milk and taken orally to cure dysentery.

Leaves are made paste and applied externally on hair to improve shine of hair.

**Established reports of uses in medicine**: Flowers and leaves are pounded together between palms and made a paste, applied locally on fresh cuts for instant arresting of bleeding. (Dutta Choudhury, 1999).

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**Vern name**: Chukar (Beng).

Annual erect shrubs, with red or green stem, particularly unbranched or with branches near the base of the stem, glabrous or slightly hairy. Leaves variable, entire or lobed, glandular beneath. Flowers large, yellow with dark crimson eye. Epicalyx united at the base and odnate to calyx. Calyx connate below, free above,
dark purple fleshy capsule ovoid, pointed, villose. Seed numerous, large 
reinformed, blackbrown, covered with minute stellate hairs.

FIs. & Frts. : Throughout the year.

Specimen collected : Nagra khasia punji, 25-10-07, Banasree Nath. Coll No. 44

Found in forest and also cultivated.

Habitat :

Ethnomedicinal uses :

Latex of the stem is used as eye drops in cleaning of dust from eyes.

Established reports of uses in medicine : Seeds used for cramps, flowers as an 
astringent. Soothing effect on mucus membranes that line the respiratory and 
digestive tracts.

URENA L.

1993.

Vern name : Toothoi (J), Bonokra (Beng).

Undershubs, erect, ca 2 m. high. Leaves orbicular, often rounded to cuneate 
at base, acute at apex, 2-8 x 1-10 cm; petioles 0.5-0.8 cm. Flowers pink with purple 
centre, 2-3 cm across, solitary or in clusters of 2-3; pedicles short, clustered 
bracteoles 5, connate below; calyx deciduous, lobes ca 2 cm. long, ovate to oblong 
lanceolate; petals 5, tomentose outside, connate below and adnate to the staminal 
tube, ovary 5-celled, each with one ovule; style with 10 capitate stigmatic branches. 
Fruits 3.0-5.0 x 2.0-4.0 cm, subglobose, covered with glochidia.

FIs. & Frts. : October - April.

Specimen collected : Nunchuri majerpunji, 08-10-10, Banasree Nath. Coll No. 
195. (Pl.-72).

Habitat : Terrestrial, commonly found among weeds along road sides and forest 
cleanings and abandoned Jhum field.

Ethnomedicinal uses :

Decoction of root is taken orally in fever to reduce excess thrust.
Established reports of uses in medicine: Root is diuretic and also used as an external remedy for rheumatism. Seeds contain urease. Decoction of stems and roots used for flatulent colic. Flowers expectorant, their infusion used in aphthae and sore throat.

**BOMBACACEAE**

*BOMBAX L.*


**Vern name:** kaaha (J), Simul (Beng).

Large deciduous tress; branches whorled, spreading; trunk buttressed at the base, often prickly. Leaves digitately 5-7 foliate; leaflets elliptic-lanceolate, acuminated, glabrous. Flowers bright red and orange yellow, solitary or clustered at the end of the branches. Calyx leathery, cup shaped. Petals obovate or oblong. Stamens many, connate below. Fruits oblong-ovoid capsule. Seeds many, white silky hairy.

**Fls. & Frts.:** January – May.

**Specimen collected:** Dinonathpur khasia punji, Rosekandi khasia punji, 14-05-08, 04-06-08. Banasree Nath. Coll. No.-89. (Pl.-70).

**Habitat:** Terrestrial, common in different parts of the study area

**Ethnomedicinal uses:**

Root is grinded and mixed with water and kept overnight. The juice so obtained is taken orally in empty stomach every early morning for a week to cure white discharge of women. The same juice is taken orally to cure spermatorrhoea.

Established reports of uses in medicine: Root are stimulant, tonic, aphrodisiac and used in sexual impotency. Gum is demulcent, haemostatic, astringent; used in diarrhea, dysentery and menorrhagia. Fruit is used in snake bite. Fruits are stimulant, expectorant, used in ulceration in bladder, kidney troubles.
**TILIACEAE**

**CORCHORUS L.**


**Vern name:** Naliya (Beng).


**FIs. & Frts.** : August – November.

**Specimen collected** : Ramchandi Bagan., 07-06-08. Banasree Nath. Coll. No.- 95

**Habitat** : Terrestrial, Cultivated.

**Ethnomedicinal uses**:

Leaves curry or juice is taken to reduce high blood pressure.

**Established reports of uses in medicine** : Leaf-infusion is demulcent, stomachic, laxative, carminative, given in dyspepsia, fever and liver disorders. Roots and unripe fruits are used in diarrhea.

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**MALPIGHIACEAE**

**HIPTAGE Gaertn.**


**Vern name** : Madhobilota (Beng).

Woody climbing shrubs; branches spreading. Leaves ca 5.0-17.0 x 3.0-5.5 cm, elliptic or ovate-lanceolate, acuminate, coriaceous, entire. Flowers white, fragrant, ca 3.0 cm long, in axillary or terminal racemes. Calyx 5 partite, ca 0.5-0.8
cm long, silky outside. Petals unequal, clawed silky. Stamens 10, connate below. Ovary 3 lobed.

**Fls. & Frts.** : January - June.


**Habitat** : Terrestrial, cultivated.

**Ethnomedicinal uses** :
Leaf juice is used to cure dysentery.
Plants can be used for ornamental purpose.

**Established reports of uses in medicine** : Leaf juice is used in stomach disorders.

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**OXALIDACEAE**

**OXALIS L.**


**Vern name** : Tupit (R), Amrulsak (Beng).

Herbs, diffused, stem creeping, rooting at nodes. Leaflets obcordate acute at base, ciliate at margins; petiolate. Flowers yellow, in axillary subumbels. Sepals ca 0.4 cm. long, lanceolate. Petals ca 0.8 cm. long, oblanceolate, notched at the apex. Capsules sub-cylindrical, pubescent.

**Fls. & Frts.** : June – December.

**Specimen collected** : Pantilong Naga punji, 01-02-09. Banasree Nath. Coll. No.- 143.

**Habitat** : Terrestrial, Common in moist places of the study area.

**Ethnomedicinal uses** :
Juice of the whole plant is good for proper urination. Juice of the plant is also good for stomach disorders.

**Established reports of uses in medicine** : Herb is used in scurvy. Leaf juice is having cooling effect, antiscorbutic, stomachic and diuretic. Leaves are source of vitamin C and carotene. Infusion of leaf is used to cure opacity of cornea. The
whole plant is also one of the ingredients of Ayurvedic formulation viz.- Changeri Ghrit. The plant is eaten raw to promote digestion. Its juice is applied for curing skin diseases. (Kohli, 1992).

**AVERRHOACEAE**

**AVERRHOA**


**Vern name:** Forchong (J), Kamranga (Beng).


**Fls. & Frts.:** April – September.


**Habitat:** Terrestrial, cultivated.

**Ethnomedicinal uses:**

Juice of the fruit is taken orally to cure jaundice. Leaf juice is taken to cure T.B.

**Established reports of uses in medicine:** Leaves, roots and fruits are used as cooling medicine. Unripe fruits are astringent, given in fevers, chest complaints and bleeding piles.

**RUTACEAE**

**AEGLE** Correa in Trans.

For Fl. Meghalaya 1:180. 1895; Nair and Nair in Hajra et al. (eds.), Fl. India 4:266. 1997; Crataeva marmelos L., Sp. Pl. 444. 1753.

**Vern name**: Sohpalul (J), Naithainui (R), Bel (Beng).

Middle sized deciduous trees; spines straight axillary. Leaves alternate, 3 foliate; leaflet acuminate, terminal ones petioled. Flowers greenish white, Calyx small, pubescent. Petals 4, ca 1.2 cm. long, oblong. Stamens many, ca 0.6 cm. long. Fruits globose, oblong pyriform. Pulp orange sweet.

**Fls. & Frts.**: April – August.


**Habitat**: Terrestrial, cultivated.

**Ethnomedicinal uses**: Pulp of the roasted green fruit is used in dysentery.

**Established reports of uses in medicine**: Fruit is aromatic, cooling, laxative, astringent, stomachic and digestive. Root bark is used in intermittent fever and also as fish poison. Leaf juice used in diabetes. Seed-gum used in colitis.

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**CITRUS L.**


**Vern. Name**: Slalebu (J), kaji lebu (Beng).

Small trees. Leaves unifoliate, ovate or oblong-elliptic, petioles winged and very narrow. Spines small, weak, 5-1.5 cm long. Flowers white. Fruits generally globose, yellow or greenish-yellow when ripe. Pulp pale, very sour.

**Fls. & Frts.**: July - December.

**Specimens collected**: Alombagh. 12-3-09. Banasree Nath. 115.

**Habitat**: Terrestrial, cultivated in the home garden.

**Ethnomedicinal use**: Fresh leaf is inhale to stop vomiting. Fruit is taken in stomach disorders.

**Established reports in Ethnomedicine**: Fruit juice is applied externally in skin diseases. Fruits are edible.

**Vern name**: Saumtara (J), Kamala (Beng).

Large shrubs with glossy green leaves, aromatic; spines delicate, short. Leaves elliptic, ovate-lanceolate, acuminate, petiolar wing narrow; petioles ca 0.4 cm. long. Flowers white, regular, bisexual. Sepals 4-5 lobed; petals 4-5; Stamens 10. Ovary cells many ovuled. Hesperidium depressed; orange red when ripe.

**Fls. & Frts.**: July.-December.

**Specimen collected**: Dinanathpur khasia punji, 20-08-00, Banasree Nath. Coll No. 116. (P1.-74).

**Habitat**: Terrestrial, cultivated for edible fruits.

**Ethnomedicinal uses**:

Dry seeds are make powder & it is taken along with water to stop vomiting.

**Established reports of uses in medicine**: Fruit is laxative, aphrodisiac, astringent and tonic. Flowers are stimulant.

Fruit juice is made to dissolve in a kind of sea shell and drunk during malarial fever. (Megoneitso & Rao 1983).

Freshly harvested roots cut into pieces and pounded together with the roots of *Tamarindus indica* and *Ananas comosus* and made to a paste. The paste is then diluted to double its content with water and filtered through cotton. 3 teaspoonful of the filtrate is taken twice a day for the treatment of Typhoid.

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**MURRAYA Koenig ex L.**


**Vern name**: Karipata (Beng), Narashingha (A).

Deciduous pubscent, strongly scented shrubs. Leaves imparipinnate; leaflets 9-25, alternate, ca 0.5-4.3 x 0.2-1.8 cm, ovate-lanceolate, oblique at base, pubscent
beneath. Flowers white, ca 0.9 cm long, in terminal corymbose panicles. Calyx segments 5, small, petals 5, ca 0.4 cm long. Stamens 10. Stigma capitate. Berries ovoid.

**Fls. & Frts.** : March – June.


**Habitat** : Terrestrial, cultivated.

**Ethnomedicinal uses** :

Leaf juice is taken orally in dysentery and other stomach disorders also. Leaves are also used in curry for flavouring.

**Established reports of uses in medicine** : Leaves used for preparing curry and extract taken to cure dysentery.


**Vern name** : Kamini (Beng).

Shrubs or small trees ca 6 m. high; bark corky outside, very thin; fragrant, compact and granular within, branches greenish grey, striate, young parts puberulous. Leaves 3-9 foliolate; rachis 3.8-10 cm. long, finely channelled, glabrous or slightly puberulous above. Leaflets 2.4-10.0 x 1.0-4.8 cm., obliquely rhomboid or elliptic lanceolate, bluntly acuminate with notched tip or acute entire, thinly coriaceous, dark-green and shinning above, totally glabrous when mature; base broadly cuneate; petiolute 2.5 cm. long. Flowers 2.5 cm. long, milky white, sweet scented, in terminal or axillary few flowered puberulous corymb, sometimes solitary when axillary. Sepals minute, acute pubscent, dotted. Petals oblong-lanceolate. Ovary linear, 2-celled.

**Fls. & Frts.** : March - December.
Pl. 19: *Albizia lebbeck* (L.) Benth.

Pl. 20: *Croton caudatus* Geisler

Pl. 21: *Cassia fistula* L.

Pl. 22: *Anisochilus pallidus* Wall.

Pl. 23: *Vitex negundu* L.

Pl. 24: *Clerodendrum glendulesum* Celeb.

Pl. 25: *Solanum erianthum* D.Don.

Pl. 26: *Euphorbia ligularia* Roxb.

Pl. 27: *Adhatoda zeylanica* Nees.

Habitat: Terrestrial, commonly found in shady areas. Often cultivated as an ornamental plant.

Ethnomedicinal uses:
Leaf paste is used externally on hair for proper growth.

Established reports of uses in medicine: Leaf juice extracted mixed with leaf juice of *Hibiscus rosa-sinensis* is applied on the scalp for removing dandruff.

**ZANTHOXYLUM L.**


Vern name: Sobanghoi (J). Leboir (Beng).

Evergreen trees up to 50ft in height and 4ft in girth. Trunk is studded with prickles which have also larger corymb base and the branches are fewer and crowded at the top of the tree, the crown being consequently more or less flat-topped. Bark grey and finely reticulately fissured outside; green underneath the corymb layer, inner layers pale with streaks of purplish tissue, both soon turning deeper on exposure. Leaves generally imparipinnate; rachis sometimes armed. Leaflets opposite, oblong-lanceolate, very oblique, caudatus-acuminate, distantly crenulate with a large reddish pellucid dot at each sinus or entire glabrous, aromatic, turning yellow before falling. Flowers minute greenish-white, cymes arranged in crowded terminal panicles. Petals 4.

Fls. & Frts.: April – September.


Habitat: Terrestrial, cultivated.

Ethnomedicinal uses:
Leaves are used externally in measeles. Fruits are also taken for the same purpose.

Established reports of uses in medicine: Leaves used in skin diseases.
**BURSERACEAE**

**CANARIA L.**


**Vern name**: Trasiang (J), Dhuna (Beng).

Middle sized trees. Bark yellowish brown to reddish brown. Leaves more or less crowded at the ends of the branchlets; stipules subulate, leaflets opposite or subopposite; ovate-oblong, lanceolate, rather bluntly acuminate, entire thinly coriaceous, glabrous. Flowers in narrow axillary or suprabuds oblong; pedicles short. Calyx cup-shaped with three broad teeth, fleshy. Petals 3, obovate-oblong, stone 3 gonous, usually 3 celled, 1-2 seeded.

**FIs. & Frts.**: May - November.


**Habitat**: Terrestrial, wild.

**Ethnomedicinal uses**:

* Bark is grinded and made paste by adding water, which is taken orally in dysentery.
* Bark powder is mixed with gud and is given to cow during dysentery.

**Established reports of uses in medicine**: Latex is used as resin.

*Additional medicinal utility.*

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**MELIACEAE**

**AZADIRACHTA** Juss. *In Mem.*


**Vern name**: Slaneem (J), Nim (Beng).
Deciduous tress. Leaves imparipinnate, crowded at the end of branches; leaflets, sub-opposite, lanceolate, acuminate, serrate. Flowers white, in axillary panicles. Calyx lobes 5, obtuse or rounded. Petals 5, ca 0.5 cm. long, linear-oblong, obtuse. Staminal tube laciniate at apex, anther sessile. Stigma 3 toothed. Drupes oblong, 1-seeded.

**Fls. & Frts.**: March – July.

**Specimen collected**: Dinonathpur khasia punji, 10-05-07. Banasree Nath. Coll. No. 01.

**Habitat**: Terrestrial, cultivated in Homestead complex.

**Ethnomedicinal uses**: Leaves are boiled in water and used at the time of bath to prevent infection from small pox and other skin diseases. Leaves are crushed with seeds of *Piper nigrum* and made paste and made tablet of it. That is taken orally to cure diabetes.

**Established reports of uses in medicine**: Bark in tonic, astringent and anti-periodic, root bark is alternative. Leaves are antiseptic, applied to boils as poultice, decoction is given in ulcers and eczema. Gum is demulcent and tonic used in catarrhal affections. Flowers are tonic and stomachic. Fruits are purgative, emollient and anthelmintic. Fresh tender twig is used for cleaning teeth particularly in pyorrhea. Plants are also used for joint pains, rheumatism, ringworms, scabies, itches, biliousness, intestinal worms, fever, piles, falling of hair, dandruff, lice, throat pain, small pox, skin diseases, chickenpox, lesions, leprosy, open wounds and scar due to burns. Leaf paste used externally on snake bite and scorpion sting.

**MELIA L.**


**Vern name**: Ghoraneem (Beng).

**Fls. & Frts.** : March – December.


**Habitat** : Terrestrial, cultivated in Homestead complex.

**Ethnomedicinal uses** :
Leaves are boiled in water and used in fever and hypertension.

**Established reports of uses in medicine** : Root is acrid and antihelmintic, it removes tumors, relieves pain in the heart and useful in vomiting. Leaves, bark and fruits are insect repellent and also used internally and externally in leprosy. Leaves and flowers are used as poultice in skin diseases. Seed oil is used in rheumatism. Leaves contain carotenoid, meliatin and an alkaloid. Pericarp contains bakayanin, neo-bakayanin and bakayanic acid. Bark contains azaridine, a sterol, tannins & active substances. Fruits contain saturated fatty acids 11.4% and unsaturated fatty acid 88.6%.

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**TOONA (Endl.) Roem.**


**Vern name** : Thangunng (R), Tun (Beng).

Large trees with grayish bark and dense crown; leaves opposite, pinnate, leaflets 4-15 pairs, lanceolate or ovate-lanceolate, acuminate, base unequal, the larger rounded, smaller acute, entire or undulate, glabrous; flowers white in large drooping, pubescent; fruits capsule, oblong.

**Fls. & Frts.** : January – June.

Habitat: Terrestrial, wild.

Ethnomedicinal uses:
* Decoction of leaves are used to cure from bodyache. Juice of leaves are also taken orally for the same purpose.
* Leaf juice is also taken orally in snake bite.

Established reports of uses in medicine: Bark is used for treating fever, itching, headache, scabies, dysentery and to promote healing of ulcers.

Additional medicinal utility.

**RHAMNACEAE**

**ZIZYPHUS** Miller, Gard. Dict.


Vern name: Boroi (Beng & J)).

Small trees; Branches tomentose. Leaves ca 3.0-6.0 x 2.0-3.5 cm, ovate-oblong or suborbicular, acute or obtuse, entire or crenate, tomentose beneath, 3 nerved at base; stipules modified into spine. Flowers greenish yellow, in axillary fascicled cymes. Calyx glabrous within. Petals clawed. Disk 10 lobed. Drupes ca 1.0-2.0 cm in diam., globose or ellipsoid, orange-red when ripe.

Fls. & Frts.: October - February.


Habitat: Terrestrial, wild.

Ethnomedicinal uses:
Fruits edible. Fruit is dried and made powder which is used in stomach troubles. Crushed bark is also used in diarrhea.
*Bark of *Z. mauritiana* and bark of *Phyllanthus emblica* mixed properly with leaves of *Averrhoa carambola*, *Azadirachta indica*, *Adhatoda vasica* and *Andragraphis paniculata*. The mixture so obtained is taken along with water in jaundice.

**Established reports of uses in medicine**: Fruits edible, rich in vitamin C., root is used in decoction in fever and as a powder applied to old wounds and ulcers, bark is used in diarrhea. (Vardhana, 2008).

Leaf juice is applied on eye for curing eye conjunctivitis. (Nath, 2011).

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**VITACEAE**

**Cissus L.**


**Vern name**: Lepongriang (J), Harjora (Beng).

Large climbers; stem quadriangular, fleshy, green. Leaves reniform, cordate, crenate-serrate, ca 3 x 1.4 cm; tendrils simple, leaf opposite. Cymes ca 4 cm. across. Flowers tetramerous, whitish. Berries globose.

**Fls. & Frts.**: June – July.

**Specimen collected**: Lalpani Khasia punji. 27-06-07, Banasree Nath. Coll No. 156. (Pl.-28).

**Habitat**: Terrestrial, wild.

**Ethnomedicinal uses**:
Paste of young shoot and leaves used in bone fracture and as pain killer.

**Established reports of uses in medicine**: Leaves and young shoots are alterative, stomachic and used in powder form in digestive troubles.

Juice of stem used in regular menstruation and scurvy.
**TETRASTIGMA** Planch. In DC., Monogr. Phaner.


**Vern name**: Checha (J).

Climbing shrubs. Leaves 3-5 foliolate; leaflets ca 8.0-18.0 x 4.8 cm, ovovate or elliptic, acuminate, crenate serrate, pubescent beneath; petiole 5.0-12.0 cm long; tendrils simple. Flowers greenish white, in corymbose, trichotomously branched cymes. Berries ca 1.5 cm in dia., globose or oblong, black.

**Fls. & Frts.**: June – November.


**Habitat**: Terrestrial, wild.

**Ethnomedicinal uses**:
- Leaf juice is taken orally in dysentery.
- Leaf is also used as vegetable by the Jaintia tribe.

**Established reports of uses in medicine**: Not so far recorded.

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**LEEACEAE**

*Leea* D. Royen ex L.,


**Vern name**: Parinnuang (R).

Tall shrubs. Leaves 2-3 pinnate; leaflets ca 5.0-15.0 x 2.0-7.0 cm, ovatelanceolate, acuminate, cuneate at base, serrate; stipules obovate. Flowers white, in axillary corymbose cymes. Berries subglobose, 3-6 lobed and seeded.
Fls. & Frts.: June - December.

Specimen collected: Languangluang Phulertal Rongmai punji. 16-10-08. Banasree Nath., Coll No. 165.

Habitat: Terrestrial, wild.

Ethnomedicinal uses:

*Paste of tender leaves along with *Curcuma longa* are used as bandage to particular area for early healing of injury.

Established reports of uses in medicine: Root paste applied for healing cut and wound.

- Additional medicinal utility.

**SAPINDACEAE**

**LITCHI**


Vern name: Sore (J), Lichu (Beng).

Small or medium sized trees. Leaves alternate, pinnate; leaflets oblong to oblong-lanceolate, cuneate at base, acuminate. Inflorescence terminal panicles. Flowers regular, dioecious. Calyx ca 4.0-5.0 cm. Petals absent. Stamens 6-8; ovary few celled. Fruits tubercled, aril edible.

Fls. & Frts.: February - July.


Habitat: Terrestrial, cultivated in the homestead complex.

Ethnomedicinal uses:

Juice of bark is taken orally against dysentery.

Established reports of uses in medicine: In China, leaves are used in insect-sting; barks in dysentery; seeds are used as anodyne in neuralgic disorders and orchitis.
**SAPINDUS** Plum.

*Sapindus mukorossi* Gaertn., Fruct. & Sem. 1: 324. t. 70. f. 3 g. h. 1788; Islam, Fl. Majuli, 87, 1990.

**Vern name**: Ritha (Beng).

Small deciduous trees up to 40 ft. in height. With a broad globose crown, bark dark-greenish brown, fairly smooth. Leaves paripinnate, common petiole vary narrowly bordered, glabrous, leaflets 10-20, alternate, gradually smaller towards the apex of the rachis, lanceolate or oblong, entire acuminate, coriaceous, glabrous. Flowers polygonous, calyx lobes 4-5, somewhat unequal ciliate. Petals 5, each with a woolly scale on either side above the claw. Stamens 8. Fruit a globose fleshy 1 seeded drupe, saponaceous, wrinkled.

**Fls. & Frts.**: May–September.


**Habitat**: Terrestrial, cultivated in the homegarden.

**Ethnomedicinal uses**:

Fruit is kept in the water for overnight. Next morning the water is used as shampoo to increase shine of hair and for proper growth of hair.

**Established reports of uses in medicine**: The saponaceous covering of the fruit is a very good substitute for washing soap. The leaves are eaten by cattle.

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**ANACARDIACEAE**

**MANGIFERA** L.


**Vern name**: Sopiang (J), Bathainui (R), Aam (Beng).

Evergreen trees, large, barks fissured. Leaves crowded at apex of branchlet, aub-coriaceous, entire, acute to sub-acuminate; extrafoliar nectarines at base on mature leaf. Panicle terminal. Flowers polygamous, small, 4-5 merous, ovary...
sessile, 1-celled; style internal. Drupes large and fleshy, endocarp fibrous; seeds compressed, with papary testa.

**Fls. & Frts.** : January – June.


**Habitat** : Terrestrial, cultivated for edible fruits.

**Ethnomedicinal uses** :
*5 gms dry leaves of *M. indica* mixed with 2 gms *Sygium cumini* and made powder of these. Then this powder is taken twice daily for 40/45 days in diabetes.*

**Established reports of uses in medicine** : Leaves are used in scorpion-sting.

Ripe fruit is laxative, diuretic, astringent and useful in haemorrhage from uterus, lungs or intestine.

Unripe fruit is useful in opthalmia and eruptions.

Rind of fruit is astringent, stimulant and tonic in debility of stomach.

Seeds are useful in asthma.

Kernel is astringent and used in uterine haemorrhage, haemoptysis and malaena, diarrhea and other discharges.

Fresh bark pounded, made.

- **Additional medicinal utility.**

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**SPONDIAS L.**


**Vern name** : Snipit (J), Amra (Beng).


**Fls. & Frts.** : March - April & May – December.

Habitat: Terrestrial, wild as well as cultivated.

Ethnomedicinal uses:
Bark juice is taken orally to cure dysentery.

Established reports of uses in medicine: Fruits are rich in vitamin A and C, Calcium, Phosphorus and Iron. Fruit is used as astringent, antiscorbutic. Bark is aromatic, refrigerant; also used in vomiting, diarrhea, dysentery and muscular rheumatism. Bark extract is useful in gonorrhoea. Roots are given for regulating menstruation. Gum is demulcent.

MORINGACEAE

MORINGA Adans., Fam.


Vern name: Daipai (R), Sajna (Beng).


Fls. & Frts.: January – June.


Habitat: Terrestrial, cultivated in homestead complex.

Ethnomedicinal uses:
Cooked fruit is good for stomach. Leaf curry is good for joint pain.
* Leaf juice is also applied on the gum to cure pyorrhoea.

Established reports of uses in medicine: Different parts of the plants are used in epilepsy, fever, rheumatism, diseases of liver, heart. Fruit is a good nutritive, digestive and stomachic vegetable. Leaves are given in scurvy, emetic, externally
applied on wounds, antiseptic. Seeds are antipyretic. Plant contain alkaloids. Viz-
moringinine; certain amorphous bases.
* Additional medicinal utility..

**PAPILIONACEAE**

_Butea_ Koeing.ex., Roxb.


**Vern name**: Polash (Beng).

Deciduous trees with silky young parts, leaves pinnate, trifoliolate, leaflets
silky tomentose beneath lateral obliquely ovate, terminal rhomboid or broadly ovate,
base cuneate, racemes axillary. Flowers pea-shaped, 5.0-6.0 cm long, bright orange,
in axillary or terminal racemes; calyx densely covered with brown or black.

**Specimen collected**: Ramgijang Rongmai punji 21-11-09. Banasree Nath, Coll.
No.-113.

**Habitat**: Terrestrial, wild.

**Ethnomedicinal uses**:
7-8 teaspoon of leaf juice is taken with water in empty stomach to cure
stomachache due to worms.

**Established reports of uses in medicine**: Seeds are laxative and anthelmintic.
Leaves are tonic and diuretic. (Kumar, 2002). Root extract is applied on wounds in
the body of animals. (Nath, 2011).

**CAJANUS DC.**

Cytisus cajan L., Sp. Pl. 739. 1753; Cajanus indicus Spr., Syst. 3: 248 : 1826; Baker
**Vern name**: Arhor (Beng).

Erect shrubs *ca* 1.9-3.0 cm high with slender sulcate grey-silky branchlets; main stem terete, smooth, green blotched with large black spots. Leaves 3 foliate; leaflet with minute resinous glands beneath; stipules small lanceolate deciduous. Lateral petioles *ca* 0.5 cm long; terminal and axillary, long peduncled, silky pubescent. Flowers congested and corymbose at the extremity of the peduncle. Calyx *ca* 0.5 cm long. Corolla *ca* 1.5-1.7 cm long, yellow, sometimes veined with red. Stamens 2-adelphous; filaments alternately longer and shorter. Style long, filiform, curved, Stigma capitate. Seeds slightly compressed testa from brownish yellow to blackish or variegated.

**Fts. & Frts.**: July – August and November – December.


**Habitat**: Terrestrial, cultivated throughout the study area.

**Ethnomedicinal uses**:
- Tender leaf juice is taken orally in jaundice.
- The leaf juice is also taken orally to reduce diabetes.

**Established reports of uses in medicine**: Leaf juice is prescribed in enlarged liver. Seeds are also used in snake bite. A paste of seeds and leaves is applied after warming to the mammae for checking secretion of milk. Leaf and root-bark juice is used in diabetes. Leaf juice mixed with honey is useful in cough. Chemical composition of plant contains two globulins viz.- Cajanin and concajanin. Sterols viz.- gamasitosterol, betasitosterol.

* **Additional medicinal utility.**

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**CLITORIA L.**


**Vern. Name**: Aparajita.

Slender twining climber. Leaves 5-7x3-4.5 cm long, stipules persistent striate; pinnately 3-7 foliolate; stipels small subulate; pinnately 3-7 foliolate.
Flowers very showy, blue, white, axillary solitary; bisexual, hypogynous, Calyx tubular, green. Corolla 4-5 cm long, blue or white. Stamens 10. Fruit linear compressed, pods flat, 6-10 seeded. Seeds subglobose or compressed.

FIs. & Frts.: Throughout the year.


Habitat: Terrestrial, cultivated at the home garden as ornamental plant.

Ethnomedicinal use: Root juice with milk is given orally in impotency.

Established reports in Ethnomedicine: Plant contain fatty acid viz, oleic acid, myristic acid, limotic acid stearic acid, palmitic acid, sterol, fixed oil and tannin. Plant is used in hysteria and root juice of the plant is used in impotency. Root bark is also used in swollen joints.

LABLAB Adans., Fam.


Vern name: Chepeto (J), Shim (Beng).

Twining shrubs; branches terete. Leaves 3 foliate; stipules clanceolate; leaflets broadly ovate, acute, cuneate or deltoid at base, entire. Flowers purplish white, in axillary or terminal elongated racemes. Calyx campanulate; teeths deltoid. Corolla exserted. Stamens diadelphous 9+1. Style bearded. Pods ca 7.0-10.0 x 1.0-4.0 cm. flat, oblong, 2-4 seeded. Seeds raddish.

FIs. & Frts.: October - March.


Habitat: Terrestrial, cultivated.

Ethnomedicinal uses:
*1 drop of leaf juice is use externally to cure earache. Leaf juice of L. purpureus and Luffa acutangula mixed together and applied externally to cure ringworm.

Established reports of uses in medicine: Seeds are febrifuge, stomachic, antiseptic, aphthodisiac. Roots are poisonous. (Vardhana, 2008).

- Additional medicinal utility.

SESANIA

Sesbania grandiflora L., Pers.

Vern name: Bokful (Beng).

Small erect quick-growing short-lived soft-wooded trees to 10 m tall, 25 cm DBH, sparsely branched. Bole straight and cylindrical, the wood white and soft. Bark light gray, corky, deeply furrowed. Leaves pinnate, 15–30 cm long, with 16–30 pairs of linear oblong leaflets. Racemes 2.5 cm long. Flowers 2–4, white to pink, pendulous the corolla 7–9 cm long. Pods 50–60 cm long.

Fls. & Frts.: March – July.

Specimen collected: Machkhal, 19-10-08, Banasree Nath. Coll No. 102.

Habitat: Terrestrial, cultivated

Ethnomedicinal uses:

Cooked flower is taken to cure stomach disorders.

Established reports of uses in medicine: Flower is good for stomach problems.

CAESALPINIACEAE

BAUHINIA L.


Vern name: Kanchan (Beng).

Shrubs erect, 4.0-5.0 m in height. Leaves slight longer than broad 4.0-6.0 x 3.5-4.5 cm., cleft about 1/3rd way down into sub-obtuse lobes; petioles 1.5-2.0 cm.
Flowers white, ca 4.0 cm, in terminal or leaf opposed short simple racemes; calyx spatheceous; petals elliptic, midvein distinct; stamens 10, fertile.

Fls. & Frts.: March – July.

Specimen collected: Machkhal, 19-11-08, Banasree Nath. Coll No. 130. (Pl.-87).

Habitat: Terrestrial, wild.

Ethnomedicinal uses:
One teaspoonful juice extract from leaves mixed with water is given orally moring daily to Jaundice.

Established reports of uses in medicine: Tender leaves pounded and made to a paste. It is then diluted to double its content with water and decanted. The supernatant liquid is taken internally twice a day during conjunction and chest pain. (Dutta Choudhury, 1999).

CASSIA L.


Vern name: Krah khet (J), Dadrakshi (Beng).

Erect shrubs, branching usually at the base, downy. Leaves unipinnate; rachis channelled; leaflets 10-12 pairs, oblong or ovate-elliptic, apiculate, glabrous above, downy beneath. Racemes terminal. Flowers bright yellow. Pods compressed, ca 15 x 2 cm; wings crenulate.

Fls. & Frts.: September – February.


Habitat: Terrestrial, wild.

Ethnomedicinal uses:
Leaf paste is applied on skin infection locally called Ring worm.

Established reports of uses in medicine: Juice of the leaves used in skin troubles and snake bite; chrysophanic acid content is high.
Decoction of leaves and flowers are used internally in bronchitis and asthma and washing eczematous patches.

Plant is poisonous to livestock and fish.

Leaves mashed in water applied on the white patches of skin that causes irritation and itch. (Dagar & Dagar 1991).


**Vern name:** Bandarlathi (Beng).

Deciduous small trees. Leaflets 4-8 pairs, opposite, ca 7.0-15.0 x 5.0-7.0 cm, ovate-lanceolate, acuminate, cuneate or rounded at base, shining above. Flowers yellow, ca 4.0 cm long, in axillary drooping racemes. Stamens all fertile. Pods ca 25.0-60.0 x 1.8-2.3 cm, cylindric, indehiscent, dark brown when ripe. Seeds flat, ovate.

**Fls. & Frts.** : April – January.


**Habitat** : Terrestrial, wild.

**Ethnomedicinal uses** :

Bark is crushed and dried and made powder. Then it is mixed with water and taken orally to cure stomach disorders.

**Established reports of uses in medicine** : Fruit is used for stomach diseases and Jaundice. Bark juice along with water is taken orally to cure dysentery.

**SARACA**

**Vern name:** Chesonai (J), Ashok (Beng).

Middle sized trees. Bark dark brown to almost black, rough with lenticels, reddish-brown, fibrous inside. Leaves compound, evergreen, forming a dense crown, leaflets slightly leathery. Flowers fragrant, orange scarlet, in compact glabrous panicle of corymbs from leaf axil or nodes on old wood, rachis coloured, pedicellate. Petals usually 0. Stamens 7-8, much exerted; filament filiform, anthers purple, versatile. Ovary more or less hairy sutures. Style curved, ovules many. Seeds 4-8, ellipsoid, oblong, slightly compressed.

**Fls. & Frts.:** March - July.

**Specimen collected:** Ramchandi 4 no. punji. 31-07-10. Banasree Nath. Coll. No. 149. (Pl.-55).

**Habitat:** Terrestrial, wild.

**Ethnomedicinal uses:**
Bark juice is taken orally to kill worms. Leaf is used as vegetable by Jaintia tribes. Established reports of uses in medicine: Bark is astringent, used in uterine affections; useful in menorrhagia due to uterine fibroids, in leucorrhoea, blood dysentery and internal haemorrhoids. Flowers are used as uterine tonic; also in biliousness and diabetes. Seeds are reported to be useful in urinary discharge.

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**TAMARINDUS L.**


**Vern name:** Sohkyncholi (J), Tetul (Beng).

Large trees; branches spreading. Leaves paripinnate; stipules linear-lanceolate; leaflets 10-20 pairs, small, linear-oblong, obtuse, subsessile. Flowers yellow, in few flowered terminal racemes. Calyx tube lanceolate. Petals 3, ca 1.5 cm long, yellow streak with red. Stamens 3. Style filiform; stigma capitate. Pods ca 7.0-18.0 x 1.8-2.2 cm, compressed, linear falcate, indehiscent. Seeds dark brown.

**Fls. & Frts.:** April - January.

Habitat: Terrestrial, wild.

Ethnomedicinal uses:
Fruit juice is mixed with water and taken orally in hypertension. Juice of the fruit is also used externally on head to reduce high blood pressure.

Established reports of uses in medicine: Fruits edible and also taken in hypertension.

MIMOSACEAE

**ACACIA** Mill., Grad. Dict.


Vern. Name: Bokul.

Tall, large, thorny shrubs with dark-brown smooth bark. Branches grey zigzag with stipular spines in pairs, 0.8-1 cm long, straight. Leaves bipinnate, pinnae 4-8 pairs, leaflets 10-20 pairs, very small, linear-oblong 4-6 mm long. Flowers bright-yellow, exceedingly sweet scented, in globose heads calyx and corolla 5 toothed. Pods 4.5-7×1.0 cm, curved. Seeds many, 2- seriate.

Fls. & Frts.: January-May.


Habitat: Terrestrial, wild as well as cultivated

Ethnomedicinal use: * Bark is used externally on teeth to reduce toothache. Flower juice is taken orally to cure irregular menstruation of women.

Established reports in Ethnomedicine: Plant is used as astringent, demulcent and alterative.

*Additional medicinal utility.
ADENANTHERA L.


Vern. Name: Pengchiang (J), Roktochandan (Beng), Letuk chandan (A).

Medium sized deciduous trees. Pinnae 3-6 pairs; pinnules alternate, ovate-oblong, slightly unequal at base, puberulous beneath. Flowers yellow, in axillary or terminal panicles. Sepals 5, connate, pubescent outside. Petals 5, lanceolate, connate below. Stamens 10, free; anther tip glanded. Ovary sessile; style filiform. Pods ca 15.0x1.2 cm, flat, curved. Seeds bright red.

Fls. & Frts.: April – September.

Specimens collected: Dinonathpur khasia punji, 24-07-07.Banasree Nath. 023.

Habitat: Terrestrial, wild.

Ethnomedicinal use: Bark is crushed with water and made paste. That paste is applied externally on affected areas to cure mumps.

Established reports in Ethnomedicine: Not so far recorded.

ALBIZIA Durazz. In Mag.


Vern. Name: Ngang (R), Sirish (Beng).

Large deciduous trees, up to 20 m takk with spreading crown; bark grey-brown, irregularly cracked; branches lenticelled; Leaf rachis 7.0-15.0 cm long, glandular at base and near the tip; stipules linear, tomentose, caduceous; pinnae 2-5 pairs, leaflets 4-10 pairs, oblong-obovate, 2.5-4.0 x 1.2-2.0 cm, base unequal, obtuse-emarginate at apex, adpressed pubescent beneath. Heads umbellate, 15-30 flowered, solitary or 3-4, fascicled in upper leaf axils or short innovations 5-7 cm across; flowers greenish white, fragrant; bracts linear, tomentose, caduceus; calyx ca 3.0 mm, pubescent; teeth minute; petals short, lanceolate. Pods oblong, 10.0-30.0 x 3.4-5.0 cm, yellowish-brown, finely reticulate, alternately depressed on either side over seeds, 2-12 seeded.
Pl.-28 : *Cissus quadrangularis* L.
Pl.-29 : *Argemone mexicana* L.
Pl.-30 : *Argyeria nervosa* (Burm.f) Boj.

Pl.-31 : *Dicranopteris linearis* (Burm.f.) Undrew.
Pl.-32 : *Jatropha curcas* L.
Pl.-33 : *Dioscorea bulbifera* L.

Pl.-34 : *Heliotropium indicum* L
Pl.-35 : *Schumannianthus dicotomus* (Roxb.) Gagnep.
Fls. & Frts.: April – October.


Habitat: Terrestrial, wild.

Ethnomedicinal use:
Roots are pounded and made paste which is applied externally over the sore caused by insect bite.

Established reports in Ethnomedicine: Plant is used as astringent, demulcent and alterative.

**MIMOSA L.**


Vern name: Chekilimchika (J), Lajjabot (Beng).

Deciduous undershrubs, straggling and spreading, densely prickly and bristly all over. Leaves sensitive pinnae 4, digitate, petiole bristly, slipules linear-lanceolate, bristly, leaflet 12-20 pairs, obliquely narrow oblong, underside bristly. Flowers pink in heads on slender axillary peduncles covered with spreading bristles. Stamens 4 pods jointed, prickly.

Fls. & Frts.: July – December.


Habitat: Terrestrial, wild.

Ethnomedicinal uses:
Paste of the leaves are applied externally on side of the boil for the early brusting.

Established reports of uses in medicine: Decoction of root is used in urinary troubles. Leaf juice is used in dressing for sinus. Root and leaves prescribed in case of piles and fistula.

Whole plant is astringent, cooling, antiseptic, blood purifier and alterative.
**PARIKA R. Br.**


**Vern name:** Langchak (Beng).

Tall trees, 15.0-20.0 m high; bark grayish-brown. Leaves upto 60.0 cm long; pinnae 20 pairs or more, 7.0-10.0 cm long; leaflets 100-120, 6.0-7.0 mm long. Peduncles 30.0-40.0 cm long; flowers 1.0-1.5 cm long, yellow or dull white, in turbinate heads, 4.0-6.0 cm in diameter, constricted at base; calyx 6.0 mm long, tube cylindrical, lobes pilose; corolla lobes spreading; stamens exserted. Pods flat, 30.0-45.0 cm long, dark brown, narroed into long stalk.

**Fls. & Frts.:** November – March.


**Habitat:** Terrestrial, wild.

**Ethnomedicinal uses:**

Bark is boiled and the water so obtained is taken orally to cure dysentery and to kill worms.

**Established reports of uses in medicine:** The seeds are cooked and used as vegetable and are supposed to cure piles.

Boiled the bark juice is taken to cure dysentery and it is also taken orally to kill the small-worm. Ripe fruits also have same function. (Nath, 2011)

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**CRASSULACEAE**

**KALANCHOE** Adans., Fam.


**Vern name:** Patharkuchi (Beng).

Fls. & Frts. : November - March.


Habitat: Terrestrial, cultivated in shade areas.

Ethnomedicinal uses:
Leaf is taken orally to get relief from urinary troubles and for release of kidney stone.

*The leaf is tightly bind with banana and is heated. The smoke is inhaled to cure sinus. Leaf juice is applied externally on toothache.

Established reports of uses in medicine: Toasted leaves are applied on wounds, boil, bruises and insect-bites. In the form of poultice or powder, the leaves are applied to sloughing ulcers.

* Additional medicinal utility.

COMBRETACEAE

*COMBRETUM* Loefl., Iter Hispan.


Vern name: Lobokor (J), Juniloth (Beng).

Scandent shrubs; branchlets clothed with sofy rusty or brownish spreading hairs. Leaves opposite, oblong-lanceolate to elliptic oblong, shortly acuminate entire; coriaceous. Shinning, pubescent on the midrib and the nerves or glabrescent above or more thinly beneath, punctuate and minutely papillose on the upper surface. Petiole stout, hairy. Flowers bisexual, densely crowned in rusty or fulvous silky, villous spikes which are panicked at the end of branches or from the upper axils. Calyx limb ca 1.0-1.2 cm. long, funnel shaped from the shortly constricted
base. Ovary 1-celled, pilose outside with spreading hairs. Fruit elliptic or ovate with 5 chartaceous wings.

**Fls. & Frts.:** January – July.


**Habitat:** Terrestrial, wild.

**Ethnomedicinal uses:**

Tender leaves are crushed and taken orally in empty stomach along with water to cure dysentery.

Leaves are crushed with rice and is taken orally to kill the worms.

*The leaf juice is taken orally to cure jaundice.*

**Established reports of uses in medicine:** Leaves are anthelmintic; decoction is given to eradicate ascaris from stomach.

* Additional medicinal utility.

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**TERMINALIA L.**


**Vern name:** Arjun (Beng & J).

Trees large, deciduous, branches spreading, often pendant, bark exfoliating in irregular sheets. Leaves sub-opposite, ovate or oblong, obtuse or rounded, 6.0-12.0 x 4.0-6.0 cm; petioles short with 1 or 2 prominent glands at the top. Spikes axillary, 8.0-12.0 cm. long, peduncles 3.0-5.0 cm. long. Flowers white, mildly fragrant. Drupes ca 3.0 x 2.0 cm, oblong, glabrous, dark brown; wings 5, stout.

**Fls. & Frts.:** October – March.

**Specimen collected:** Lalpani Khasia punji, Meherpur Naga punji. 06-06-07, 06-01-09. Banasree Nath., Coll No. 08.

**Habitat:** Terrestrial, wild.

**Ethnomedicinal uses:**
Dried bark is mixed with tea or milk and taken orally in diabetes. Bark is boiled and the juice so obtained is mixed with milk and taken orally in cardiac problems.

**Established reports of uses in medicine:** Bark is tonic, astringent, febrifuge and antidysenteric used in heart diseases as a cardiac tonic. Fruits are tonic, deobstruent. Juice of fresh leaves used for earache. Ashes of bark used in scorpion sting.


**Vern name:** Hartaki (Beng).


**Specimen collected:** Lalpani Khasia punji, Meherpur Naga punji. 06-06-07, 06-02-09. Banasree Nath., Coll No. 42.

**Habitat:** Terrestrial, wild as well as cultivated.

**Ethnomedicinal uses:**

Decoction of fruit is good for stomach. It is also taken orally to get relief from cough.

* Fruit is kept in water overnight. Next morning the water so obtained is applied on eye to cure conjunctivitis.

**Established reports of uses in medicine:** Fruits are alternative, laxative and astringents. Bark is diuretic and cardiotonic. Fruits contain about 30% of an astringents substance. It also contains tannic acid (20-40%), gallic acid, resin etc. and some purgative principle of the nature of anthraquinone.

* Additional medicinal utility.
**MYRTACEAE**

*PSIDIUM* L.


**Vern name**: Saborium (J), Payara, Sapri (Beng).

Small trees; young branches pubescent. Leaves opposite, oblong-elliptic oblong, acute or obtuse, base cordate, 4.0-12.0 x 3.0-4.0 cm; petioles ca 1.0 cm long. Flowers 1-3 on axillary peduncles, 2.0-3.0 cm across, white; calyx urceolate, thick; petals broad, membranous free; stamens numerous; exerted; ovary 3-4 celled, ovules numerous. Berries many seeded.

**Fls. & Frts.**: March – April.

**Specimen collected**: Lalpani, Uttarkrishnapur. 28-06-08, 15-09-07. Banasree Nath. Coll. No. 64.

**Habitat**: Terrestrial, cultivated for edible fruits and medicinal purpose.

**Ethnomedicinal uses**:

Tender leaves mixed with little satl is used as tooth powder to cure pyorrhea and other tooth problems.

Tender leaves of *P. guajava* and *Punica granatum* is chrushed and made juice which is taken orally to cure dysentery.

**Established reports of uses in medicine**: Bark of root is astringent, used in diarrhea of children. Fruit laxative useful in colic and bleeding gums and leaves are used as astringent for bowel troubles also in wounds and ulcers. Decoction of leaves used in Cholera for arresting vomiting and diarrhea.

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*SYZYGIUM* Gaertn., Fruct.


**Vern name**: Khainchian (J), Kalojam (Beng).
Evergreen trees, bark gray. Leaves oblong-elliptic to ovate, acuminate or acute, narrowed at base, glabrous. Flowers greenish white, in a lateral or terminal trichotomous panicles. Calyx campanulate, 4-lobed. Petals 4, concave, rounded. Berries oblong, purple black, 1-seeded.

**Fls. & Frts.:** March - July.


**Habitat:** Terrestrial, cultivated in homestead complex.

**Ethnomedicinal uses:**

Fruit is taken raw in diabetes.

**Established reports of uses in medicine:** Fruit juice is tonic and laxative. Rind is used in cough, throat troubles and cold; also used as heart tonic. Bark, setam and roots are anthelmintic and insecticidal properties.

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**MELASTOMACEAE**


**Vern name:** Sodang (J), Lotloti (Beng).

Bushy shrubs ca 3.0-4.5 cm. high. Leaves oblong, lanceolate or elliptic, acuminate, scabrous above, bristly on tertiary nerves, basal nerves 3-5. Inflorescence in terminal panicles; buds completely enclosed within the bracts. Flower showy purple, 1-5 at branch tips. Calyx densely scaly, 5-lobed, lobes lanceolate, deciduous. Petals ca 5.4-3.6 cm. long. Stamens 10 unequal, alternately long or short; anthers longer than stamens, shorter yellow. Fruits ca 0.6-0.9 cm. across, purple, placenta breaking up irregularly.

**Fls. & Frts.:** June - December.

**Specimen collected:** Arun punji. 05-11-09. Banasree Nath. Coll No. 139. (Pl.-41).
Habitat: Terrestrial, wild.

Ethnomedicinal uses:
Leaf juice is taken orally for dysentery and diarrhea.

Established reports of uses in medicine: Bark and leaves are used for skin troubles. Leaves are used in dysentery and diarrhea and leucorrhoea. Bark and root extract are antiseptic and used as gargle and also in wounds.

LYTHRACEAE

LAWSONIA


Vern name: Mehendi (J & Beng).

Small trees with slender branches, up to height of 5 m or large shrubs; branches often thorny; bark rusty-brown, fairly smooth. Leaves opposite, elliptic to elliptic-lanceolate, 3.0-4.0 cm long, acute, grayish green. Flowers small, 6.0 mm. across greenish yellow or rose-coloured, fragrant, in dense terminal paniculate cymes; sepals 4; petals 4; stamens 8, in pairs between the petals. Fruits small, globose capsule, ca 6.0 mm. red when young, finally dry; seeds numerous, angular.

Fls. & Frts.: Throughout the year.

Specimen collected: Lalpani Khasia punji, 16-06-08, Banasree Nath. Coll No. 78.

Habitat: Terrestrial, wild as well as cultivated.

Ethnomedicinal uses:
Leaf juice is mixed with Curcuma domestica is applied locally on face and other parts of the body to reduce sun burn.

Established reports of uses in medicine: Bark is given in jaundice, skin diseases. Leaves external application in headache, rubbed over the soles of the feet in the burning of feet.
PUNICACEAE

PUNICA L.


Vern name: Dalim (Beng).

Shrubs or small deciduous trees, branches ofthen spring tipped. Leaves opposite, ovate-lanceolate or oblong-lanceolate, obtuse, entire glabrous. Flowers 1-4 together on the tips of axillary. Shoots, orange red. Calyx leathery, persistent, petals 5-7 wrinkled. Stamens many, ovary inferior many celled many ovuled. Fruits brownish yellow to red. Seeds numerous surrounded by crimson or pink acid pulp.

Fls. & Frts.: May – January.


Habitat: Terrestrial, cultivated.

Ethnomedicinal uses:

15-20 nos. tender leaves of P. granatum, 3-4 tender leaves of Psidium guajava and 6-7 roots of Centella asiatica are mixed well and made juice which is taken orally to cure dysentery.

Established reports of uses in medicine: Fruit juice is tonic and laxative. Rind is used in cough, throat troubles and cold; also used as heart tonic. Bark, setam and roots are anthelmintic and insecticidal properties.

PASSIFLORACEAE

PASSIFLORA L.


Vern name: Chitaphol (R & Beng).

Climbers with woody stem; leaves deeply 3-lobed, suborbicular to broadly ovate, 3 veined from the base; lobes elliptic or oblong, apex acute; flowers fragrant,
solitary white but with often purple tinged; fruits globose or ovoid, yellow when ripe with a hard rind enclosing edible pulp and numerous small seeds.

**Fls. & Frts.**: June - February.


**Habitat**: Terrestrial, wild.

**Ethnomedicinal uses**:

* Boiled leaf or the juice so obtained is taken orally thrice daily for 1 month in diabeted or until glucose level is reduced.

**Established reports of uses in medicine**: Fruits are considered diuretic and as a stimulant tonic.

* Additional medicinal utility.

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**CARICACEAE**

**CARICA**


**Vern name**: Skyphor (J), Pepe (Beng), Papita (H).

Herbaceous shrubs, stem succulent, with milky latex, fistular. Leaves alternate, digitately lobed, forming crown at apex; petioles long, fistular. Flowers dioecious, subsessile, creamy white. Male flowers axillary in long pendant panicles. Female flowers solitary or in short cymes at the axil. Berry green, yellow when ripe, seeds many, brownish black.

**Fls. & Frts.**: Most part of the year.


**Habitat**: Terrestrial, cultivated in the homestead complex.

**Ethnomedicinal uses**:

Unripe fruits curry is taken in constipation.

* Extract of flower is taken orally in dog bite.
Established reports of uses in medicine: Leaves are used as jaundice. Fruits and seeds are useful in bleeding piles. (Kumar, 2003).

*Additional medicinal utility.

**CUCURBITACEAE**

**LAGENARIA**


Vern name: Deklong (J), Panilau (Beng).

Climbers; branchlets densely hirsute. Leaves simple, suborbicular, angular or shortly 3-lobed. Flowers white, axillary, solitary.

**Fls. & Frts.** : March – October.


Habitat: Terrestrial, cultivated.

Ethnomedicinal uses:

*Leaf extract is taken orally in leucorrhoea.

Established reports of uses in medicine: Root extract mixed with the blood of a black hen, administered for epilepsy by Valmikis- 3-5 spoonfuls twice a day for 40 days. Leaf juice applied on burns by Jatapus, Koyas and Savaras. Tender fruits used as vegetable. Ripe fruit sheles used as utensils and water bottles.

*Additional medicinal utility

**LUFFA**

Vern name: Soboruprachang (J), Jhingal (Beng).


Fls. & Frts.: March – October.

Specimen collected: Ramachandi bagan, 4 no. punji. 22-03-10. Banasree Nath.
Coll. No.-189

Habitat: Terrestrial, cultivated.

Ethnomedicinal uses:
Leaf extract is used externally to cure eczema.

Established reports of uses in medicine: Tender fruits used as vegetable.


Vern name: Sobru (J), Purol (Beng).

Fast growing annual vine. The vine can get more than 9.0 cm long. The large leaves are lobed and have silvery patches on the topsides. The flowers are showy and conspicuous, about 5-7.6 cm across with five petals. The fruits are green, up to 61 cm long and 7.6 cm in diameter cylindrical and smooth, slighter wider on one end. Small fruits. On older fruits, the outer skin eventually dries and turns brown and papery.

Fls. & Frts.: March – October.

Specimen collected: Dinonathpur khasia punji. 22-03-08. Banasree Nath. Coll. No.-89.

Habitat: Terrrestrial, cultivated.

Ethnomedicinal uses:
Stem latex is used in itching.

Established reports of uses in medicine: Not so far recorded.
**MOMORDICA L.**


**Vern name:** Chekasang (J), Kerala (Beng).

Climbers, monoecious, with tuberous roots. Leaves 5-7 lobed. Flowers yellow; bracts of male flower borne at the apex of peduncles. Fruits ovoid, muricate-tuberculate, fusiform, tapering to both ends, ribbed with tubercles.

**Fls. & Frts.:** March – October.

**Specimen collected:** Dinonathpur khasia punji. 22-03-08. Banasree Nath. Coll. No.-82.

**Habitat:** Terrestrial, cultivated.

**Ethnomedicinal uses:**

Cooked fruit is good for dysentery. It is also used to kill the worms.

*Leaf juice is applied externally on skin to reduce allergy.

**Established reports of uses in medicine:** Fruit is rich in minerals and vitamin A, C & B complex and tonic, stomachic, carminative and cooling; used in rheumatism, gout, liver troubles, spleen, diabetes. Root juice is given in biliousness.

*Additional medicinal utility.

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**CACTACEAE**

**OPUNTIA** Mill., Grad.


**Vern name:** Shij (J), Phoni-monosha (Beng).

Thorny, large. Fleshy bush with obovate, jointed, phylloclades. Spines pale yellow with numerous barded bristles. Leaves subulate, fleshy, sub-spinulose,
caduceus. Areoles with 5-6 pale yellow spines and many barbed bristles. Flowers yellow, tinged with red, funnel-shaped. Stamens numerous, shorter than the pistil. Style stout, 5.0 mm. long. Stigma 6-12 lobed, 4.0-5.0 mm. long. Bristles purple, pear shaped, truncate, many seeded.

**Fls. & Frts.:** April – July.


**Habitat:** Xerophytic.

**Ethnomedicinal uses:**
Leaves are warmed above the fire and pounded in a mortar and made juice. The juice so obtained is taken orally to reduce cough.

*Root juice is applied externally to reduce toothache.

**Established reports of uses in medicine:** Fruit is refrigerant, useful in gonorrhoea, baked and given in whooping cough, leaves mashed up and applied as poultice to allay inflammation and heat made into a pulp applied to the eyes in ophthalmia. (Vardhana, 2008).

* Additional medicinal utility.

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**APIACEAE**

**CENTELLA L.**


**Vern name:** Dwaikhro (J), Thankuni (Beng).

Creeping herbs; rooting at nodes. Stem small and delicate. Leaves reniform or suborbicular, long petiolate, crenate or denate, stipulate. Flowers white in fascicled umbles, sessile. Petals ovate, acute. Fruit ovoid, hard, laterally compressed.

**Fls. & Frts.:** April – September.

**Specimen collected:** Dinonathpur khasia punji 11-06-08. Banasree Nath. Coll. No.-24.

**Habitat:** Terrestrial, wild.
Ethnomedicinal uses:

Leaf juice is taken in dysentery and gastric. The leaf juice are also used as heart tonic and remedial for high blood pressure. Leaves of *Syzygium cumini* and *C. asiatica* are mixed together and made juice which is taken orally to cure dysentery.

*Leaf juice is given to hen during diarrhea.*

Leaf juice is also used externally on boils for early healing.

**Established reports of uses in medicine:** Plant is diuretic and tonic. A glycoside, asiaticoside shown to be active in the treatment of leprosy has been isolated. Plant is used for anaemia, blockage in blood vessels, fatigue, blurring of vision, muscular fatigue, nervous weakness, sexual debility, boils, wounds. Chronic/abstinate ulcers, buring sensation, hairloss, eczema, fever, insomnia, poor memory and elephantiasis.

* Additional medicinal utility.

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**CORIANDRUM**


**Vern name:** Sarphei (J), Dhania (Beng).

Erect branched, strongly smelling, annual herbs with terate, striate stem. Leaves diamorphic, lower rosette forming, long petioled, lobed, upper alternate, decompound, segments linear-lanceolate. Flowers purplish-white, in terminal or axillary compound umbles, inner regular. Fruits sub-globose, ribbed, cremocarp, splitting into two mericarp.

**Fls. & Frts.:** January - March.

**Specimen collected:** Damcherra khasia punji. 21-03-09. Banasree Nath. Coll. No.-120.

**Habitat:** Terrestrial, cultivated.

**Ethnomedicinal uses:**

Leaves are taken raw or juice from the plant is taken orally to cure stomach disorders. Leaves are also added to curry to increase flavour.
Pl.-37: *Clerodendrum viscousum* vent., Jard.

Pl.-38: *Justicia gendarussa* Burm.

Pl.-39: Seeds of *Parika roxburghii* G. Don.

Pl.-40: *Hibiscus collinus* L.

Pl.-41: *Melastoma malabathricum* L.

Pl.-42: *Drymoglossum heterophyllum* (L.) Trimen

Pl.-43: *Ixora coccinea* L.

Pl.-44: *Piper betle* L.

Pl.-45: *Lablabpurpureus* (L.) Sw.
Established reports of uses in medicine: Fruits aromatic, stimulant, carminative, diuretic, tonic, stomachic. (Singh and Ali, 1998). Leaf juice mixed with turmeric powder and little drops of mustard oil, is applied on skin daily for dry skin.

**ERYNGIUM (Tourn.) L.**


Fls. & Frts.: May – November.


Habitat: Terrestrial, wild.

Ethnomedicinal uses:

Leaf is taken in stomach disorders. Leaves are also used in flavouring the curry.

Established reports of uses in medicine: Roots are stomachic. Herb yields volatile oil. Root contain saponin. (Chopra, et al., 1956)

Leaves are boiled and is used to reduce high blood pressure.

**HYDROCOTYLE L.**


Vern name: Khudmankuni (Beng).

Annual prostrate herbs, rooting at the nodes ca 30-50 cm. long. Leaves reniform, ca 1 cm. long and almost equally broad, smooth, margin crenate, petiolate. Inflorescence an umble, in the leaf axil. Flower light purple in colour, ca
1.5 mm; calyx teeth minute, petals ca 0.3 cm. long red, lanceolate, valvate acute. Fruits-round, flat, redish brown.

**Fls. & Frts.** : May – November.

**Specimen collected** : Rupacherra, 19-11-08, Banasree Nath. Coll No. 137.

**Habitat** : Terrestrial, wild.

**Ethnomedicinal uses** :
Leaf juice is taken in dysentery.

**Established reports of uses in medicine** : Leaves are vermifuge. The smell of the wood is believed to cure many disease of the children. Root is used in cough, asthma.

**RUBIACEAE**

**IXORA L.**


**Vern name** : Rongan (Beng).

Glabrous, branched shrubs. Leaves opposite, elliptic or obovate, coriaceous, entire with cordate or sub-cordate base and mucronate apex, stipules interpetiolar, triangular, awned. Flowers deep red, showy, in terminal cymose, panicles. Corolla tube nearly 2.5 cm. long, limbs 4-lobed, lobes acute, spreading. Stamens-4, anthers exerted. Style glabrous, stigma bifid.

**Fls. & Frts.** : April – August.

**Specimen collected** : Pantilong Rongmai punji, 01-02-10, Banasree Nath. Coll No. 200. (Pl.-43).

**Habitat** : Terrestrial, wild.

**Ethnomedicinal uses** :
Leaf extract is applied externally on the affected areas of burnt to reduce burning sensation.

**Established reports of uses in medicine** : Flowers are useful for treating dysentery, leucorrhoa, dysmenorrhoea and catarrhal bronchitis. (Vardhana, 2008).
**CANTHIMUM L.**

*Canthium gracilipes* Kurtz.

**Vern name**: Kolungtha (R), Mon (Beng).

Scrambling shrubs; young branchlets pubescent. Leaves elliptic or ovate or oblong-lanceolate, acuminate, membranous, glabrous, nerves beneath sparsely puberulous; lateral nerves 5-7 on either half; base acute or rounded; petiole stipules subulate, pubescent. Flowers small, pentamerous, solitary or in pairs on capillary pubescent pedicles arising from arrested lateral branchlets. Calyx glabrous; teeth subulate. Fruit bluish-black, slightly compressed, sinuate at the apex; albumen copious.

**Fls. & Frts.**: April - November.

**Specimen collected**: Ragailuang Rongmai punji, 01-06-07, Banasree Nath. Coll No. 22.

**Habitat**: Terrestrial, wild.

**Ethnomedicinal uses**: Bark of *C. gracilipes*, *Syzygium cumini* and *Mangifera indica* pounded in a mortar, then dried and made powder of it. After that powdered mixture is boiled in water and that water is taken 1 cup daily to cure cardiac problems.

**Established reports of uses in medicine**: Not recorded so far.

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**MUSSAENDA L.**


**Vern name**: Raphei (R), Baibone (Beng).

Shrubs. Leaves simple opposite, short petioled, oblong-lanceolate, glabrous. Flowers orange yellow, in terminal dense subcapitate cymes. Calyx with one white petaloid sepal. Corolla tube ca 2.5-3.2 cm. long, silky pubescent outside. Stamens 5. Berries globose, crowned by calyx lobes.

**Fls. & Frts.**: April - November.

Habitat: Terrestrial, wild.

Ethnomedicinal uses:

*Leaves of M. roxburghii and Croton oblongifolius are boiled together and the juice so obtained is taken orally to cure from suffocation due to felling down or histaria. Leaf juice is also applied externally to cure boils.

Established reports of uses in medicine: Leaves are used for preparation of hair-care lotion. Root and barks are used for mouth ulcers. Leaf paste is used in snake-bite.

* Additional medicinal utility.

**NEOLAMARCKIA**


Vern name: Kodom (Beng), Nombang (R).


Fls. & Frts.: November - April

Specimen collected: Pantilong Rongmai punji, 01-02-08, Banasree Nath. Coll No. 35.

Habitat: Terrestrial, wild.

Ethnomedicinal uses:

Bark is boiled and the water so obtained is taken orally in sudden asthma. Bark is also used as timber.
Established reports of uses in medicine: Bark is tonic, febrifuge, astringent, vomiting and in snake bite. Decoction of leaves are used as gargle in case of aphthae and stomachic. The ripe fruit is acidic and is eaten raw or cooked. Chemical composition of the plant contain acid viz- quinonic acid, cinhotannic acid and tannins.

**PAEDERIA L.**


Vern name: Sohmuseme (J), Badalipata (Beng).

Slender twining foetid shrubs. Leaves opposite ovate or ovate-lanceolate, acuminate, entire, sub-cordate at base; petiolate. Stipules interpetiolar, deciduous. Flowers grayish purple in colour in axillary dichotomously branches, cymes. Fruits ellipsoid, reddish in colour, compressed.

Fls. & Frts.: May – October.


Habitat: Terrestrial, wild.

Ethnomedicinal uses:
Cooked leaf curry is good for stomach.

Established reports of uses in medicine: Ripe fruit is edible but raw ones are poisonous. Fruit decoction is used for asthma and biliousness. Leaves are used as a dressing for wounds. Root and leaf decoction are useful in hysteria.
ASTERACEAE

AGERATUM L.

Panigrahi et Kar in BBSI 8 (3 & 4) : 228-236 (1966) 1967; Balak., Fl. Jowai 1:258,

Vern name: Trathepiang (J), Sialmutra (Beng).

Herbs erect, ca 20 cm. high, plant parts pubescent, strongly aromatic.
Leaves opposite, ovate petiolate. Heads in terminal corymbs or panicles, Flowers
bluish purple. Sepals paleaceous of 5 scales. Achnes oblong, ribbed, black,
scabrous.

Fls. & Frts.: Most part of the year, mostly in January – May.

Specimen collected: Lalpani Khasia punji. 24-10-07, Banasree Nath. Coll No.
45.

Habitat: Terrestrial, wild.

Ethnomedicinal uses:
Leaf juice is used in cuts for early healing. Leaf juice is also used to cure eye
problems.
Leaf juice is applied externally on the effected areas of skin to cure ringworm.
Established reports of uses in medicine: The leaves are stypic, applied to cuts
and sores externally. It is also useful in boils, leprosy and skin diseases.

ARTEMISIA

Artemisia indica Willd., Sp. Pl. ed. 4, 3: 1846, 1804; A vulgaris (auct. plur. non

Vern name: Jomokhou (R), Nagodona (H).

Erect eromatic shrubs, 1-3 m high. Leaves sessile, lobed or deeply
pinnatisect with stipule like lobes at base, 3.0-9.0 x 1.0-3.0 cm, densely white woolly
beneath, glabrous above. Heads ovoid, 3.0-4.0 mm diameter, solitary or fascicled on
large terminal paniculate racemes; involucral bracts few, oblong. Achenes oblong
ellipsoid, minute.
**Fls. & Frts.** : July – February.

**Specimen collected** : New Alipur. 24-01-10, Banasree Nath. Coll No.145.

**Habitat** : Terrestrial, wild.

**Ethnomedicinal uses** :
Leaf juice is taken orally in diarrhea.
Leaf juice is used to externally on cuts and wounds for early healing.

**Established reports of uses in medicine** : Herb is emmenagogue, anthelmintic, antiseptic. Root is tonic, antiseptic. Infusion of leaves and flowering tops administered in nervous and spasmodic affections, in asthma and diseases of brain. Plant yields essential oil adenine and volatile oil which is good larvicides and feeble insecticides.

The medicinal properties of this plant are based on santomin, contained in the young leaves and flower heads.

Leaves are warmed and the eyes are covered with it to cure any eye trouble (Hynniewta 1984). Fresh juice is taken to get relief from headache and stomach pain by Apatani (Kholi, 1992).

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**CHROMOLAENA, L.**


**Vern name** : Krahendwar (J), Uchunti (Beng), Mayeshnuebli (R).

Aromatic shrubs, ca 1-2 m high. Profusely branched. Leaves opposite, ovate deltoid, serrate 3- nerved at the base. Flowers white, intermental and axillary corymbose heads. Heads 20-35 flowered. Involucral bracts ovate-lanceolate, 4-5 seiate. Corolla ca 0.4 cm. long, pale to blue white. Achenes ribbed. Pappus 5, white.

**Fls. & Frts.** : November – February.


**Habitat** : Terrestrial, wild.
Ethnomedicinal uses:

Fresh leaves or leaf juice is applied on the fresh cuts and wounds to stop bleeding. *Leaf juice is also applied externally to cure pyorrhoea. Tender leaves are crushed and taken orally along with water in empty stomach for dysentery.

Established reports of uses in medicine: Plant is used as fish poison. Bruised leaves are applied on cuts in the body as styptic. The Et. OH (50%) extract of aerial parts are spasmolytic. The leaves contain ceryl alcohol and sterols, trihydric alcohol and anisic acid. Fresh juice is given in gonorrhoea.

*Additional medicinal utility.

**ELEPHANTOPUS** L.


Vern name: Hostipodo (Beng), Kuhupu (R).

Erect, stigose, dichotomously branched herbs., ca 30-50 cm. high. Leaves and stem covered with fine hairs. Leaves radical, ovate-oblong or oblanceolate, serrate, crenate scabrous. Inflorescence-Head with 4-10 flowers covered by bracts, bracts hairy. Flower-purple or white corolla deeply 5 cleft, tubular. Styte exserted. Achenes ribbed. Pappus 1-seriate, 4-5 bristles, white.

Fls. & Frts.: September - January.


Habitat: Terrestrial, common in shady areas.

Ethnomedicinal uses:

*Leaves are grinded and make powder and taken orally along with water to reduce throat and tongue pain.

Established reports of uses in medicine: Roots are prescribed to arrest vomiting. Powdered with pepper is applied in toothache. Leaves are used in eczema and
ulcers. Mucilaginous decoction of roots and leaves is used as an emollient in
dysurea, dysentery, diarrhea and stomach pains.

• Additional medicinal utility.

ERIGERON


Vern name: Not known.

Undershrubs, corymbose branched. Leaves 1.0-8.0 x 0.3-1.5 cm, linear-
lanceolate, oblanceolate-spathulate or elliptic, acute, cuneate, base narrowed,
serrate-incised or entire, adpressed hairy. Heads corymbose panicles, 1.0-2.0 cm
across, involucral bracts lanceolate-elliptic; ray florets oblong, white or purplish
ringed; disc florets yellow; pappus copious, white, achenes minute.

Fls. & Frts.: June – December.


Habitat: Terrestrial, wild.

Ethnomedicinal uses:
Root juice is used as poultice to reduce muscular pain.

Established reports of uses in medicine: Leaves used in Malaya for rheumstism
and lumbago. Leaves and roots are useful for poulticing. Essential oil is fungitoxic.
Essential oil contains d-limonene, 24; thujone, 13; isoeugenol, 26; Me-isoeugenol,
8; eugenol; eugenol-OAC, 11%.

GNAPHALIUM L.

1881; G. luteo-album subsp. affine (D.Don.) Koster in Blumea 4(3) : 484. 1941. G.

Vern name: Not known.
Woolly herbs. Leaves *ca* 2.0-5.0× 0.2-0.5 cm, linear-oblong or lanceolate, obtuse, entire, sessile. Heads golden yellow, *ca* 0.5 in dia. In dense or branched corymbos. Involucral bracts 3 seriate. Ray florets *ca* 0.2 cm long. Disk florets *ca* 0.2 cm long, 5 lobed.

**Fls. & Frts.** : February – April.

**Specimen collected** : Languangluang Rongmai punji, 16-11-09,. Banasree Nath. Coll No. 159.

**Habitat** : Terrestrial, common.

**Ethnomedicinal uses** :
Leaves are crushed in a mortar and paste is made, which is applied locally on forehead to reduce pain.

**Established reports of uses in medicine** : Leaf and stem paste used in headache.

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**HEDYOTIS L.**


**Vern name** : Not known.

Diffusely prostrate herbs. Leaves linear or linear-lanceolate, scabrid, subsessile; stipules short, scabrid. Flowers white, sessile or shortly pedicelled, solitary, axillary. Capsules didymous, ovoid.

**Fls. & Frts.** : April – November.


**Habitat** : Terrestrial, common in moist places.

**Ethnomedicinal uses** :
Leaves are crushed in the foot which is used to cure eye related problems.

**Established reports of uses in medicine** : Not recorded so far.
**HELIANTHUS**


**Vern. Name**: Surjomukhi (Beng).

Annual herbs with rough, hairy stem; leaves alternate with long-stalked, broadly ovate to cordate, roughly pubescent on both surface; flowers in heads, ray florates yellow, disc florates brownish-purple; fruits achenes, ovoid-compressed black when ripe.

**Fls. & Frts.**: February - July.


**Habitat**: Terrestrial, cultivated.

**Ethnomedicinal uses**:

Seeds crushed with water obtained after washing rice. The mixture so obtained is mixed with juice of *Musa paradisica* and then it is boiled and taken orally to disserctile function of penis.

**Established reports of uses in medicine**: Leaves are used to treat skin diseases, itching, ulcer, leprosy, asthma, bronchitis, burning sensation in the vagina, urinary discharges, anaemia. Root is used to strengthen teeth and cure toothache. Flowers are used to treat piles, ophthalmia and kidney diseases.

**HELIOTROPIUM L.**


**Vern name**: Photka (Beng).

Erect herbs, branches falsely whorld; stem-solid, lower portion woody, terete, green with milky latex, covered with short stalked, rough, white, stellate hairs; lower internodes much longer. Leaf simple, alternate, crowded towards the tips of branches, extipulate, petiolate, densely stellate acuminate, base alternate to
rounded, venation unicostate, pinnately reticulate. Flowers white, unisexual, interterminal erect spikes. Male flower fascicled above female in the axil of minute bracts of the racemes. Fruit regma, with persistant style and perianth, Seeds tipped with a small, cup like, white, oblong with a longitudinal nerve; endosperm fleshy.

**Fls. & Frts.** : Most parts of the year.


**Habitat** : Terrestrial, common along the howar.

**Ethnomedicinal uses** :
Leaf juice is mixed with little mustard oil and headed under flame. The juice so obtained is mixed with *Curcuma domestica* and applied externally to cure eczema.

**Established reports of uses in medicine** : Not recorded so far.

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*Mikena* Willd.


**Vern name** : Japanpu nuang (R), Jarmai thomai (J), Refujiloth (Beng).

Shrubs or erect or twining herbs, climbing, glabrous or puberulous. Leaves long-petioled, ovate, acute or acuminate, base rounded cordate or truncate, crenate or angled, sometimes villous beneath heads 4 flowered corymbose terminating in lateral branches, achenes glabrous glandular, pappus reddish.

**Fls. & Frts.** : October – January.


**Habitat** : Terrestrial, common.

**Ethnomedicinal uses** :
Leaf juice is used as poultice in fresh cuts and injury to stop bleeding.

*Leaf juice is also applied externally on forehead to reduce high temperature.*
Established reports of uses in medicine: Leaf extract is applied to itches and poultice to wounds. The plant is used as antidote to snake bite and scorpion sting. Plant is a rich source of vitamins A, C and also contains vitamin B.

*Additional medicinal utility.

SPILANTHES Jacq., Enum.


**Vern name:** Bangit (R), Dwajtiltemem (J).

Erect herbs. Rooting at the basal nodes. Leaves ovate, elliptic, narrowed at base, obtuse or acute at apex, 3-nerved, distantly serrate; pedunculate. Head yellow, heterogamous, solitary or in long terminal panicles; Involucre ovoid or companulate, bracts sub 2 seriate, ciliate. Florets tubular. Corolla yellow. Achenes glabrous, verrucose, black, laterally compressed.

**Fls. & Frts.:** January-December.

**Specimen collected:** Channighat Rongmai punji, Marwah. 20-07-07, 19-05-10, Banasree Nath. Coll No. 66.

**Habitat:** Terrestrial, found abundantly along the roadsides.

**Ethnomedicinal uses:**

Fresh flower is applied locally against toothache.

Established reports of uses in medicine: Flowers are made into a tincture used to relieve toothache; also a powerful mosquito larvicide. Seeds are chewed to produce salivation when the mouth is dry. Spilanthal obtained from flowers has strong local anaesthetic action. Crushed plant is used as fish poison. Flowers contain a sterol and a non reducing polysaccharide. Flowers are chewed in throat affections and paralysis of tongue. Herb is also used in dysentery. Decoction is given as a lithontriptic and diuretic; scabies and psoriasis. Root is purgative.
**TAGETES**


**Vern name:** Suntugenda (J), Genda (Beng).

Herbs, *ca* 60 m. high, scented, much branched. Leaves opposite upper ones alternate, pinnate or pinnatifid; leaflets lanceolate-oblong, sharply serrate with awned teeth, glandular along the margins below the serrations. Heads solitary or cymose, *ca* 2-3 cm. peduncled; slightly swollen below the head. Involucre, campanulate, acute, linear teeth, gland dotted. Ligules of marginal flowers yellow or orange red coloured, with brownish red markings, emarginated. Achenes angled, slightly compressed, hairy.

**Fls. & Frts.**: April – August.

**Specimen collected**: Dinonathpur khasia punji 11-06-08. Banasree Nath. Coll. No.- 151.

**Habitat**: Terrestrial, cultivated.

**Ethnomedicinal uses**:

20 gm flower juice is mixed with 50 gm leaf juice of *Cynodon dactylon*. The juice so obtained after mixing is taken orally in dysentery daily after 4 hrs till the disease cures.

**Established reports of uses in medicine** : Fruit is aromatic, cooling, laxative, astringent, stomachic and digestive. Root bark is used in intermittent fever and also as fish poison. Leaf juice used in diabetes. Seed-gum used in colitis.

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**VERNONIA** Schreb., Gen.


**Vern name**: Kukshim (Beng).

Erect herbs 80 cm high. Stems terete, ribbed, grayish perennial glandular. Leaves various, obtuse or acute, repand-serrate, undulate or almost entire glabrous, glandular beneath, petioled or subsessile. Heads homogamous, 18-20 flowered,
purplish white, in terminal corymbose panicles. Involucral bracts 4-seriate, lanceolate, pointed at the tip of recurved, with a few glands. Corolla ca 0.5 cm long. Achenes terete, appressedly silky, faintly ribbed, sometimes dimorphic. Pappus hairs white, biseriate; outer row short.

**Fls. & Frts.** : May – December.


**Habitat** : Terrestrial, common.

**Ethnomedicinal uses** :
Leaf juice is taken orally in dysentery.

**Established reports of uses in medicine** : Plant juice given in piles. Plant is diaphoretic, decoction is used to promote perspiration in febril conditions; used for remedy for spasm bladder. Fresh leaf juice is used in blood dysentery. Externally used for rheumatism. Seeds for intestinal colics, cough, leucoderma and other chronic deseases. (J. Bombay Nat. Hist. Soc. 56 : 241. 1959). The whole plant is an ingredients in the preparation of some Ayurvedic formulations Viz. Cystone tablet, Bala Tail.


**Vern name** : Paipuang (R), Agijal (Beng).

Tall sparsely pubescent herbs. Leaves ca 3.0-13.0 x 0.5-3.0 cm, lanceolate or oblanceolate, acuminate, coarsely serrate. Heads purplish white, 6-12 flowered in terminal branched corymbs. Involucral bract ca 0.5 cm long, linear-oblong, acuminate. Achenes compressed, 10-ribbed. Pappus reddish-white.

**Fls. & Frts.** : November - January.


**Habitat** : Terrestrial, wild.

**Ethnomedicinal uses** :
Leaf juice is taken orally to kill the worms.
Established reports of uses in medicine: Plant juice given in piles. Plant is diaphoretic, decoction is used to promote perspiration in febrile conditions; used for remedy for spasm bladder. Fresh leaf juice is used in blood dysentery. Externally used for rheumatism. Seeds for intestinal colics, cough, leucoderma and other chronic diseases. (J. Bombay Nat. Hist. Soc. 56: 241. 1959). The whole plant is an ingredients in the preparation of some Ayurvedic formulations Viz. Cystone tablet, Bala Tail.

**WEDELIA**


Vern name: Bhringaraj (Beng).

Herbs, ascending, rooting at the lower nodes. Leaves spatulate-oblancoolate, acute, trinerved, attenuate margins flat or slightly enrolled, entire or feebly serrate, shortly appressed hairy on both surfaces, subpetiolate. Heads yellow, solitary or terminal peduncles, ca 5.0-6.0 mm. across; Involucral bracts in 2 series; outer oblong, acute or obtuse at the apex appressed pubescent; inner lanceolate. Ray florets few; corolla ca 6.0-7.0 x 3.0-4.0 mm. long.

Fls. & Frts.: Almost throughout the year.


Habitat: Terrestrial, wild.

Ethnomedicinal uses:

Leaf juice is used externally on hair for the growth of hair.

*Leaves and flower is pounded and made juice which is applied locally on skin to cure ringworm.*

Established reports of uses in medicine: Leaf extract is used as tonic, used for cough, alopecia and cephalagia. Decoction of the herb is used in menorrhagia and uterine haemorrhages. Ethanolic extract of herb inhibits the growth of *Ehrlichascites* carcinoma. Leaves are used for dyeing and promoting growth of hair.
*Additional medicinal utility.

**XANTHIUM L.**


**Vern name**: Bichaphol (Beng).

Scabrous undershrubs, 1.0-1.5 m tall. Leaves broadly ovate to cordate, 3-5 lobed, acute or acuminate, rounded or cordate all the base, irregularly serrate on margins, hispid on both the surfaces; petiolate. Heads monoecious. Male heads many flowered; involucral bracts 1 seriate, prickly. Female head 2 flowered in axillary racemes; involucral bracts connate; corolla absent. Style branches long thread like, protruding from between the beaks, 2.0-5.0 mm. long, Pappus absent.

**Fls. & Frts.**: August – November.


**Habitat**: Terrestrial, Common in wasteland.

**Ethnomedicinal uses**:

Leaf juice is taken orally in dysentery.

**Established reports of uses in medicine**: Plant is diaphoretic sedative, sudorific, useful in long standing malaria. Root is tonic useful in strumous diseases and cancer. Fruit has cooling effect, demulcent, given in small pox. Herb is poisonous due to the presence of toxic substances, which is removed by boiling. Seeds possess anti-inflammatory activity. Leaves are astringent and antisyphilitic, used in herps. Fruits are rich in vitamin C.

**PLUMBAGINACEAE**

**PLUMBAGO L.**


**Vern name**: Agnichita (Beng).

Undershubs with glabrous small herbaceous branchlets. Leaves 4-10 cm. long, alternate, ovate, entire, glabrous. Calyx sticky, densely glandular. Flowers white, sub-sessile, in glandular pubescent, terminal and axillary, racemes, ca 4-10 cm. long. Corolla lobes oblong, anthers purple. Capsule oblong, pointed.

**Fls. & Frts.**: August – March.


**Habitat**: Terrestrial, wild.

**Ethnomedicinal uses**: Root is pounded in mortar and made juice which is taken orally to cure jaundice. **Established reports of uses in medicine**: Root paste is applied for opening boils. Infusion of root is used in influenza. Roots are abortifacient, vesicant and diuretic; also used in dyspepsia, anasarca, piles and skin diseases.

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**OLEACEAE**

**NYCTANTHES L.**


**Vern name**: Slasewli (J), Sephali, Sewli (Beng).

Scandent shrubs. Leaves unifoliolate or imparipinnate; leaflets lanceolate or ovate-lanceolate with 3 or 5 basal nerves, *ca* 2.5-12.0 x 1.5-4.0 cm, acute or acuminate. Flowers pale yellow, *ca* 2.0 cm long in axillary pedunculate, few flowered cymes. Calyx 5 teethed. Corolla tube *ca* 1.2 cm long, stout; lobes 5, ovate. Berries *ca* 0.4-0.6 cm in dia., subglobose, 2 seeded.

**Fls. & Frts.**: April – December.

Habitat: Terrestrial, cultivated in the homestead garden.

Ethnomedicinal uses:
Leaf extract is taken orally against malarial fever.
*Leaf juice is also taken orally to kill the worms.

Established reports of uses in medicine: Powdered seeds are employed as paste to cure scurvy and affection of scalp. (Kumar, 2002). Paste prepared from twigs of the leaves mixed with Zingiber officinale and it is warmed in water. Then juice is taken to cure diarrhea.

*Additional medicinal utility.

APOCYNACEAE

ALSTONIA R. Br.


Vern name: Chandraksniyat (J), Chatim (Beng).

Evergreen trees, 15-20 m high, with grayish bark. Leaves in whorls, elliptic 10-15 x 3-4 cm. Inflorescence compact, subumbellate cymes; corolla-tube densely pubescent putside, constricted at the middle, 7-8 mm; lobes obovate c 3 mm, pale green to pale yellow. Follicles 2, pendant. Seeds oblong with tufts of pale brown hairs at both extremetis.

Fls. & Frts.: October – March.


Habitat: Terrestrial, commonly found along the road side.

Ethnomedicinal uses:
Juice of the roots and leaves are taken orally in stomachache.
Established reports of uses in medicine: Bark is known in commerce as Dita bark, and used in medicine as bitter febrifuge and astringent in treatment of malarial fever, chronic dysentery and diarrhea. The application of latex is useful in ulcers. Ethanol extract of stem is hypotensive and anti cancer. Bark contain two alkaloids—ditamine and echitamine. The latex is found to contain 2.8-7.9% caoutchouc, root barks contain echitamine chloride and amyrin. Picralinal, a key alkaloid of picralimin group isolated and constitution are reported by Rastogi et al (1970). Singh and Anandkrishna (1983) reported that the milk of tree is given in postmortam pain of abdomen in delivery cases. Milky latex applied to sores. Decoction of bark is drunk to treat genital trouble in men.

CATHRANTHUS


Vern name: Nayantara (Beng).

Erect, ever blooming herbs., ca 1.0-1.5 m high, stem-erect, cylindrical, branched, solid, purple red with milky latex, pubescent. Leaf simple, extinulate, opposite decussates sub-sessile or petiolate, ovate or obovate, entire, mucronate, unicostate, reticulate. Inflorescence solitary axillary, or axillary dichasial cyme. Flower ebractate, pedicellate, complete, actinomorphic, bisexual, hypogynous, pentamerous, cyclic, rosy-purple in colour. Sepals 5, polysepalous, valvate. Petals 5, gamopetalous, pink, violet or purple in colour, hypocramerifom, corolla swollen. Stamens 5, filaments short, anthers sagittate. Gynoecium-bicapillary. Ovary free, ovules many, style long. Stigma modified & capitate. Two green hypogynous nectories or nectariferous scales are present. Fruit follicle.

Fls. & Frts.: Almost throughout the year.

Specimen collected: Pantilong Naga punji. 01-05-07. Banasree Nath. Coll No. 03.

Habitat: Terrestrial, cultivated as ornamental garden plant.
Ethnomedicinal uses:
Tablet is made by leaf paste and then it is taken orally in diabetes.

Established reports of uses in medicine: The whole plant contain Urosolic acid and about 44 alkaloids (reserpine, vindolicine, vindorosine, lichnerinine, akuammine, catharanthine, vivrocine, vindoline etc.). Leaf contains 2 glycosidal principles & ursolic acid; alkaloids like leurosine, isoleurosine, pervine etc. Root contains 24 alkaloids isolated so far from the roots. It contains like ajmalicine (5-yohimbine), vinosidine, lochnerivine, leurosivine, cavincine etc. bark also contains different alkaloids & other compounds.

**ICHNOCARPUS, R. Br.**


Vern name: Kra char III (J).

Twining shrubs; branchlets, inflorescence and leaves beneath rusty tomentose; bark reddish brown. Leaves opposite, ca 2.0-9.0 x 1.0-3.5 cm, ovate or elliptic lanceolate, acuminate, petiolate. Flowers white, in axillary and terminal pubescent cymes. Caylx lobes minute ovate, pubescent. Corolla lobes ca 0.2 cm long, spreading, lanceolate, pubescent along margin. Follicles ca 8.0 cm long, linear.

Fls. & Frts.: August – December.


Habitat: Terrestrial, common along the roadside.

Ethnomedicinal uses:
Roots cut into pieces pounded and made to a paste which is apply externally on fracture.

Established reports of uses in medicine: Not so far recorded.
**TABERNAEMONTANA L.**


**Vern name:** Santule (J), Togor (Beng).

Bushy shrubs, branches dichotomous, latex bearing. Leaves oblong or elliptic, caudate, acuminate, submembranous, upper surface glossy green, 5-8 x 2-4 cm’ petiole upto 1 cm long; cymes usually axillary, corymbose, few flowered; white, calyx 5 lobed; corolla tube ca 2 cm long; lobes 5 ca 1.5 x 1 cm., anthers subsessile, carpels 2, distinct. Follicles divaricate, recurved orange red inside, seeds enclosed in a red aril.

**Fls. & Frts.:** April – December.

**Specimen collected:** Pedlapunji, 10-03-10, Banasree Nath. Coll No. 190.

**Habitat:** Terrestrial, commonly cultivated in the homegarden as an ornamental plant and for medicinal purpose.

**Ethnomedicinal uses:**

Leaves are dried and made powder and then mixed with coconut oil, which is applied externally in cuts for early healing.

**Established reports of uses in medicine:** Leaves and roots possess tranquilizing effect. Leaves and roots are antihelmintic and used in dysentery and piles. Leaves, roots and fruits are used variously as medicine or tonic; expectorant, febrifuge and used in catarrh, fever, foetid ulcers, rheumatism and gonorrhoea. Flowers are astringent, also used in liver complaint and fever.

**ASCLEPIADACEAE**

**CALOTROPIS R. Br.**

Asclepias gigantea L., Sp. PI. 214.1753.

Vern name: Akon (J & R), Akond (Beng).

Hoary tomentose shrubs. Leaves ca 5.0-16.0 x 4.5 cm, elliptic, ovate to obovate, sessile or subsessile, acute, base cordate or amplexicaul at base, tomentose beneath. Flowers purplish white, in umbellate lateral cymes. Calyx segments ovate acute, glandular inside. Corolla lobes spreading, deltoid, ovate. Corona 1 seriate. follicles ca 5.0-10.0 cm long, recurved. Coma white silky.

Fls. & Frts.: April - September.


Habitat: Terrestrial, common along the roadside.

Ethnomedicinal uses:
Slightly warmed leaves are used in affected parts of the body to get relief from muscular pain.
* Leaf juice is taken orally to reduce high blood pressure.
* Leaf latex is used to cure toothache.

Established reports of uses in medicine: Root bark is useful in dysentery. Leaves are used in intermittent fevers. (Chopra, et al., 1956)
Latex of the stem is applied on abscess and it is used till the ailment is cured. (Nath, M. 2011).

* Additional medicinal utility.

PERIPLOCACEAE
CRYPTOLEPIS

Cryptolepis elegans Wall. ex G. Don, Gen. Syst. 4: 82. 1837; FPM 826.

Vern name: Thangsky (J).

Slender climbers. Bark brownish, branchelets long, slender, brown. Leaves elliptic or ovate, oblong or oblong-lanceolate, obtuse or acute with a cusp, glabrous, dark green and shining above, glaucous beneath; lateral nerves not parallel, base
Pl.-46: Scoparia dulcis L.  
Pl.-47: Peperomia pellucida (L.) H.B.K.  
Pl.-48: Passiflora edulis L.  

Pl.-49: Combritum pilosum Roxb.  
Pl.-50: Elephantopus scaber L.  
Pl.-51: Plumbago zeylenica L.  

Pl.-52: Rongmai Naga medicine man with Pedilanthes tithymaloides (L.) Poil. along with investigator  
Pl.-54: Coix lacryma-jobi L.
rounded, cuneate or subcordate. Flowers in axillary or terminal cymes. Calyx segments obtuse.

**Fls. & Frts.**: June – November.


**Habitat**: Terrestrial, wild.

**Ethnomedicinal uses**:
- Leaf juice is taken orally to cure nerve pain.
- The juice is also applied locally on burnt to reduce burning sensation.
- The same is also taken orally to cure piles.

**Established reports of uses in medicine**: Root extract mixed with cow’s milk and administered for cough by Jatapu and Savara- 2 spoonfuls twice a day for 3 days. (Rama Rao & Henry, 1996).

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**HOYA R. Br.**


**Vern name**: Krashman (J).

Epiphytic climbers, woody. Leaves thick fleshy, ovate-elliptic or ovate lanceolate, acute. Flowers white with pinkish centre, densely umbellate cymes; stalk *ca* 2.0-2.5 cm. long. Calyx lobes *ca* 0.2 cm. long, acuminate. Corolla rotate. Follicle lanceolate, reflexed.

**Fls. & Frts.**: March – October.


**Habitat**: Terrestrial, common.

**Ethnomedicinal uses**:
- Leaves are pounded and made paste of it and it is applied externally on the burns.

**Established reports of uses in medicine**: The leaves are cut into small pieces, and
pounded to make paste and applied locally on bone fracture for joining of the bones. Powdered leaf is applied externally in tumor. (Das, 2006).

**CONVULVULACEAE**

*Argyreia* Lour.


**Vern name:** Chia synthaih (J), Bichatak (Beng).


**Fls. & Frts.** : June – September.

**Specimen collected** : Nunchuri Majherpunji, 16-10-09, Banasree Nath. Coll No. 171. (Pl.-30).

**Habitat** : Terrestrial, common in the study area

**Ethnomedicinal uses** :

Leaves extract are used externally as poultice on skin diseases. It is also used in boil for early brusting.

**Established reports of uses in medicine** : Roots are useful in nervous disorder, rheumatism, as tonic. Leaves are antiphlogistic and used as poultice for wounds and skin diseases. Plant used in gonorrhoea, gleet and chronic ulcers. Seeds show significant spamilolytic and hypotensive activity.

**IPOMEA L.**

Vern name: Kalmisak (Beng).

Aquatic trailing herbs; rooting at nodes; stem hollow. Leaves hastate or cordate, entire or more or less angularly lobed. Flowers pale-purple, ca 5.0 cm. long, solitary or few flowered peduncled cyme. Sepals ovate, oblong. Corolla ca 3.0-4.5 cm. long. Capsules ovoid, glabrous.

Fls. & Frts.: July – February.

Specimen collected: Gaglacherra khasia punji, 13-06-07, Banasree Nath. Coll No. 16.

Habitat: Aquatic, common in water bodies.

Ethnomedicinal uses:

The young shoot is taken as vegetable to stimulate digestive power.

Leaf curry is taken after delivery of women to increase the lactation.

*Leaves curry is taken in jaundice daily till the ailment is cured.

Established reports of uses in medicine: The chemical composition of the plant contain: sterol; acid viz.: melissic acid, butyric acid, myristic acid and behenic acid.; Hydrocarbons viz.: triacontance, pentairiacotane; different types of resin - 7.27% and essential oil-0.048%.

*Additional medicinal utility.


Vern name: Ding (J), Mitha alu (Beng).

Prostrate annual, trailing on th ground, with milky juice. Leaves 3-5 lobed truncate to subcordate, sinus broad, apex gradually acute, ovate, cordate. Flowers purple. Capsules globose.

Fls. & Frts.: July – November.


Habitat: Terrestrial, wild.

Ethnomedicinal uses:
*Tuber is crushed in a mortar and made juice, which is applied locally on burnt to reduce burning sensation.

**Established reports of uses in medicine**: Used as vegetable.

*Additional medicinal utility.

**CUSSCUTACEAE**

**CUSCUTA L.**


**Vern. Name**: Swarnalota.

Twining, yellowish green, glabrous, very long leafless, parasite. Branches filiform, fleshy, forming a dense yellow masses on the trees and shrubs. Flower creamy or white in solitary or fascicles raceme or in umbellate clusters. Stamens 5, epipetalous, appendaged between the filaments. Ovary 2-celled, 2-ovules in each locules.

**Fls. & Frts.**: September - December.

**Specimens collected**: Phulertal., 10-10-08. Banasree Nath. 94.

**Habitat**: Terrestrial, grows wild as a parasite on a number of angiospermic plant species.

**Ethnomedicinal use**: Boiled water of the plant is taken orally in fever. The water is also used to take bath to cure skin diseases.

**Established reports in Ethnomedicine**: Plant is purgative, used externally for itching and internally for fever. Seeds are carminative, anthelmintic alterative. Stems are useful in bilious disorder. Plant extract is also used in liver complaints and flatulence.
**SOLANACEAE**

**CAPSICUM L.**


**Vern name:** Lanka (J and Beng).

Erect, annual, branched herbs. Leaves 4.0-10.0 x 1.8-4.0 cm. elliptic, narrow-lanceolate, entire or wavy, acute or acuminate, petioled. Flowers white, small, solitary or in groups of 2-3 together. Calyx short, often truncate. Corolla 5-lobed, rotate. Fruit a berry, 2.5-8.0 cm long, much longer than broad, green, red or yellowish-red at maturity, mildly pungent. Seeds many.

**Fls. & Frts.:** June – October.

**Specimen collected:** Kachukhal Part II. 21-11-09. Banasree Nath. Coll. No.-117.

**Habitat:** Terrestrial, cultivated in the kitchen garden.

**Ethnomedicinal uses:**

Leaves are crushed and made paste, which is applied externally in skin diseases. Fruit is also taken as vegetables.

**Established reports of uses in medicine:** Plant juice used in earache green chillis rich in vitamin A and C, eaten fresh with salads and reported to retard cancer. (Vardhana, 2008). Boiled leaves are mixed with oils and applied on face for curing pimples and also applied on body for skin problems. (Nath, M. 2011).

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**DATURA L.**


**Vern name:** Dutra (J & R), Datura (Beng).

Undershubs, coarse annual; stem green or purplish. Leaves sinuate or obscurely lobed sparingly hairy on the nerves beneath, petiolate. Flowers white. Calyx tubular, 5-angled. Corolla ca 12.0 cm. long, teeth linear. Stamens ca 11.0 cm. long. Capsules dehiscencr, deeply 5-valved; spines very sharp.

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Fls. & Frts.: August – April.


Habitat: Terrestrial, grown in homestead complex.

Ethnomedicinal uses:
Leaves are pounded and tablets are made from this, which is used in itching.

*Leaves are crushed with a little salt and is applied locally to reduce bodyache.

Established reports of uses in medicine: Plant is narcotic, anodyne. Leaves and flowering tops constitute the drug stramonium; hyoscyamine is the chief alkaloid.
Leaves are used in boils, asthma, sore and fish bite. Plant is used for swollen legs, earache, baldness, mental derangement, snake-bite etc. Fruit juice is applied to scalp for curing dandruff and falling hairs.

*Additional medicinal utility.

**NICOTIANA L.**


Vern name: Makhoubui (R), Shada (Beng).

Large, erect, branched, annual herbs. Basal leaves large, oblong, lanceolate, acuminate, upper ones smaller, amplexicaul or semi-amplexicaul, obovate. Flowers rosy or reddish, 5.0-6.0 cm. long, born in terminal panicles. Calyx usually 1.2-1.5 cm. long, lobes sub-equal, lanceolate-acute. Corolla tube narrow below, ventricose above, limb 1.5-1.8 cm. across, lobes spreading, acute. Stamens-5, include. Fruits a capsule, 1.2-1.5 cm. long, ovate. Seeds many.

Fls. & Frts.: November – April.


Habitat: Terrestrial, wild.

Ethnomedicinal uses:
*One teaspoonful juice of leaves are taken orally twice daily for 1 or 3 months to cure T.B.

*Fresh leaf juice mixed with powdered bark of *Syzygium cumini* is taken orally in Titanus till it is cured.

**Established reports of uses in medicine**: Flowers used in asthma. The leaves sedative, nacrotic, antiseptic. Its green leaves are applied to skin to cure scabies, destroy lice and have a salutary effect in cases of neuralgic pains and toothache. (Vardhana, 2008).

*Additional medicinal utility.*

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**SOLANUM L.**


**Vern name**: Sohmontho (J).

Erect undershrubs, much branched; stems and branches with curved prickles, younger parts stellately tomentose. Leaves ovate oblong, sinuate or lobed 7.0-14.0 x 2.0-8.0 cm. Cymes extra axillary, scorpion. Calyx *ca* 0.4 cm long; corolla *ca* 0.6 cm long, bluish purple. Stamen 0.4 cm long, epipetalous, alternate to corolla lobes; filament short; anthers yellow; pollen dehiscing through apical pores; carpels 2, obliquely placed. Berry globose, orange-red when ripe.

**Fls. & Frts.**: November - January.


**Habitat**: Terrestrial, wild.

**Ethnomedicinal uses**: Leaf juice is use in itching. Fruit is taken as vegetable.

*Leaf juice is applied externally for early healing of cuts and wounds of dog.

**Established reports of uses in medicine**: Roots are carminative, expectorant and useful in asthma, cough, catarrhal affection, toothache, fevers. Leaf juice mixing
with fresh juice of zinger is taken to stop vomiting. Leaves and fruits rubbed up with sugar used as external application for itch. (Chopra et al., 1956)

*Additional medicinal utility.


**Vern name**: Konkolam (R).

Erect tomentose shrubs. Leaves ca 7.0-20.0 x 2.0-7.5 cm, elliptic, ovate-oblond, entire, acute, tomentose on both surfaces. Flowers creamy white, in woolly terminal corymbose cymes. Calyx teeth ca 0.2 cm long. Corolla ca 1.2 cm long, tomentose outside; lobes acute. Ovary hairy. Berries ca 0.6 cm in dia., globose, stellately tomentose.

**Fls. & Frts.**: February - September.


**Habitat**: Terrestrial, wild.

**Ethnomedicinal uses**:

*Boiled leaf juice is applied on head to cure headache during delivery.

**Established reports of uses in medicine**: Fruits taken for gastric troubles.

*Additional medicinal utility.


**Vern name**: Sohnhang (J), Hatibhekuri (A).
Prickly undershrubs. Leaves \( ca \ 5.0-18.0 \) cm long, ovate, lobed or angled, hirsute and prickly on both surfaces and petioles. Flowers white, in few flowered lateral cymes, \( ca \ 1.5 \) cm long. Berries \( ca \ 1.5-2.0 \) cm in dia., globose.

**Fls. & Frts.:** May - November.

**Specimen collected:** Lalpani Khasia punji. 21-11-7. Banasree Nath. Coll No. 65.

**Habitat:** Terrestrial, common along roadside.

**Ethnomedicinal uses:**
Root is pounded and made juice by adding water, which is applied to reduce toothache.

**Established reports of uses in medicine:** Fruit paste applied to cure toothache in leech bite also.


**Vern name:** Panthakhunga (R), Tithbegun (Beng).

Erect shrubs, \( ca \ 4 \) m. high, branches tomentose, sparsely prickled. Leaves large, shallowly lobed, acuminate, densely tomentose. Cymes. Scorpioid. Flowers white; pedicles \( c 2 \) cm. long in fruit; calyx hirsute; corolla stellate pubescent; stamen 5. Berries 1.0-1.5 cm. across, globose, yellow.

**Fls. & Frts.:** April – December.


**Habitat:** Terrestrial, Grows abundantly on waste land and jhuming area.

**Ethnomedicinal uses:**
Roots cut into pieces pounded and made to a paste. Along with water it is taken orally during gastric problems. Fruits are used as vegetables.

**Established reports of uses in medicine:** The fruits are used as vegetable. Fumes of burning seeds are inhaled for toothache. Plants are reported to be useful in cough and as sedative, diuretic and digestive tonic. Fruits are useful in liver as well as spleen enlargement. Paste of pounded fruits is applied as cure for skin diseases by
‘Adi’ tribe against local name ‘Bako’ (Pal 1984). Roots used in poultices for cracks in the feet. Root extract taken in malaria against the local name ‘Bangko’ (Adi) as reported by Hynniewta (1987).

SCROPHULARIACEAE

**LINDERNIA** Allioni in Miss. Taurin.


Wettst. In Engler & Prant. 1, Nat. Pflan. IV. 3b:80, 1891.

**Vern name**: Krasia (J).

Creeping pubescent herbs. Leaves opposite, *ca* 1.0-3.2 x 0.6-1.9 cm, ovate-oblong, serrate, tomentose, shortly petiolate. Flowers yellow, *ca* 1.8 cm long, axillary, solitary. Calyx *ca* 0.5 cm long, pubescent. Corolla *ca* 0.8 cm long, capsules *ca* 0.5 x 0.2 cm oblong.

**Fls. & Frts.**: November – March.


**Habitat**: Terrestrial, Common in moist places.

**Ethnomedicinal uses**: Leaf juice is taken in insect bite.

**Established reports of uses in medicine**: Not so far recorded.

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**SCOPARIA** L.


**Vern name**: Langphiakpurau (R), Khrabakhor (J), Mithapata (Beng).

Branching erect annual 1 m or so semi woody foeted. Leaves simple, opposite or 3 natley whorled, ovate lanceolate, distantly serrate, glabrous or sparsely pubescent. Flowers small, white, axillary racemose. Calyx segments imbricate in buds; Corolla white *ca* 5.6 mm. across; filaments wooly at base.
Capsule small, ovoid or globose, enclosed by the calyx lobes; seeds many, obovoid, blackish.

**Fls. & Frts.** : Almost throughout the year soecially July and January.


**Habitat** : Terrestrial, common along the roadside and different parts of the study area.

**Ethnomedicinal uses** :

Leaf juice is mixed with *Cynodon dactaylon* & *Syzygium cumini* is taken in diabetes. Leaf juice is also good for chronic dysentery & it help to get rid from acidity. Juice of leaves are also applied externally on snake bite.

*Leaf juice mixed with leaf juice of *Mussaenda roxburghii* and taken orally in cancer.*

**Established reports of uses in medicine** : Decoction of plant is used for graval and other renal troubles. An antidiabetic compound amellin, occur in the leaves and stem of green plants. Plants infusion is used in fever, cough and bronchitis and as gargle for toothache. It is also helpful in anaemia, ketonuria, retinitis and other complications associated with diabetics mellitus. Tender shoot is used for sinus and pneumonia and leaves for different kinds of skin diseases. (Saklani & Jain 1994).

*Additional medicinal utility.*

**BIGNONIACEAE**

**OROXYLUM** Vent., Dec.


**Vern name** : Radapuitonam (R), Dainlain (J), Sona (Beng).

Small deciduous trees, with brownish and corky bark. Leaves opposite, bipinnate, very large; leaflets broadly ovate. Flowers in long terminal erect raceme,
purplish; calyx companiculate, leathery; corolla companiculate, 5-lobed, fleshy; stamen 5; ovary 2-celled. Capsules sword like; seeds winged.

**Fls. & Frts.** : May – August.


**Habitat** : Terrestrial, wild.

**Ethnomedicinal uses** :
Dry fruits are made powder and along with water or without water also taken by the female in white discharge.

*Bark of *Gmelina arborea* mixed with bark of *O. indicum* and is crushed. Then it is boiled in water. The water so obtained is taken orally for 3-4 days daily thrice to cure jaundice.

**Established reports of uses in medicine** : Root bark is astringent, tonic, useful in diarrhea and dysentery, also diaphoretic and used in rheumatism. Seeds purgative. Bark made into powder along with *Curcuma domestica* useful for sore back of horses. It is also used in acute rheumatism. Bark powder used to treat cuts and burns. Decoction of leaves given in stomachache and rheumatism; leaves used externally for enlarged spleen. Bark decoction given for contraction of uterus during delivery. (Anderson 1986).

*Additional medicinal utility.*

**PEDALIACEAE**

**SESAMUM**


**Vern name** : Til (Beng).

Erect, annual, glandular, tomentose herbs. Lower leaves opposite digitately 3-lobed, 3-foliate, tripartite, lobed elliptic-oblong, long petiolated, glabrous above, puberulous beneath, upper leaves entire, lanceolate, ovate-oblong, varying in length, short, petioled. Flowers rose-pink, solitary in the axils, with conspicuous
vascular glands at the base. Capsule obtuse-tetragonal, valvular, silky tomentose, shortly beaked.

**Fls. & Frts.**: August – November.

**Specimen collected**: Arun punji. 21-11-08. Banasree Nath. Coll. No.-84.

**Habitat**: Terrestrial, cultivated.

**Ethnomedicinal uses**:

* Seeds of S. indicum and seeds of Brassica compestris mixed properly with milk. The paste so obtained is applied locally to cure bronco.

Established reports of uses in medicine: Seeds are useful in piles and cough. Seed juice is applied to burns, scalds. (Chopra et al., 1956).

*Additional Meidical utility.*

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**ACANTHACEAE**

**ADHATODA** Nees.


**Vern. Name**: Vasak (J, R and Beng).

Bushy shrubs, much branched, leaves 8-15x4-7 cm lanceolate, elliptic-lanceolate, acuminate or acute. Flowers white or creamish white in elongate spikes. Calyx 5-fid; Corolla 2.5-3.5 cm long, ovary hairy, Capsules 4-seeded.

**Fls. & Frts.**: November – April.


**Habitat**: Terrestrial, cultivated in the home garden.

**Ethnomedicinal use**:

Leaf is boiled in water and the juice so obtained is taken orally to cure dysentery.

*The juice is also taken in piles to get relief from it.*
The leaf juice mixed with honey and *Zingiber officinale* and taken orally to cure cough and cold.

*Leaves of *Averrhoa carambola, A. vasica, Cynodon dactylon* and Leaves of Scoparia dulcis is mixed well with Gud. Then by that paste table is made which is taken in T.B.

Flower is taken as vegetable by the Rongmai Naga tribe.

**Established reports in Ethnomedicine:** The leaf, root and flower are used in the form of decoction, juice or powder as a remedy for chronic bronchitis, cold, cough and tuberculosis of lungs and also externally used for skin diseases and rheumatism. Leaf juice is used in dysentery, diarrhea and glandular tumors.

*Additional medicinal utility.*

**ANDROGRAPHIS** Wall. ex Nees.


**Vern. Name:** Bukti (R), Murbut (J), Kalomegh (Beng).

Erect annual herb. Stem quadrangular, young parts glandular hairy. Leaves 3.5-6.5x1.5-2 cm, subsessile, lanceolate or linear-lanceolate. Flowers pedicillate, pubscent. Bracts folliaceous ca 1 cm long. Corolla white or purplish spotted, ca 5 mm, bilipped, 2+3 lobed, stamen 2, anthers exerted. Capsules oblong ca 1.2x0.4 cm glandular hairy when young, glabrous on maturity.

**Fls. & Frts.:** March-December.

**Specimens collected:** Ngasunluang Ramnagar, Nagra khasia punji 02-12-08, 09-10-10 Banasree Nath. 56.

**Habitat:** Terrestrial, cultivated in the home garden for medicinal uses.

**Ethnomedicinal use:**
Dried or fresh plant cut into small pieces and kept in a glass of water for overnight. Next morning the water is taken orally in empty stomach against stomach troubles, chronic fever, diabetes and also in worm problem.

*Leaves of *A. paniculata, *Azadirachta indica, *Adhatoda vasica and *Calotropis procera* is mixed properly and taken orally in malarial fever for 7 or 11 or 21 days.

*Leaf juice is applied externally on swelling teeth enamel till it cured.

**Established reports of utilization in Ethnomedicine:** Plant is used in piles, itches, fever, liver trouble and dysentery. It is also used as tonic and anthelmintic. Plant decoction is also used against jaundice.

*Additional medicinal utility.

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**JUSTICIA L.**


**Vern name:** Jagatmadan (Beng).

Bushy shrubs, stem, purplish black. Leaves 5.5-11.0 x 0.5-1.5 cm., linear lanceolate, bluntly acuminate, cuneate at base; petioles 0.2-1.0 cm. long. Spikes terminal. Flowers creamy white with purple spot; upper lip slightly hooded; stamens 2; filaments villose below. Capsules ca 1.2 cm. long, glabrous.

**Fls. & Frts.** : October - April.


**Habitat** : Terrestrial, Commonly cultivated as hedge plant.

**Ethnomedicinal uses** :

Leaf juice is taken orally as pain killer

**Established reports of uses in medicine** : Decoction of leaves is taken internally (1/2 cup c 20 ml.) at a time for relief from body pain. External application of the leaf paste is also useful. (Dutta Choudhury, 1999).
PHLOGACANTHUS Nees ex Wall.,


Vern. Name: Kalo Vasak

Evergreen shrub 1.5-3.5 m high. Bark yellowish-brown. Leaves 10-25x3-9 cm oblanceolate, elliptic-oblong, acute or acuminate, dark glossygreen above, pale beneath; lateral nerves 10-12 on either half. Inflorescence 15-20 cm long, pubescent. Corolla 2-3 cm, orange. Capsule up to 3 cm long, dilated at top.

Fls. & Frts.: December – April.


Habitat: Terrestrial, cultivated in the home garden.

Ethnomedicinal uses:

*Leaves of P. thyrsiflorus is mixed well with Zingiber officinale & Allium sativum and is taken with honey to cure asthma.

Established reports in Ethnomedicine: Plant is used against cold, cough and fever.

*Additional medicinal utility.

STROBILANTHES Blume.

Strobilanthes glabratus Nees.

Vern name: Khlukhnis (J).

Shrubs 3-4 ft high. Leaves elliptic, acuminate, evenulate-undulate or sub-entire, membranous, glabrate; lateral nerves 6-8 on either half, arching; base narrowed. Flowers in ovoid-pedunculate heads, usually glabrate; peduncles, angled or grooved. Bracts elliptic or ovate-elliptic, coriaceous in fruit. Calyx linear, scarious. Corolla bluish, 1.0-1.25 in., glabrous. Capsule 0.75 in, broadly oblong, glabrous, 4-seeded. Seeds ovate, areolas small, hairy.

Fls. & Frts.: May - November.
**Specimen collected**: Nunchuri Majherpunji, 16-10-09, Banasree Nath. Coll No. 173.

**Habitat**: Terrestrial, common in the study area.

**Ethnomedicinal uses**: Leaves extract are used externally as poultice on skin diseases. It is also used in boil for early brusting.

**Established reports of uses in medicine**: Not so far recorded

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**THUNBERGIA Retz.**


**Vern name**: Rangnang (J).

Large climbers, stem fistular. Leaves ovate, orbicular, angularly toothed; petioles upto 4 cm. long, rigid. Spikes c 5 cm. long. Flowers c 4 cm. across, bluish white. Capsules curved upwards with a beak.

**Fls. & Frts.**: April - July


**Habitat**: Terrestrial, wild.

**Ethnomedicinal uses**: Stem latex is applied locally on eye to cure eye problems.

**Established reports of uses in medicine**: Decoction of leaves given in stomach complaints. Leaf extract is applied locally drop wise on eyes during conjunctivitis. Stems cut in between internode and air is blown through the lumina of the stem for remedy of troubled eyes.
VERVANACEAE

CLERODENDRUM L.


Vern name: Singluang (R), Bamanhati (Beng).

Small erect shrubs with rigid hollow stem. Leaves ternately whorled, acute or linear-lanceolate. Flowers creamy white, in axillary and terminal paniculate cymes; bracts linear. Calyx lobes ca 0.3 cm. long, ovate, acute. Corolla tube 5.0-8.0 cm. long, slender, lobes obovate-oblong, obtuse. Drupes 4-lobed.

Fls. & Frts.: August – December.

Specimen collected: Languangluang Rongmai punji, 14-11-09, Banasree Nath. Coll No. 117. (Pl.-85).

Habitat: Terrestrial, common in certain parts of the study area.

Ethnomedicinal uses:

Leaf juice is taken in dysentery.

Established reports of uses in medicine: Leaves are vermifuge. The smell of the wood is believed to cure many disease of the children. Root is used in cough, asthma.


Vern name: Garmakhoi (R), Pressurepata (Beng).

Shrubs about 1-5 m high with globose crown and disagreeable smell. Leaves opposite, ovate, acute, entire, cordate at base. Petiolate, with cluster gland near the apex. Inflorescence in terminal corymbose cymes. Flowers white; bracts caduceus. Calyx pubescent, often bearing few glands, connate, teeth short, calyx-teeth short. Corolla tube slender, ca 2.5-1.3 cm. long. Style exerted. Fruits bluish green, globose, compressed above.
Fls. & Frts.: August - December.


Habitat: Terrestrial, wild.

Ethnomedicinal uses:
Leaf juice is taken orally to reduce high blood pressure.

Established reports of uses in medicine: Leaves are used for rheumatic pain by Khasis and Jaintia's of Meghalaya. Young leaves are useful as anthelmintic, as Clerodin (245)-Et-Cholesta-5, 22, 25-triene-3 Bita-01, 1, amyris, Bita sitosterol and Clerodolone (Plant a Med. 37:64, 1979) as recorded by Asolkar et al. (1999). Kohli (1992) reported that consumption of leaves as boiled vegetables is valued to keep blood pressure low.


Vern name: Bungbun (R), Cheiarem (J), Bati (Beng).

Undershrubs with foetid smell, softly tomentose, branched 4-angled. Leaves opposite, ovate-cordate, acuminate, dentate. Flowers white, tinged with pink in terminal sub-corymbose, panicles; bracts foliaceous, deciduous, pubescent. Calyx ca 0.5 cm. long; segments broadly lanceolate, acuminate, hairy. Corolla white, lobes oblong, obtuse, tube slender. Drupes globose, within persistent calyx, bluish black when mature.

Fls. & Frts.: February - July.


Habitat: Terrestrial, common along the roadside.

Ethnomedicinal uses:
Slightly heated leaves are applied externally against bodyache.
Tender leaves are rubbed by hands and give massage on back up to 7 times to cure asthmatic problems due to gastric.

Established reports of uses in medicine: Leaves are used as bitter tonic, vermifuge, laxative and Cholagogue. Fresh leaf juice is introduced into the rectum for removal of ascarids. Leaves and roots are used externally in tumor. Leaves and flowers are used in scorpion sting.

*Additional medicinal utility.

GMELINA L.


Vern name: Tainplak (R), Laphang (J), Gamair (Beng).

Deciduous trees. Leaves ca 6.0-20.0 x 3.0-9.0 cm, ovate, acute or acuminate, entire, cuneate at base, long petiolate with two basal glands. Flowers yellow, in axillary or terminal panicles. Calyx broadly campanulate 5 toothed. Corolla ca 3.0 cm long, yellow, campanulate, pubescent outside, 2 lipped. Drupes obovoid-pyriform ca 2.0-2.3 cm in dia., orange yellow when ripe.

Fls. & Frts.: March – June.


Habitat: Terrestrial, common in certain parts of the study area.

Ethnomedicinal uses:

Bark is dried and made powder which is mixed with the dried bark powder of Oroxyllum indicum and put in water. The water so obtained is taken orally for 3-4 days during jaundice.

Established reports of uses in medicine: Ripe dried fruits are employed in urticaria and worms. (Chopra, et al., 1956). Seeds of the plant is warmed and rubbed on wounds to reduce pain and also for antiseptic action.
Pl.-55: *Saraca asoca* (Roxb.) De. Willd.

Pl.-56: *Tamarindus indica* L.

Pl.-57: *Acasia farnesiana* (L.) Willd.


Pl.-59: *Lygodium flexuosum* (L.) Sw.

Pl.-60: *Rumex marifimus* L.

Pl.-61: *Kalanchoe pinnata* (Roxb.) Pers.


Pl.-63: Investigator with Jaintia medicine man.
**VITEX L.**


**Vern name**: Nishinda (Beng).

Deciduous shrubs or small trees. Bark thin, gray or ashy white; blaze yellow; branches spreading quadriangular. Leaves digitately 3-5 foliate, opposite, decussate; petiolate. Flowers purplish blue, in clusters in terminal long panicles. Calyx *ca* 0.3 cm. long, 5 toothed pubescent above. Corolla *ca* 0.5 cm. long, tomentose outside. Stamens exerted, ovoid; filaments villous at the base. Drupe globose, black when ripe.

**Fls. & Frts.**: June - December.


**Habitat**: Terrestrial, common along the roadsides.

**Ethnomedicinal uses**:  
*Leaves are boiled in water. That water so obtained is taken in bath to reduce lecurrhoea.*  
Leaves are used as mosquito repellent.  
*Leaves are crushed and warmed with oil. That oil is used externally on skin to cure eczema.*  
*Established reports of uses in medicine*: Leaves and roots possess tranquilizing effect. Leaves and roots are anthelmintic and used in dysentery and piles. Leaves, roots and fruits are used variously as medicine or tonic; expectorant, febrifuge and used in catarrh, fevers, foetid ulcers, rheumatism and gonorrhoea. Flowers are astringent, also used in liver complaints and fever.  
*Additional medicinal utility.*
**LANTANA Alba. Mill.**


**Vern name:** Not known.

Shrubs. Stems with many recurved prickles. Leaves opposite, ovate or obovate, acute, crenate, sparingly scabrulous; base cuneate, rounded or cordate; petiolate. Flowers in axillary heads, tubular, usually orange, varying white to dark purple; bracts lanceolate, 3-5 ribbed. Spike sub-umbellate. Fruits drupes, greenish blue when ripe. Seeds bony.

**FIs. & Frts.:** Throughout the year.

**Specimen collected:** Rupacherra. 02-06-10. Banasree Nath. Coll No. 186.

**Habitat:** Terrestrial, common in roadside.

**Ethnomedicinal uses:**

Leaf juice are used on fresh cuts and wounds to check bleeding.

**Established reports of uses in medicine:** Leaf paste as cure for ring worm. Leaf decoction as tonic, stimulant and for the treatment of malarial fever and rheumatism. Plant is diaphoretic and antispasmodic; used in tumors.

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**LAMIACEAE**

**AJUGA**


**Vern name:** Keraiya (Beng).

Annual herbs; leaves ovate-oblong to ovate-lanceolate, acute at the base, margin undulate to sinuate, crenate, acute; flowers bracteate, sub-sessile to sessile; fruits nutlets.

**FIs. & Frts.:** October – March.

**Specimen collected:** Ramchandi Bagan, 4 no. punji , 16-10-09, Banasree Nath. Coll No. 177.
Habitat: Terrestrial, cultivated.

Ethnomedicinal uses:
Leaves extract are used externally on hair for shine and for proper growth.

Established reports of uses in medicine: Leaves are used for hair lotion.

**ANISOCHILUS** Wall.


Vern name: Riangthu (R).

Tall branched puberulous annual. Leaves long-petioled, ovate-lanceolate, acuminate, dentate, membranous. Spikes panicled. Fruiting calyx tomentose like a ‘cats claw’ (F.B.L) recurved beak of upper lip closing the mouth.

Fls.: April.

Specimen collected: New Alipur, 16-10-09, Banasree Nath. Coll No. 177. (Pl.-22)

Habitat: Terrestrial, common along the study sides.

Ethnomedicinal uses:
Leaves extract are used externally as poultice on skin diseases. It is also used in boil for early brusting.

Established reports of uses in medicine: Not recorded so far.

**EPIMEREDI**


Vern name: Rujot (Beng).

Suffructiose herbs, strongly scented. Leaves ovate, acute or obtuse, crenate, serrate, softly pubsccent. Petioles densely hairy. Flowers bluish purple, in dense flowered whorls on terminal shoots; lower whorls arising from leaf axils. Calyx

**Fls. & Frts.**: September - March.

**Specimen collected**: Nagra Khasia punji, 23-07-09, Banasree Nath. Coll No. 15.

**Habitat**: Terrestrial, cultivated.

**Ethnomedicinal uses**:
Leaf juice or cooked curry is good for easy digestion.

**Established reports of uses in medicine**: Plant carminative, astringent, tonic. Oil from the plant in uterine affection. (Singh and Ali, 1998)
Leaves are cooked with little salt and is taken daily for 3-4 days as a remedy for diarrhea.

**HYPTIS Jacq.**


**Vern name**: Lengikerme (J), Tukma (Beng).

Rigid, annual hairy undershrubs, *ca* 1.0-3.0 cm high, stem obtusely quadrangular, aromatic. Leaves ovate, elliptic, acute, obtuse or macronate, base narrowed, cuneate, hairy. Flowers blue *ca* .5-1 cm. long with spiny lobes; Calyx 10-ribbed; corolla lips sepreading. Nutlets *ca* 3.5 cm. long. Seeds black, mucilaginous when ripe.

**Fls. & Frts.**: September - February.


**Habitat**: Terrestrial, common along the roadside, wasteland on sandy soil.

**Ethnomedicinal uses**:
Dried seeds are kept overnight. Next morning seeds are taken orally for stomach disorders.

*It is also good for liver.*
Established reports of uses in medicine: Plant is stimulant, carminative, sudorific & lactagogue. Leaf used in tumors & cancers. Infusion is used in Catarrhal conditions, uterus affection & parantarical cutaneous diseases. In Ghana, stream from hot decoction of shoot is used in headache & malaria. Decoction used in pregnancy & piles. Roots are chewed with betel nuts as a stomachic, & its decoction is used as an appetizer.

*Additional medicinal utility.

**LEONURUS**


**Vern name:** Photka (Beng).

Annual, shrubs, 1.0-1.5 m high; stem quadrangular or ribbed. Leaves opposite pinnatifid or palmatifid, lobed. Petioles slender. Inflorescence axillary verticillaster cyme, flower pink ca 5.0 mm across; bracts subulate. Calyx 5-nerved, teeth 5, spinescent. Corolla tube straight. Stamen 4. Fruit a nutlet, ca 4.0 mm across.

**Fls. & Frts.:** February – May.


**Habitat:** Terrestrial, common along the road side and hawar.

**Ethnomedicinal uses:**
Root juice is taken in stomach disorders.

Established reports of uses in medicine: Roots and leaves are bitter and febrifuge. Water soluble fraction contains leonurine. Plant is tonic, emmenagogue, vulnerary and used in menstrual disorders. Leaf extract is effective for uterus contraction.
**LEUCAS** R. Br.


**Vern. Name:** Donkolosh (Beng).

Annual, erect herb. Stem stout, hispid or scabrid. Leaves *ca* 2.5-7x1-2 cm, linear or oblong obtuse, entire, distantly crenate, sub-sessile. Flowers white, whorls axillary, usually distant. Corolla white, lip hooked, hirsute outside. Stamens 4, didynamous. Carpels connate in a 4 - partite ovary. Style subulate at apex. Nutlets oblong, smooth, brown.

**Fls. & Frts.:** Almost throughout the year.

**Specimens collected:** Ramchandi 4 no. punji. 12-01-08. Banasree Nath. 62. (Pl.-36).

**Habitat:** Terrestrial, wild in the road side, paddy field or in the forest edges.

**Ethnomedicinal uses:**

Flower is used externally as a poultice on tooth to reduce pain.

**Established reports in Ethnomedicine:** Plant is antipyretic, leaf juice is applied in psoriasis, skin eruption and painful swelling. Flowers are prescribed in cold and cough.

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**MENTHA**

*Mentha arvensis* L., Sp. Pl. 528, 1753; Benth in DC. Prodr. 12:171.

**Vern name:** Long Pudina (Beng).

Strongly aromatic perennial herbs. Stem 30-50 cm. hairy or glabrate. Leaves shortly petioled or sessile, oblong, ovate or lanceolate serrate, whorls axillary capitate. Calyx teeth triangular or lanceolate. Corolla hairy.

**Fls. & Frts.:** February – April.

**Specimen collected:** Bagbahar khasia punji , 23-02-11, Banasree Nath. Coll No. 219.

**Habitat:** Terrestrial, cultivated.
Ethnomedicinal uses:
Pounded leaves are mixed with salt and taken orally for easy digestion.

Established reports of uses in medicine: Dried plant is antispasmodic, stomachic, carminative, refrigerant, stimulant, act against worm and diuretic. Leaf infusion is a remedy for rheumatism.


Vern name: Pudina (Beng).

Glabrous, erect or sub-erect, branching from the base, strongly aromatic, perennial, 30.0-100.0 cm. high herbs, propagating by means of stolons and runners. Leaves 2.5-8.0 x 1.2-3.5 cm. oblong-lanceolate, shortly petioled, sharply serrate, sub-glabrous above, pale beneath. Flowers purple, rarely whitish, in thick terminal spikes, elongating in fruit. Bracts lanceolate, acuminate. Calyx campanulate, tubular. Corolla glabrous, often equally lobed.

Fls. & Frts.: May – July.

Specimen collected: Bagbahar khasia punji, 23-02-11, Banasree Nath. Coll No. 216.

Habitat: Terrestrial, cultivated and also grows wild.

Ethnomedicinal uses:
Leaf juice is taken orally to cure stomach problems.

Established reports of uses in medicine: Carminative, stomachic, mild antispasmodic, expectorant, antiseptic and local anesthetic properties. Aromatic smell of the leaf when inhaled considered remedy of vomiting tendency. (Nath, 2011).
**OCIMUM L.**


**Vern name:** Majiangapa (R), Bontulshi (Beng).

Erect herbs, woody at base, glabrescent, aromatic. Leaves petiolate, ovate, lanceolate, acuminate 4.0-6.0 x 1.0-1.8 cm; petioles ca 2.0 cm. long. Flowers in whorls on simple or branched racemes, terminal, bracts or oblanceolate, ca 3.0 mm. long; Calyx bilabiate more or less villous within, ca 2.5 mm. long; Corolla bilabiate, ca 1.0 cm. long, creamy white; style gynobasic. Nutlets ellipsoid, pitted.

**Fls. & Frts.:** Throughout the year.

**Specimen collected:** Ramgaijang Rongmai punji, Jirighat,, 22-11-08, Banasree Nath. Coll No. 37.

**Habitat:** Terrestrial, cultivated in homestead complex for medicinal purpose and also found wild.

**Ethnomedicinal uses:**

Leaf juice or boiled leaves are taken orally in gastric. Leaf juice is taken with honey and *Zingiber officinale* to cure cough and cold.

Leaves are used in curry by the Rongmai Naga tribes.

**Established reports of uses in medicine:** Flowers carminative, diuretic, stimulant and demulcent. Leaves, roots, flowers and seeds are used in gonorrhoea, dysentery, diarrhea. Plant is stomachic, anthelmintic, expectorant, antipyretic. Leaf juice is useful in throat complaints, ringworms and earache. Seeds are demulcent, stimulant, diaphoretic and used in habitual constipation and piles.

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**Vern name:** Lepone (J), Ramtulshi (Beng).

Glabrescent shrubs, ca 1.0-2.0 m high, much branched, aromatic. Leaves ovate, acute or acuminate, serrate, pubescent; petioles ca 1.5-2.0 cm. long. Racemes simple or branched. Flowers shortly pedicellate, creamy white, bracts sessile, lanceolate awned from the rounded base. Calyx bilabiate hirusute, long upper lip
broad round recurved, lower spinulose, much shorter, lateral triangular broader than the lower. Corolla bilabiate, nearly twice as long as calyx. Stamens 4, exerted. Nutlets sub-globose, rugose with glandular depressions brown.

**Fls. & Frts.**: October – February.

**Specimen collected**: Ramchandi bagan, 02-06-07, Banasree Nath. Coll No. 20.

**Habitat**: Terrestrial, cultivated in homestead complex for medicinal purpose.

**Ethnomedicinal uses**:
Crushed leaves are applied externally on fresh cuts or wounds to stop bleeding. Leaf juice is also applied on eyes to cure problems of eyes.

**Established reports of uses in medicine**: Plant is antiseptic, styptic, stimulant, anthelmintic, digestive, diuretic and leaf extract used as tonic. Decoction of leaf is used in gonorrhoea and seminal weakness. Seeds are also given in neuralgia and headache.


**Vern name**: Tuisi (Beng).

Herbs, woody at bease; branchlet purplish, softly hirsute or pubescent. Leaves ovate or ovate-oblong or elliptic-oblong, distantly serrate, crenate or entire, acute, membranous, pubescent; base acute; petiolate. Flowers purplish or crimson in raceme; pedicles usually longer than calyx; bracts reflexed. Calyx-sepals 5, gamosepalous, calyx bilabiate. Corolla 5. Gynoeicum-bicarpellary, ovary 4-lobed, style long gynobasic, stigma bifid. Fruit schizocarpic made up of 4 nutlets. Seeds 4, endospermic.

**Fls. & Frts.**: Throughout the year.

**Specimen collected**: Dinonathpur khasia punjih., 14-03-08, Banasree Nath, Coll. No. 50.

**Habitat**: Terrestrial, cultivated in homestead complex.

**Ethnomedicinal uses**:
Leaf juice is taken orally in cold and cough. Juice is also taken in eyes to cure cataract.

Juice of the leaves are also good for stomach disorders.

**Established reports of uses in medicine**: Leaves are expectorant, antiperiodic, stimulating and used in catarrh, bronchitis, earache and stomach complaints. Powder of dry leaves is used as snuff in eczema. Seeds are demulcent, used in genitor-urinary disorders. Root decoction is given in malaria. Plant is useful in snake-bite and scorpion sting; essential oil extracted from leaves in mosquito repellant. Plant contain phenolic constituents viz. -eugenol, carvacrol, traces of phenol, terpenoids, citral, citronellol, camphor, traces of acid/acetic acid.

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**PERILLA L.**


*Perilla ocimoides* L., Gen. ed. 6: 578. 1764; Fl. Brit. India 4: 646. 1885.

**Vern name**: Laileh (J).

Deciduous pubescent, strongly scented shrubs. Leaves imparipinnate; leaflets 9-25, alternate, ca 0.5-4.3 x 0.2-1.8 cm, ovate-lanceolate, oblique at base, pubescent beneath. Flowers white, ca 0.9 cm long, in terminal corymbose panicles. Calyx segments 5, small, petals 5, ca 0.4 cm long. Stamens 10. Stigma capitate. Berries ovoid.

**Fls. & Frts.**: March – June.


**Habitat**: Terrestrial, wild.

**Ethnomedicinal uses**:

*Seeds are crushed and made juice which is taken orally to stimulate sexual power.

**Established reports of uses in medicine**: The Nagas eat leaves and seeds.

*Additional medicinal utility.*
**TEUCRIUM (Tourn.) L.**


**Vern name**: Not known.

Erect, stoloniferous herbs; stem angular. Leaves ovate-oblong, subacute at base, serrate. Inflorescence in axillary or terminal spikes, pedicle short. Flower pinkish purple. Calyx ca 0.3 cm long. Corolla ca 0.5 cm long. Nutlets ovoid.

**Fls. & Frts.**: July – November.

**Specimen collected**: Ngeseung Rongmai Punji, 12-4-09, Banasree Nath, Coll. No.- 86. (Pl.-66).

**Habitat**: Terrestrial, common along the road side and hawar.

**Ethnomedicinal uses**:

Leaf juice is applied locally to cure skin diseases.

**Established reports of uses in medicine**: Plant juice is mixed with juice of *Allium sativum* and is applied externally in skin diseases.

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**NYCTAGINACEAE**

**BOERHAVIA L.**


**Vern name**: Soro (J), Punarnava (Beng).

Much branched herbs, diffuse; branches swollen at nodes, pinkish. Leaves opposite, ca 1.5-7.5 cm 0.4-3.5 cm, ovate-oblong, unequal, puberulous. Flowers pink, bracteate in terminal and axillary panicked umbles; bracts and bractoles ovate, puberulous. Perianth ca 0.2 cm long, pink, 5 lobed, glandular hairy. Stamens exerted. Fruits clavate, 5-ribbed.

**Fls. & Frts.**: June – November.

**Specimen collected**: Lalpani, 11-06-08. Banasree Nath. Coll. No.-46

**Habitat**: Terrestrial, common on shady hill slopes.

**Ethnomedicinal uses**:
Leaf juice is used to cure cataract.

Established reports of uses in medicine: Not so far recorded.

**AMARANTHACEAE**

**ACHYRANTHES L.**


**Vern name:** Apay (J).

Erect or subscandent herbs; glabrous or pubescent. Leaves opposite, ca 3.5-14.0x1.5-5.0 cm, ovate-elliptic, acute or subacute, rounded or narrowed down into base, glabrous or pubescent. Flowers greenish white, pink in elongated terminal spike; bracts ca 0.3 cm long, ovate-lanceolate, acuminate; bracteoles ovate, winged at base. Tepals ca 0.5 cm long; white, ovate-oblong. Stamens 5; staminodes fimbriate. Urticles oblong, enclosed in the perianth.

**Fls. & Frts.:** October – March.

**Specimen collected:** Nunchuri Majherpunji, 16-10-09, Banasree Nath. Coll No. 102

**Habitat:** Terrestrial, commonly found along the roadsides.

**Ethnomedicinal uses:**

*Leaf juice is taken orally in dysentery.*

Established reports of uses in medicine: Root extract taken in tonsillitis.

*Additional medicinal utility.*

**ALTERNANTHERA** Forsk.


**Vern. Name:** Not known.
Herbs; stem fistular; base creeping; rooting at nodes; internodes long. Leaves \( ca \) 0.2-8.0x0.6-1.8 cm, linear-oblong or obovate, spatulate, acute, narrowed down into base, entire. Flowers white, in axillary, solitary, globose pendunculate heads; bracts \( ca \) 0.4 cm long, deltoid, ovate; bracteoles \( ca \) 0.5 cm long, ovate, acuminate. Tepals \( ca \) 0.4 cm long. Urticles compressed.

**Fls. & Frts.**: May – August.


**Habitat**: Terrestrial, common in swampy areas.

**Ethnomedicinal use**: Leaf juice is taken in diarrhea.

**Established reports in Ethnomedicine**: Not recorded so far.

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**AMARANTHUS L.**


**Vern name**: Kanta nota (Beng).

Erect or diffuse spinous herbs, much branched, \( ca \) 45 cm. high. Stems armed with 2-3 sharp spines at leaf axil. Leaves alternate, ovate-elliptic, cuneate at base. Flowers unisexual, green clustered at leaf axil even towards base of plant as well as elongated spikes or panicles at the top of the plants. Sepals 5, stamens 5, styles 2-3. Utricle oblong with 3-lobed apex, circumsciss 3-below the middle. Seeds shining black.

**Fls. & Frts.**: Throughout the year.

**Specimen collected**: Namdailang Rongmai punji, 18-07-09, Banasree Nath. Coll. No. 106.

**Habitat**: Terrestrial, commonly found wild areas and also found along the roadsides.

**Ethnomedicinal uses**: Juice of leaves is taken to cure dysentery.

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Established reports of uses in medicine: Fresh root cut into pieces and aqueous extract is made by crushing in a mortar. The extract is then taken internally to reduce chest pain. It is also useful in the case of snake-bite. (Dutta Choudhury, 1999).


Vern name: Bon nota (Beng).

Erect or ascending herbs with deltoid-ovate leaves, petiolate. Flowers greenish white, in small axillary clusters and terminal panicled spikes; bract and bractoles ovate-lanceolate; petals ovate-oblong. Stamens 3. Capsules corrugated.

Fls. & Frts.: Throughout the year, but specially March – October.

Specimen collected: Namdailang Rongmai punji, 18-07-09, Banasree Nath. Coll. No. 176

Habitat: Terrestrial, weeds in wasteland and fields.

Ethnomedicinal uses:
Leaf juice is applied locally on the affected areas of snake bite.

Established reports of uses in medicine: Leaves are emollient; used as cooling in snake-bite.

*CYATHULA* Bl., Bijdr.


Vern name: Dauhanpat (R), Bishaylakarani (Beng).

Erect herbs. Leaves opposite, ovate-oblong, acute, pubescent, tinged red at the time of young. Flowers bluish red, in cluster in simple or paniculate, branched spikes, polygamous. Sepals 5, ovate, acute.

Specimen collected: Namdailang Rongmai punji, 18-07-09, Banasree Nath Coll. No. 177. (Pl.-73).

Habitat: Terrestrial, grown in shady places.

Ethnomedicinal uses:
Paste of leaves are used externally to cure dog and cat bite.
Leaf paste is also used locally on fresh cuts and wounds to stop bleeding.

Established reports of uses in medicine: Root decoction is given in dysentery; also used for skin diseases.

CHENOPODIACEAE
CHENOPODIUM


Vern name: Checha (J).

Annual ascending herbs. Leaves variable in size and shape, entire, oblong lanceolate, 2.0-4.5 x 0.5-1.8 cm, toothed or lobed at margins, smaller towards apex. Flowers minute greenish in terminal and axillary clusters, forming compact, panicled spikes, the terminal; perianth lobes 5, connate at the base.

Fls. & Frts.: November - April.


Habitat: Terrestrial, common, in moist and shady places of the study area.

Ethnomedicinal uses:
Leaf juice is taken orally in stomach disorders.

Established reports of uses in medicine: The plant is used in urinary troubles, dysentery, piles and stomach disorder. (Chopra, *et al.*, 1956).
BASELLACEAE

**BASELLA** (Rheede) L.


**Vern name**: Pui (Beng).

Fleshy twining herbs; stems greenish pink. Leaves ca 2.5-10.5 x 1.0-5.5 cm, ovate-elliptic to ob lanceolate, acute, entire, petiolate. Flowers pinkish green, in lax axillary pedunculate spikes; bracts ovate, acute; bractoles 2, ca 0.1 cm long, fleshy, concave. Perianth ca 0.3 cm long, pinkish green. Urticles ovoid, ca globose 0.4 cm dia., juice purple.

**Fls. & Frts.**: August - October.


**Habitat**: Terrestrial, common, twining on bushes.

**Ethnomedicinal uses**: Leaf juice is applied externally on burnt to reduce burning sensation.

**Established reports of uses in medicine**: Leaves are demulcent and diuretic; useful in gonorrhoea. Leaf juice is used in urticaria and constipation in children and women. Mucilaginous leaves are pulped and used as poultice. Ripe fruit juice mixed with water and taken in anaemia. It is also applied in eye troubles. Leaf extract is applied on boils. (Das. 2009)

POLYGONACEAE

**RUMEX** L.


**Vern name**: Bonpalong (Beng).

Erect herbs; stem groved. Leaves lanceolate, acute, narrowed to the base; lower leaves oblong-lanceolate; stipule tubular. Inflorescence in racemose whorls.

**Fls. & Frts.**: December – July.

**Specimen collected**: Nunchuri majherpunji, 18-11-08, Banasree Nath, Coll. No. - 83. (Pl.-60).

**Habitat**: Terrestrial, common in moist, shady places along the road side and hawar.

**Ethnomedicinal uses**: Leaf is used externally in miscal.

**Established reports of uses in medicine**: Herbs have cooling effect; leaves are used in burns, seeds are aphrodisiac and the roots purgative.

Seed powder is applied externally on eczema (Das, 2006).

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**ARISTOLOCHICEAE**

**APAMA**


**Vern name**: Krahtengroo (J), Thangkhum (R).

Herbaceous undershrubs. Stem creeping below and rooting then ascending, 15.0-30.0 cm; simple, angular, geniculate, tomentose. Leaves ca 10.0-15.0 x 6.2-10.0 cm. Smooth but opaque above, 6-10 nervèd at base. Flower red, ca 1.2-1.8 cm. bracts oblong persistent. Perianth-lobes rounded-cordate, acute stamen 1-seriate. Capsule ca 5.0 cm. long, straight. Seeds 3-gonous, rugose.

**Fls. & Frts.**: March – July.


**Habitat**: Terrestrial, wild.

**Ethnomedicinal uses**: Decoction of the stem is taken against stomachache.
Established reports of uses in medicine: Stem and leaves are used diuretic and fish-poison (Chopra et al., 1956)
Juice extract from root is taken in every morning for curing diarrhea till it is cured. (Nath, 2011).

PIPERACEAE
PEPEROMIA Ruiz & Pav.


Vern name: not known.

Succulent herbs, erect or diffuse; stem pellucid. Leaves alternate, ca 1.0-3.0 x 0.5-2.5 cm, broadly ovate, acute, subtruncate or cordate at base, 5-7 nerved. Flowers minute, unisexual, in axillary terminal or leaf opposed short spikes; bracts pellate. Fruits globose, apically pointed, ribbed.

Fls. & Frts.: September - January.


Habitat: Terrestrial, common in moist places.

Ethnomedicinal uses:
Extract of leaf is taken orally to cure sinusitis.

Established reports of uses in medicine: Plant is used as poultice in sores and boils, cooling; extract shows antibacterial activity.
Extract of leaf juice mixed with boiled water is taken in dysentery. (Das, A.K., 2009).

Peperomia reflexa A. Dietr.

Vern name: not known.

Shrubs, densely branched, herbaceous. Leaves in whorls of 4, orbicular or obovate, obtuse, entire, coriaceous, pellucid-punctate. Flowers bisexual, minute
spikes exceeding the leaves. Perianth 0, stamens 2, very short; anthers confluent; stigma usually penicillate. Fruit minute, indehiscent.

**Fls. & Frts.**: September - November.

**Specimen collected**: Ngasungluang Ronghmai punji, 13-08-08, Banasree Nath. Coll. No.-38.

Common in moist places.

**Ethnomedicinal uses**:
Extract of leaf is taken orally to cure sinusitis.

**Established reports of uses in medicine**: Not so far recorded.

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**PIPER L.**


**Vern name**: Patthei (J), Pan (Beng).

Profusely branching climbers, nodes swollen with clinging roots at nodes. Leaves cordate, acuminate, broadly ovate often unequal sided. Spikes short, *ca* 2.0-6.5 cm. long, greenish. Flowers dioecious small. Male flowers with few stamens; female spike pendulous. Fruit globose.

**Fls. & Frts.**: November - May.

**Specimen collected**: Dinonathpur khasia punji 11-06-08. Banasree Nath. Coll. No.-52. (Pl.-44)

**Habitat**: Terrestrial, cultivated in forest often in homestead complexes.

**Ethnomedicinal uses**:
Leaf juice is used externally on eyes to cure cataract. The juice is also applied on fresh cuts to stop bleeding and to get relief from pain.

*Slightly heated leaves are applied externally on breast to get relief from pain due to excess accumulation of milk.*

**Established reports of uses in medicine**: Leaf carminative, aromatic, stimulant and also used in snake bite. Decoction of the leaf is used for early healing of wounds. Leaves yield an essential oil used in respiratory catarrh and diphtheria.
Leaf juice is applied in painful affection of eye as drop. Fruits with honey are given in cough. Leaves are rich in vitamin C.

*Additional medicinal utility.*


**Vern name**: Morit (J), Gulmorich (Beng).

Stout glabrous climbers, rooting at nodes. Leaves ovate-lanceolate or broadly ovate, shortly acuminate, spikes *ca* 4.0-7.0 cm. long, pendent. Flowers dioecious, bracts of female flower copular, adnate to margins of ovary. Fruit red, globose *ca* 6.0-7.0 mm. blackish.

**Fls. & Frts.**: July – April.


**Habitat**: Terrestrial, cultivated in hilly areas.

**Ethnomedicinal uses**:

Dried powder of seeds mixed with honey is taken orally to get relief from caugh.

* 5 nos. of *P. nigrum* grind with *Zingiber officinale* and mixed with lime. The paste so obtained is made tablet which is taken orally to cure spermatorrhoea.

**Established reports of uses in medicine**: It is stimulant, carminative and stomachic; taken in a larger quantities, it gives a feeling of warmth and causes sweating. It is also diuretic but can cause irritation in urinary tract. Certain experiments on seeds have shown antibiotic activity. It is externally used as tubefacient and as local application for sore throat, skin diseases and piles.

*Additional medicinal utility.*
SAURURACEAE

HOUTTUYNIA Thunb.


**Vern name**: Merendoh (J).

Prostrate, diffuse, aromatic herbs. Leaves ca 3.0-9.5 x 2.0-5.2 cm, ovate, acuminate, cordate at base, gland dotted, pubescent on nerves beneath; stipules lanceolate. Flowers in dense axillary spikes subtended by an involucre; involucre bracts white. Stamens 3, ca 0.3 cm long, anthers yellow. Styles 3. Fruits subglobose capsule.

**Fls. & Frts.**: June - August.

**Specimen collected**: Kachukhal part I, 11-06-09, Banasree Nath, Coll. No. 136.

**Habitat**: Terrestrial, occasionally, in moist places of the study sites.

**Ethnomedicinal uses**:

Leaf juice is taken orally in diarrhea.

**Established reports of uses in medicine**: Plant is used as preventive amoebic dysentery, specially after child birth. Plant is cooling, resolvent, emmenagogue; leaves are used in dysentery, measles, gonorrhoea, eye and skin troubles. In Chinese folk medicine the plant is used as antimicrobial and antitumor. An active principle effective in the treatment of stomach ulcers has been isolated.

CHLORANTHACEAE

CHLORANTHUS Sw. in Phil.


**Vern name**: Not known
Undershubs, erect. Leaves opposite, ca 5.0-13.0 x 2.0-7.0 cm, elliptic or elliptic-lanceolate, acuminate, narrowed down to the base, serrate, glandular. Flowers white, bisexual, in terminal panicles; bracts sheathing. Stamens 3, confluent. Stigma subsessile. Berries white, succulent.

Fls. & Frts.: June - December.


Habitat: Terrestrial.

Ethnomedicinal uses:
Leaf juice is used in stomach disorders.

Established reports of uses in medicine: Not so far recorded.

LAURACEAE

CINNAMOMUM Blume.


Vern. Name: Slaropyrriong (J), Tejpata (Beng).

Moderate sized, branchy tree. Bark rather rough, dark-grey or dark brown. Leaves alternate, sub-opposite or opposite, 6.0-17.0 x 2.0-6.0 cm, ovate-oblong or elliptic to oblong-lanceolate, 3 nerved at base, aromatic, glabrous, acute, acuminate with the tip, petiolate, pink when young. Inflorescence-panicle, pubescent. Flowers creamy white ca 75.0 cm across; perianth silky pubescent. Stamens villous, ovary free. Fruits ovoid, black.

Fls. & Frts.: February-May.

Specimens collected: Arun punji. 27-01-08. Banasree Nath. 90.

Habitat: Terrestrial, cultivated.

Ethnomedicinal uses: *Leaf juice is taken orally to increase sexual urge.

Established reports in Ethnomedicine: Bark and leaves used in gonorrhoea, diarrhea, colic pain, blood purifier, snake bite and enlargement of spleen.
*Additional medicinal utility.

THYMELIACEAE

AQUILARIA


Vern name: Agar (Beng).

Tall evergreen trees, upto 25 m in height; young shoots silky; bark white or grayish-white, warty. Leaves alternate, thinly coriaceous, linear-oblong or oblong-lanceolate, 5.0-10.0 cm. long, cordate-acuminate, base cuneate, shining. Flowers white, in many-flowered sessile or shortly peduncled, silky umbles; perianth 8.0 mm. long, densely villous within. Fruits obovoid, 4.0-5.0 cm. long, thinly velvety.

Fls.: June - August. Frts.: September – October.


Habitat: Terrestrial, wild.

Ethnomedicinal uses:
Leaves are crushed and made powder. It is applied over the gum to protect from inflammation.

Established reports of uses in medicine: Leaves powder is applied on gum to protect from inflammation (Nath, 2011).

EUPHORBIACEAE

BRIDELIA Willd.


Vern name: Otchait (J).

Big shrub to medium to large-sized tree, up to 10–20 m high, Leaves simple, rhombic-obovate, acute. Flowers pale green, in axillary or spicate sessile clusters. Drupes globose.
Fls. & Frts.: March – October.


Habitat: Terrestrial, wild.

Ethnomedicinal uses:
Bark juice is taken orally in dysentery.
Bark is also taken raw for chewing.

Established reports of uses in medicine: Root bark crushed with dry ginger (*Zingiber officinale*) and the filtrate given orally as an anthelmintic by Jatapus and Savarris. Fruits edible.

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**CROTON L.**


Vern name: Photka (Beng).

Erect herbs, branches falsely whorled; stem-solid, lower portion woody, terete, green with milky latex, covered with short stalked, rough, white, stellate hairs; lower internodes much longer. Leaf simple, alternate, crowded towards the tips of branches, extipulate, petiolate, densely stellate acuminate, base alternate to rounded, venation unicostate, pinnately reticulate. Flowers white, unisexual, interterminal erect spikes. Male flower fascicled above female in the axil of minute bracts of the racemes. Fruit regma, with persistent style and perianth, Seeds tipped with a small, cup like, white, oblong with a longitudinal nerve; endosperm fleshy.

Fls. & Frts.: Most parts of the year.


Habitat: Terrestrial, common along the road side.

Ethnomedicinal uses:
Leaf juice is used externally on fresh cuts and wounds to stop bleeding.

Established reports of uses in medicine: Juice of the young stem is useful in fresh cuts to stop bleeding.

**Vern name**: Guakpingpu (R)

Shrubs, branches scandent. Leaves broadly ovate, acuminate, base rounded or cordate, coarsely toothed. Sub-coriceous; petioles 1.0-2.0 cm. long. Racemes slender, pubescent, ca 12.0 cm. long. Flowers clustered; petals of male flower wooly; stamens 15-30; petals in male flower small. Capsules rusty, pubescent.

**Fls. & Frts.**: March – October.


**Habitat**: Terrestrial, wild.

**Ethnomedicinal uses**: 

Leaf juice is taken orally in cancer.

Stem and leaf juice is used externally in skin diseases.

*Leaf juice is also taken orally in stomach ulcers.

**Established reports of uses in medicine**: Decoction of roots used to relieve constipation. Leaves are used in sprains as poultice. Tender shoots used for cholera; gum from stem used to cure cataract.

*Additional medicinal utility.*

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**Vern name**: Houbum (R).

Middle sized trees, often gregarious. Bark grayish with fine reticulating vertical fissures; inside light pinkish to cream, aromatic. Leaves crowded at the ends of branchlets, elliptic-ovate or oblong-lanceolate, obtuse, sub-acute or bluntly acuminate, serrate or crenate, rather coriaceous, glabrous, dark green, covered with minute raised dots, pales beneath; lateral nerves 10-16 on either half, base narrowed into the petiole. Flowers pale yellowish green, solitary or fascicled, in the axils of
minute bracts, arranged in terminal or axillary racemes; upper males and lower females. Calyx segments 5, slightly connate, ovate, obtuse; petals 5, concave, oblong; stamens 12, inflexed in bud; Fruit sub-globose, 3 lobed. Seeds ellipsoid, smooth.

**Fls. & Frts.** : December – April.


**Habitat** : Terrestrial, wild.

**Ethnomedicinal uses** :
Tender leaves of *C. oblongifolius*, *Agle marmelos*, *Mangifera indica*, *Ocimum sanctum* and flower of *Hibiscus rosa-sinensis* are mixed together and made a paste and is taken orally in acidity.

Leaf of *C. oblongifolius* and leaves of *Mussaenda roxburghii* is boiled together. The water so obtained is taken orally or externally to cure histaria.

The plant is considered as holy plant by Rongmai Naga tribe.

**Established reports of uses in medicine** : Not so far recorded.

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**EUPHORBIA**


**Vern name** : Soh (J), Rangpan (R).

Shrubs or small trees, ca 5 m. high, stem corky when old, branches 5-angled. Leaves deciduous, thickly coriaceous, ovate, 6-12 x 3-6 cm. Cyathea small in dichotomous pendulous cymes; involucre hemispheric, yellowish, lobes large, reddish. Bractioles fimbriate.

**Fls. & Frts.** : December – May.


**Habitat** : Terrestrial, cultivated for medicinal purpose.

**Ethnomedicinal uses** :
Leaf juice is used to cure hoping cough.

* Juice of leaves are also taken in fever.

**Established reports of uses in medicine**: Latex acrid, rubefacient, purgative and expectorant, used to remove warts and cutaneous eruptions. Milky juice of the plant is used as expectorant. Root is used in scorpion sting and snake bite. Pith is burnt on fire and taken to kill intestinal parasites. The same is also used as purgative. (Rao and Jamir 1982).

*Additional medicinal utility.*

**Jatropha L.**


**Vern name**: Berenda (J & Beng).

Deciduous shrubs, ca 2.5 cm. high. Leaves suborbicular, *ca* 5.5-12.0 cm. 3-5 lobed, cordate at base, petioles 6.0-12.0 cm. long. Flowers *ca* 6.0 mm, unisexual monoecious, male flowers light green; sepals 5; petals campanulate, 5 lobed. Female flowers creamy yellow; calyx and corolla same as male flowers, stamens 10, biseriate, 2.0-3.0 mm long. Capsule globose or ovoid *ca* 3.0 mm, green.

**Fls. & Frts.**: May – November.


**Habitat**: Terrestrial, wild.

**Ethnomedicinal uses**:
Leaf extract is used against toothache.

**Established reports of uses in medicine**: Sap collected by breaking young stem is applied on fresh cuts to stop bleeding and also for antimicrobial action. The sap is applied once a day till healing. (Dutta Choudhury, 1999).

Latex of the stem is applied locally for curing toothache problems. Leaves are smashed and it is applied on burnt spot for burning sensation. Latex of the stem is also applied locally for few days on wounds of animals. (Nath, 2011).
**PEDILANTHUS**


**Vern name:** Rangachita (Beng).

Succulent, deep green, erect, perennial undershrubs with simple or branched. Zigzag stem. Leaves simple, glabrous, somewhat fleshy, elliptic-ovate to oblong, acute, acuminate or mucronate, entire, shortly petioled. Involucres red or pinkish-orange, irregular, slipper-shaped, born in dichotomous cymes with caduceus bracts.

**Fls. & Frts.:** January – July.


**Habitat:** Terrestrial, wild as well as cultivated.

**Ethnomedicinal uses:**
Leaf juice is used externally on fresh cuts and wounds to stop bleeding. Established reports of uses in medicine: Leaf paste is applied on forehead to cure headache. Root is powerful emetic.

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**PHYLLANTHUS**


**Vern name:** Sopala (J), Amlokhi (A & Beng).

Deciduous trees; bark grayish. Leaves *ca* 0.6-1.2 x 2.3-0.3 cm, oblong, obtuse to subacute, obliquely subcordate at base; stipules *ca* 0.1 cm long, ovate. Flowers greenish yellow, in axillary clusters. Sepals 6, *ca* 0.1 cm long oblong. Stamens 3, connate. Styles basally connate. Drupes *ca* 2.0 cm in dia., globose. Seeds 3-angled.

**Fls. & Frts.:** December – April.

**Specimen collected:** Lalpani Khasia punji, 23-02-10, Banasree Nath. Coll No. 146.
Habitat: Terrestrial, wild.

Ethnomedicinal uses:

Fruit is taken raw in dysentery.

*Bark of *Ziziphus mauritiana* and bark of *Phyllanthus emblica* mixed properly with leaves of *Averrhoa carambola, Azadirachta indica, Adhatoda vasica* and *Andragraphis paniculata*. The mixture so obtained is taken along with water in jaundice.

Established reports of uses in medicine: Fruits edible and taken in indigestion also; root extract taken in asthmatic trouble.

* Additional medicinal utility.


Vern name: Ratalau (R).

Erect or ascending herbs. Leaves ca 1.0-2.5 x 0.3-0.6 cm, linear-oblong, mucronate, rounded at base. Flowers white, in axillary clusters or solitary. Male flowers shortly pedicelate; sepals 6, ca 0.7 cm long oblong; stamens 3; anthers didymous, free. Females larger and longer than male; sepals as in male. Capsules ca 0.2 cm in dia., globose, long stalked.

Fls. & Frts.: June – November.

Specimen collected: Uttar krishnapur Rongmai punji, 23-08-07, Banasree Nath. Coll No. 41.

Habitat: Terrestrial, common along the road sides.

Ethnomedicinal uses:

Leaf extract is given orally to children to cure throat pain.

Established reports of uses in medicine: Not recorded so far.
**RICINUS L.**


**Vern name**: Varenda (J, Beng).

Shrubs soft wooded, *ca* 4 m high. Leaves alternate, large, peltate, orbicular, digitately lobed, lobes oblong, serrate, acuminate at apex. Panicles terminal. Flowers pale yellow, monoecious androgy nous. Male flowers crowded; calyx segments 3-5; stamens many, connate in several branched columns. Female flowers larger than males, styles 3, bipartite. Capsules oblong ellipsoid, covered with aril; seeds brownish, endospermous.

**Fls. & Frts.**: Throughout the year.

**Specimen collected**: Nagra Khasiapunji, 23-07-10, Banasree Nath. Coll No. 167.

**Habitat**: Terrestrial, grows wild in fields, gardens and waste places.

**Ethnomedicinal uses**: Slightly warmed leaves with mustard oil are used externally on body to get relief from muscular pain.

**Established reports of uses in medicine**: The oil obtained from the seed called castor oil is used as purgative and lubricant. It is also used as ointments as smoothing agent and as an oil vehicle in eye drops. Leaf applied to head to relieve headache and as poultice for boils. Roots are carminative, purgative and useful in leprosy. Flowers and fruits applied to treat obstinate wound. (Monadhar 1991). Leaf paste is applied on boils. Seed paste is used as an antidote to food poisoning (Megoneitso and Rao 1983).

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**URTICACEAE**

**STREBLUS**


**Vern name**: Shewra (Beng).
Pl.-64: *Piper nigrum* L.


Pl.-66: *Teucrium viscidum* Bl.

Pl.-67: Jaintia medicine man with *Homalomena aromatica* Schott.

Pl.-68: *Aquilaria malaccensis* Lam.

Pl.-69: *Sapindus mukorossi* Gaertn.

Pl.-70: *Bombax ceiba* L.

Pl.-71: *Zizyphus mauritiana* Lam.

Pl.-72: *Urena lobata* L.
Medium sized evergreen trees. Leaves ca 2.0-6.5 x 1.5-3.0 cm, elliptic obovate or rhomboid, acute, cuneate at base, rough, serrate, shortly petiolate; stipules linear-lanceolate. Flowers unisexual. Male flowers pale yellow, in globose heads, stamens 4. Female flowers solitary. Tepals 4, enlarged in fruits. Drupes ca 0.6 cm in dia. 1 seeded, covered by the enlarged perianth.

**Fls. & Frts.** : January - July.

**Specimen collected** : Pedlapunji. 20-02-08. Banasree Nath. Coll No. 67.

**Habitat** : Terrestrial, common along the roadside and also cultivated.

**Ethnomedicinal uses** :

Branch is taken locally to cure pyorrhoea.

**Established reports of uses in medicine** : The twigs are used generally as tooth brushes to cure pyorrhrea and toothache. Leaves are applied in skin diseases and milky juice also medicinal antiseptic, astringent, applied to chapped hand and sore heels. Decoction of bark is given in fever, dysentery and diarrhea. (Vardhana, 2008).

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**MORACEAE**

**ARTOCARPUS** Forst.


**Vern name** : Sohplai (J), Kathol (Beng).

Evergreen trees. Leaves ca 5.0-18.0 x 4.0-9.0 cm, elliptic or obovate, coriaceous, cuneate at base, dark green above, stipules large, caduceus. Flowers in cylindrical axillary and terminal heads, embraced by leathery caduceus sheath. Perianth 2-lobed. Stigma spathulate in female heads. Fruits oblong, tubercled.

**Fls. & Frts.** : March - August.


**Habitat** : Terrestrial, common along the roadside and also cultivated.

**Ethnomedicinal uses** :
Unripe fruit good for stomach.
Fruits edible.

**Established reports of uses in medicine:** Roots are used in diarrhea. Unripe fruit is astringent and the ripe fruit is laxative. Juice of the plant is applied in glandular swelling and abscesses to promote suppuration. Leaves are useful in skin diseases and as an antidote in snake-bite.
Young leaves are powdered and applied externally on tumor, till cured.

*Ficus clavata* Wall.

**Vern name:** Tyrsiang (J).

Erect shrubs, young parts scabrid. Bark grayish-brown; blaze white, with yellow streaks; exuding milky juice. Leaves alternate, oblong-lanceolate or oblanceolate, abruptly acuminate or caudate, upper leag coarsely toothed, lower half entire rather thinly coriaceous glabrous but harsh; lateral nerves 4-8 on either half; base obscurely 5-nerved, acute or cuneate. Male and Gall flowers intermixed in the same receptacle, pedicellate; perianth of both gamophyllous. Female flowers on different smaller receptacles; perianth gamophyllous campanulate, 5-toothed; style sub-terminal, elongate; stigma cylindrical or obovoid. Raceptacle axillary, solitary; globose, more or less scabrid, yellow when ripe, basal bracts very small.

**Fls.** : September – October, **Frts.** : May – June.

**Specimen collected:** Nunchuri majerpunji. 09-02-09. Banasree Nath. Coll No. 131.

**Habitat:** Terrestrial, common along the roadside.

**Ethnomedicinal uses:**
leaf juice is given orally to new born baby in stomach disorders.

**Established reports of uses in medicine:** Not recorded so far.

**Vern name**: Slaskesko (J), Kakdumur. (Beng).

Medium sized trees, branches fistular. Leaves oblong-elliptic, 8-12 x 4-6 cm; lateral nerves 6-10; petioles 1.5-2.0 cm. long, stipules lanceolate. Hypanthodia solitary, axillary, 2 cm. across, shortly peduncled, yellow when ripe.

**Fls. & Frts.**: March-August.

**Specimen collected**: Nunchuri major punji, Arun punji, Pedia punji, 09-02-09, 15-07-08, Banasree Nath. Coll No. 132.

**Habitat**: Terrestrial, wild.

**Ethnomedicinal uses**: Leaf juice is good for stomach.

**Established reports of uses in medicine**: Fruits, seeds and barks are purgative and emetic. Considered tonic, lactagogue and emetic. Fresh hypanthodia crushed and taken with common salt twice daily against mild cough.

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**Vern name**: Slalang thanisky (J). Dumur (Beng).

Deciduous trees; branches pale or reddish brown. Leaves alternate, ca 8.0-18.0 x 3.0-6.0 cm, ovate-oblong or elliptic-lanceolate, glabrous, acute, rounded or acute at base, entire stipulate. Receptacles ca 2.0-3.0 cm., subglobose or pyriform, stalked, clustered on trunk or leafless branches. Male flowers in 2-3 ring; stamens 2.

**Fls. & Frts.**: February – September.

**Specimen collected**: Machkhal. 21-11-09. Banasree Nath. Coll No. 103.

**Habitat**: Terrestrial, common along the roadside.

**Ethnomedicinal uses**: Leaf juice is taken in stomach disorders.

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Leaf juice is mixed with mustard oil, *Allium sativum* and *Areca catechu* and made poultice which is used to reduce pain due to bruning.

**Established reports of uses in medicine:** Root juice is taken orally for few days to control blood sugar. Unripe fruit juice is also taken for same purpose.

C 50 ml. root juice mixed with water is taken orally for one week to get relief from blood dysentery. (Nath, 2011).

Sap of root in diabetes, root in dysentery, leaves powdered and mixed with honey given in bilious affections (Vardhana, 2008).


**Vern name:** Chri (J), Ashwata Bot (Beng).

Large deciduous tress, branches spreading. Bark grayish with brownish speeks. Leaves alternate, orbicular ovate, entire or undulate, caudate-acuminate, coriaceous; petiolute, slender, terate; stipule minute, ovate, ovate-acute. Male flowers sessile, very few, often absent. Stamen 1. Sepals 3-4 in female and gall flowers, perianth segments 5, lanceolate; style short, lateral; stigma round. Receptacle ca 1 cm., subglobose, axillary, sessile, paired, dark purple when ripe, with 3 pubscents coriaceous broad basal bracts 3.

**Fls. & Frts.** March – September.

**Specimen collected:** Ramchandi 4 no. Khasia punji. 02-02-10. Banasree Nath. Coll No. 133.

**Habitat:** Terrestrial, common along the roadside.

**Ethnomedicinal uses:**

Dried bark is mixed with water and the filtrate is taken orally against vomiting.

**Established reports of uses in medicine:** Bark is astringent, useful in gonorrhoea. Bark infusion is useful in scabies. Plant is also used in bleeding piles, boils, mumps, burns, constipation, diabetes, diarrhea, female sterility, leucorrhoea, soreness in the mouth, menorrhagia, vaginal diseases and urino-genital disorders. Fruits are used as
laxative. Seeds are used as cooling agent. Leaves and young shoots are used as purgative.

**MORUS L.**

*M. acidosas* Griff., Notul. 4: 388, 1854; Kanjilal et al., Fl. Assam 4: 272, 1940.  
**Vern name:** Soniau (J), Tut (Beng).

Small deciduous trees. Leaves ovate-elliptic to ovate-lanceolate, caudate acuminate, 5.0-10.0 x 2.0-4.0 cm, sharply serrate, submembranous, scaberulous-glabrous, rounded or subcordate and 3-nerved at base; petioles ca 2.5 cm. Flowers unisexuals, monoecious, appear with leaves, male spikes short, lax flowered. Female spikes many ca 1.0 cm long, sepals 4, obovate; styles connate below. Fruits subglose, green turning black when ripe, aromatic.  
**Fls. & Frts.** : March – August.  
**Specimen collected:** Pedla punji, Rosekandi Khasia punji, 11-12-09. Banasree Nath. Coll. No. 140.  
**Habitat:** Terrestrial, wild.  
**Ethnomedicinal uses:**  
Ripe fruits is taken in stomach disorders.  
**Established reports of uses in medicine:** Fruits are aromatic, cooling, laxative; bark is anthelmintic. Leaves decoction used in gargling during inflammation of vocal cords. Roots are anthelmintic and astringent.

**TURNERACEAE**

**TURNERA**

*Turnera ulmifolia* L.  
**Vern name:** Thadneg (J).  

Perennial, dense, compact shrubs 2½ feet in height. Dark green leaves are clustered toward the tips of the branches, lanceolate to oblong-lanceolate or
narrowly elliptic, 4-13 X 2-3 cm, margins doubly serrate. Flowers are bright yellow buttercups, which look great against the dark-green foliage. The blowers might be slightly brownish towards the center.

**Fls. & Frts.** : April – May.


**Habitat** : Terrestrial, cultivated as ornamental plant.

**Ethnomedicinal uses** :
Leaf juice is applied locally over boils.

**Established reports of uses in medicine** : Not recorded so far.

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**MONOCOTYLEDONS**

**ORCHIDACEAE**

**PAPILIONANTHE** Schltr.


**Vern name** : Not known.

Epiphytes; stem branched, monopodial, long erect or arched, many noded, cylindric, green; roots long, simple or branched. Leaves terete, 4.0-8.0 cm long, green. Raceme lateral, 2-4 flowered; peduncle stout, 3-4 noded, *ca* 8.0 cm long., simple; rachis *ca* 2.0 cm long, zigzag. Flowers showy, 6.0-8.0 cm across, violet-purplish white; bracts *ca* 2.5 cm suborbicular, *ca* 3.5 cm across; lip 3 lobed, *ca* 4.0 x 5.0 cm, light pink with dark crimson spotted lines; side lobes elliptic, encircling the column; midlobe ovate.

**Fls. & Frts.** : April – May.


**Habitat** : Terrestrial, grows on tree trunks as epiphytes.

**Ethnomedicinal uses** :
Stem juice is used to get relief from rheumatic pain.
Established reports of uses in medicine: Aerial roots cut into pieces pounded and made to a paste. The paste is then applied in the form of poultice over fractured bones after placing them in proper place. Bamboo splits are tied around the bone to check further displacement. (Dutta Choudhury, 1999).

**ZINGIBERACEAE**

**ALPINIA** Roxb.


**Vern name:** Tara (Beng).

Perennial herbs, rhizomatous; leafy stem ca 2.25 m high. Leaves ligulate 25-50 x 7-10 cm, oblong-lanceolate, sharply acuminate apex and acute to acutely rounded base. Flowers bracteate, pinkish white with pink bracts, sepals greenish white. Lip cuneate, clawed, pink, emerginate, with 2 subulate glands at the base. Capsules globose ca 2 cm. in diam.

**Fls. & Frts.**: April – August.

**Specimen collected**: Rupacharra Khasia punji, 09-05-10, Banasree Nath. Coll No. 181.

**Habitat**: Terrestrial, commonly found along streams and on the bank of ditches.

**Ethnomedicinal uses**:
Extract of the fresh rhizome is applied locally on cuts as antiseptic.

**Established reports of uses in medicine**: Rhizomes are used in rheumatism, fever and catarrhal specially in bronchial catarrhal. It is also used as stomachic, stimulant and aphrodisiac.
COSTUS L.


**Vern name**: Jummothium (R).

Tall herbs; stem somewhat spirally twisted, leafy, fleshy; rootstock creeping, tuberous. Leaves spirally arranged, ca 12.0-30.0 x 4.0-6.0 cm, elliptic or obovate or oblanceolate, acuminate, subsessile, silky pubescent beneath. Flowers white, large, in terminal globose or ovoid spikes; bracts ca 2.0 cm long, ovate, reddish. Calyx 3 toothed. Petals elliptic. Stamens 1 perfect, hairy at base. Capsules globose, trigonous with persistent calyx at top.

**Fls. & Frts.**: July - October.

**Specimen collected**: Ragailuang Rongmai punji, 11-06-08. Banasree Nath. Coll. No. 92.

**Habitat**: Terrestrial, common in moist shady places.

**Ethnomedicinal uses**:

*Root juice is mixed with milk and taken orally against leucohrrea.

**Established reports of uses in medicine**: Decoction of root is given orally to cure urinary troubles and to dissolve stones. (Kumar, 2002).

Root of the plant is warmed and it is applied insert into ear to discharge pus. (Nath, 2011).

*Additional medicinal utility.*

CURCUMA L.


**Vern name**: Keturi (J).
Rhizomatous, aromatic herbs. Leaves ca 20.0-60.0 cm long, oblong, acuminate, narrowed down into long petioles, pubescent beneath. Flowers pale yellow, in many flowered long pedunculate spikes; bracts ca 3.5 cm long. Corolla lobes 3, oblong. Stamens 1 perfect. Lip yellow, orbicular. Capsules ovoid, trignous.

Fls. & Frts. : April - August.


Habitat : Terrestrial, grows wild and under cultivation.

Ethnomedicinal uses :
Rhizome extract is given as pain killer.

Established reports of uses in medicine : Rhizome is good for muscular pain.


Vern name : Sermit (J), Haldi (Beng).

Rhizomatous herbs, rhizome much branched, yellow inside. Leaves large, 25-55 x 8-15 cm; oblong, acuminate, narrowed at the base, glabrous; petioles shorter than blade. Spikes ca 10 cm long. Flowers purplish white, epigynous, equaling the bracts; corolla tube ca 2.5 mm long, lobes white; staminodes creamy with yellow medium band; lip yellow.

Fls. & Frts. : July – September.


Habitat : Terrestrial, cultivated in the kitchen garden and also in the jhum field.

Ethnomedicinal uses :
Juice of rhizome is taken orally to kill the worms.
The juice of flower is given to cow after delivery to stimulate mammary gland.

Established reports of uses in medicine : Rhizome is used in aromatic, stimulant, tonic and flatulence. (Kumar, 2002).
**GLOBA**


**Vern name**: Leechang (J), Junglihalud (Beng).

Perennial herbs with creeping rhizome and erect stem. Leaves subsessile, oblong-lanceolate, acuminate, pubescent beneath. Flowers yellow, calyx funnel shaped, 3-lobed. Corolla lobes reflexed, staminodes petaloid, oblong lip bifid, filaments long, slender, appended; anthers with bifid wings. Ovary globose, glabrous, placenta parietal. Capsules subglobose.

**Fls. & Frts.**: May – September.


**Habitat**: Terrestrial, common in forest areas.

**Ethnomedicinal uses**:
Extract of rhizome is taken orally to get relief from bodyache.

**Established reports of uses in medicine**: Roots are used in headache.

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**HEDYCHIUM**

*Hedychium spicatum* Buch. Ham. Ex Smith.

**Vern name**: Galam (R), Bon haldi (Beng)

Perennial rhizomatous herbs. Leaves oblong or oblong lanceolate up to 30 cm, very variable in breadth, glabrous. Spike dense flowered, bracts large oblong, calyx shorter than the bracts. Flowers white.

**Fls. & Frts.**: Not known.


**Habitat**: Terrestrial, grows wild and under cultivation.

**Ethnomedicinal uses**:

*Root is taken raw in stomachache.

**Established reports of uses in medicine**: Used as spice and grown as garden herbs.

*Additional medicinal utility.*
ZINGIBER


Vern name: Gha (R), Ada (Beng).

Rhizomatous herbs, aromatic, stems erect, slender, 60.0-90.0 cm high. Leaves distichous, long radical, lanceolate, gradually tapering to apex. Spikes ca 6.0 cm long. Flowers greenish, stamens dark purple, as long as the lip; filaments shorter than the anther.

Fls. & Frts.: July – October.


Habitat: Terrestrial, cultivated in homegarden.

Ethnomedicinal uses:

Rhizome is taken raw to get relief from caugh and cold. Rhizome is mixed with Piper nigrum and lime which is used in spermatorrhoea.

Established reports of uses in medicine: Stem used in migraine and dry ginger contains protein, fat, fibre, carbohydrate, minerals, vitamins A, B and C. It is used in mind diarrhea, colic and dyspesis. Also it is used for veterinary purposes. (Vardhana, 2008). Rhizome extract mixed with Ocimum basilicum is taken internally as a remedy for headache. (Nath, 2011).

MUSACEAE

MUSA


Vern name: Lede (J), Kala (Beng).

Stoloniferous shrub up to 2-4.5 m high. Pseudostem composed of convolute leaf sheaths. Leaves very large with parallel venation, spirally arranged forming a compact crown, at the top oblong. Inflorescence from the centre of pseudostem
Pl-73: *Cyanthula prostrata* (L.) Bl.

Pl-74: *Citrus reticulate* Blanco.

Pl-75: *Alstonia scholaris* (L.) R. Br.

Pl-76: *Diplazium polypodeoides* (Retz.) Sw.

Pl-77: *Eleusine indica* Gaertn.

Pl-78: *Oroxylum indicum* L. Vent.


Pl-80: Investigator with Rongmai Naga medicine man

Pl-81: *Papilionanthe teres* (Roxb.) Schltr.
developed directly from the rhizome; peduncles hard, bearing condensed spikes, pendent. Flowers creamy yellow, lower female, upper male in dropping spathaceous spikes. Sepals 3 adnate to 2 petals. Split on one side, third petals free concave. Stamens 5; stigma capitate. Fruits 3 gonous, oblong, yellow when ripe.

Fls. & Frts. : Once in a year.

Specimen collected : Rupacharra Khasia punji, 18-07-08, Banasree Nath. Coll No. 98.

Habitat : Terrestrial, cultivated in homegarden.

Ethnomedicinal uses:
Cooked green fruits, stem sap are taken in dysentery and diarrhea.

Established reports of uses in medicine: Unripe fruits along with other drugs are used in diabetes. Ripe fruit is antiscorbutic, used as a mild demulcent, astringent in dysentery. Sap of stem are tonic; useful in blood and venereal diseases. Root is anthelmintic. Flowers astringent and juice of the core of pseudostem is used in haemoptysis.


Vern name : Lede (J), Ramkola (Beng).

Stem 4-5 ft., very slender. Leaves 2 ft., thin, bright green; petiole 1 ft. or more. Bracts densely pubescent externally. Flowers in an erect or decurved spike, subunisexual, lower female, upper male, lower usually 3-fld., male flower 6-9 in a cluster. Calyx 1½ in. Fruit 2-3 in., pale yellowish green, variegated with red. Seeds irregularly cubical, black, tubercled.

Fls. & Frts. : July –November.


Habitat : Terrestrial, wild.

Ethnomedicinal uses :
Stem sap is used in cuts for early healing.

Established reports of uses in medicine: Juice extracted from the stem used for dysentery. (Hynniewta, 1984). Tender leaf is applied on the affected place in order to stop the growing of excess muscles due to occurrence of piles.

*Additional medicinal utility.

CANNACEAE

CANNA L.


Vern name: Kolaboti (Beng)

Rhizomatous erect herbs. Stem purplish. Leaves large, oblong lanceolate 30 x 11 cm. Flowers in simple raceme, red ca 10.0 cm. Sepals 3, small ca 1.0x2.0 cm. Petals 3, red, ca 4.0x1.0 cm. Outer staminal segments 3, bright red, oblanceolate; labellum ovate acuminate wide at anterior portion; two lateral staminodes slightly larger; ½ anther fertile rest petaloid. Ovary worted, trilocular, placentation axile.

Fls. & Frts.: February – June.


Habitat: Terrestrial, cultivated as ornamental plant and also found in forest.

Ethnomedicinal uses:

Fresh roots are pounded along with water and made a paste and it is taken orally to cure fever.

Established reports of uses in medicine: Roots are diaphoretic, diuretic and used in fever and dropsy. Stalks cut into pieces and boiled with rice water and pepper given to cattle as antidote.
MARANTACEAE

SCHUMANNICANTHUS Gagnep.


Vern name: Murta (Beng).

Tall shrubs. Leaves ca 10.0-17.0 x 4.0-7.0 cm, elliptic-oblong, lanceolate, cuspidate, rounded at base. Flowers white, large, paired in lax terminal panicles; bracts narrow. Sepals 3, ca 2.5 cm. long. Petals 3, ca 2.8 cm. long. Staminal tube cylindrical; segments petaloid. Fruits subglobose. Lobed.

Fls. & Frts.: May – September.


Habitat: Terrestrial, common along swampy areas, shady forest in the plains area and as forest undergrowth.

Ethnomedicinal uses:

*Tender leaves are cut into thin pieces and boiled in 1 lit. of milk and made kheer. Then it is taken thrice daily after meal. It is very rich in vitamins.

Stem is warmed and it is applied on ear of the children for earache.

Established reports of uses in medicine: Lower portion of the stem is warmed and it is applied on ear of the children for earache problem.

*Additional medicinal utility.

BROMELIACEAE

ANANAS

Vern name: Kihuan (R), Anaroa (Beng).

Monocarpic, polymorphic, the head crowned with a tuft of leaves, terrestrial herbs to under shrubs. Leaves rosette forming long, spiny serrate, base sheathing. Scalp short. Flowers blue, small, sessile, bisexual. Fruit a syncarpium with bulbils at its tip.

Fls. & Frts.: March – August.


Habitat: Terrestrial, commonly found in forest area.

Ethnomedicinal uses:

Fruit is taken for abortion purposes.

*The piece of leaves are chewed and is bind tightly on the head to get relief from one sided headache.

Established reports of uses in medicine: Unripe fruit is taken for abortion and fruit juice is taken against antiscorbutic.

*Additional medicinal utility.

AMARYLLIDACEAE

CRINUM L.


Vern name: Krapiap (J), Ghuran (Beng).


Fls. & Frts.: June – December.

Specimen collected: Nagra Khasia punji, 28-12-10, Banasree Nath. Coll No. 208.

Habitat: Terrestrial, grows in sheady areas.

Ethnomedicinal uses:
Extract of bulb is given to the cow to cure diarrhea.

Established reports of uses in medicine: Bulb is given to cow to cure diarrhea.

**DIOSCOREACEAE**

**Dioscorea L.**


Vern name: Bon alu (Beng).

Large twinning herbs; bulbils axillary tubercled. Leaves simple, alternate, *ca* 4.0-17.0 x 2.8-15.0 cm, broadly ovate-cordate, acuminate; petioles *ca* 3.0-10.0 cm long. Male flowers in pendulous, axillary panicked spikes. Female flowers 3-4 together in axillary spikes. Capsules quadrately oblong.

Fls. & Frts.: July - December.


Habitat: Terrestrial, common in forest areas.

Ethnomedicinal uses:

Juice of tuber is taken orally to cure dysentery.

Cooked tuber is used as vegetable.

Established reports of uses in medicine: Tubers are also uses in syphilis, piles and dysentery. Dried tubers are pounded and applied to cure ulcers. Tuber and bulbils are edible.

**Drymaria Willd. ex Roem & Schult.**


Vern name: Not known.

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Pl-83: *Zanthoxylum budrunga* Wall.

Pl-84: *Tetrastigma obovatum* (Lawson.) Gagn.

Pl-85: *Clerodendrum indicum* (L.) Kurtz.

Pl-86: Investigator with *Camellia sinensis* (L.) O. Kuntz.

Pl-87: *Bauhinia acuminate* L.

Pl-88: Investigator in front of B.S.I.

Pl-89: Investigator in front of F.R.I.

Pl-90: *Drynaria quercifolia* (L.) J. Smith.

Pl-91: Investigator in front of B.S.I.

Pl-92: Investigator in front of F.R.I.
Diffuse or suberect herbs; rooting nodes. Leaves ca 0.5-2.5 x 0.4-1.8 cm. ovate-cordate, elliptic or orbicular, mucronate, sessile, sparsely pubscent; stipules bristly. Flowers white, ca 0.5 cm long, in axillary or terminal long peduncled cymes; bracts linear, membranous. Sepals ca 0.3 long, pubscent outside. Petals ca 0.3 cm long, each deeply 2 partite. Stamens 5, ca 0.2 cm long. Capsules ovoid, trigonous.

Fls. & Frts.: March – September.


Habitat: Terrestrial, common, in moist places of the study sites.

Ethnomedicinal uses:

*Leaf extract is applied locally on ringworm.

Established reports of uses in medicine: Plant used as vegetable; leaf extract taken in menstruation trouble.

*Additional medicinal utility.

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LILIACEAE

**ALLIUM L.**


Vern name: Piaz (Beng).

Herbs bulbous, subterranean, bulbs covered with pinkish white or purple brown dried perisistant leaf sheaths, with stimulant sap and pungent smell. Leaves radical and basal, several, cylindric, fistular. Flower dense in large umbles on long hollow peduncle, white; peduncle longer than leaves, 25-50 cm.; umbles subtended by 2-3 reflexed bracts, petals linearly lanceolate. Stamens exerted.

Fls. & Frts.: January – March.


Habitat: Terrestrial, commonly cultivated in kitchen gardens.

Ethnomedicinal uses:
Bulb is fried in ghee and it is poured into the honey for overnight. Next morning it is taken orally in empty stomach which gives immense energy.

Bulb juice is also taken orally to cure fever.

**Established reports of uses in medicine**: Bulb is stimulant, diuretic, expectorant and aphrodisiac. It is also used in flatulence and dysentery.

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**ALLIUM L.**


**Vern name**: Enamfuanmai (R), Rasun (Beng), Lasan (H).

Herbs bulbous, subterranean with several bulblets enclosed in a silky white envelop. Leaves several from base, flat, long pointed. Flowers dense in capitulate, small umbles on terete peduncle, white peduncles longer than leaves, 30 cm. Tepals linear lanceolate, acute; anthers and style sterted.

**Fls. & Frts.**: January – March.

**Specimen collected**: Nagra Khasia punji, 23-07-07, Banasree Nath. Coll No. 20.

**Habitat**: Terrestrial, cultivated.

**Ethnomedicinal uses**:

Bulb is taken orally to reduce high blood pressure.

Paste of the bulb is mixed with the paste of *A. cepa* is applied externally on the affected area to cure from cat bite.

Juice of bulb is heated slightly and is applied externally on ear to reduce earache.

*2 Bulb is taken after food for 1 month/40-45 days to reduce diabetes.

**Established reports of uses in medicine**: Bulb is carminative, sphyrodisiac, expectorant and stimulant. It is also used in fever, cough, febrifuge and intermitten fever. Juice is used as rubefacient in skin diseases and as ear drop in earache. It is also useful in dyspepsia and flatulence.

*Additional medicinal utility.*
ALOE L.


Vern. Name: Ghritkumari (Beng).

Nearly acaulescent, stoloniferous herb with yellowish brown cell sap. Leaves in a basal rosette, numerous, 25-60 cm long, erect, narrowly lanceolate, acuminate, glaucose-green, having marginal spines. Scape simple or branched. Flowers yellow. Perianth tubular. Stamens 6, filaments slender, trilocular, with many ovules in each locule. Style filiform. Stigma capitate.

Fls. & Frts.: July - September.

Specimen collected: Uttarkrishnapur, 14-02-08. Banasree Nath. 68.

Habitat: Terrestrial, cultivated in the home garden.

Ethnomedicinal use:

Leaf juice is used externally to increase glow of skin and also get rid of pimples of face.

Established reports in Ethnomedicine: Fresh leaf juice cathartic, cooling and useful in fevers, spleen and liver disorders and externally applied in certain eye diseases. Leaf juice of plant is also used against tuberculosis.

ASPARAGUS L.


Vern name: Satmul (Beng).

Straggling or scandent spinous undershrubs; root tuberous. Cladodes in tufts of 2-6, aricular, falcate, ca 1.5-2.5 cm long, triquetrous. Flowers white, in short solitary or fascicled racemes. Perianth 6 partite, petaloid. Berries globose.

Fls. & Frts.: October - January.


Habitat: Terrestrial, wild.

Ethnomedicinal uses:
Root extract taken in stomach disorders.

Established reports of uses in medicine: Root extract taken in epilepsy and also in nerve weakness.

**DRACAENA**

*Dracaena spicata* Roxb.; Fl. 2. 157; Fl. Brit. India 6.328.

Vern name: Tor (J).

Stout shrubs. Leaves alternate, petiolate, very broadly. Flower whitish, interminal races, panicles, in fascicles; bracts small. Stamens 6, adnate to the base of perianth tube; filament filiform or glattened; anthers versatile. Carpels 3, connate in a 3-celled ovary; ovules solitary; erect in each cell; style filiform; stigma capitate. Berry orange red, testa thickened; embryo small.

Fls. & Frts.: October - March


Habitat: Terrestrial, wild.

Ethnomedicinal uses:

Juice of the leaves are applied on the fracture as bandage.

Established reports of uses in medicine: Decoction of the plat is one of the ingredient for the treatment of irregular menstruation trouble of women. (Das, A.K. 2006).

**PONTEDERIACEAE**

*MONOCHORIA* Presl.


Vern name: Kachuripapa (Beng).
Perennial fresh water, marshy and aquatic herbs. Stem erect or oblique. Leaves sagittate, hastate or cordate, acute or obtuse; petioles sheathing. Flower pale blue-violet, long pedicelled; inflorescence racemose. Perianth 6; stamens 1 large 5 smaller, appended at base. Capsules, subglobose or oblong, within persistent perianth.

Fls. & Frts.: March – November.


Habitat: Aquatic.

Ethnomedicinal uses:
Fresh leaf juice is used in boils.

Established reports of uses in medicine: Plant is alterative, tonic and cooling, used in insanity. Leaf juice is applied on boils. Root stocks and rhizomes are powdered with charcoal and used for scurf.

ARECACEAE

ARECA L.


Vern name: Kuai (J), Supari (Beng).

Evergreen tress, unbranched, erect, annulated, upto 15 m. high. Leaves in terminal crown, pinnatisect with the upper segment, petiole with broad clasping base. Flowers unisexual, in spadix; spathes 3, deciduous. Spadix intrafoliar much branched, rachis stout. Male flowers very small on filiform tips of branches. Female flowers solitary at the bases and axils of branches. Fruits 1-seeded nuts, ovoid exterior fleshy, orange, base enclosed in perianth cup.

Fls. & Frts.: May – November.

Habitat: Terrestrial, common in wild areas and also cultivated.

Ethnomedicinal uses:
Young leaf extract and juice is applied in toothache. Fruit is also used for the same purpose.

Established reports of uses in medicine: A paste obtained by crushing dehasked nut is mixed with crushed tuberous roots of Curculigo capitulate and applied locally on fresh cuts as haemostat. (Dutta Choudhury, 1999).

COCOS L.


Vern name: Sonikor (R), Naikol (Beng).

Large unarmed palm. Leaves crowded at the top of trunk, ca 2.0-3.0 m long, pinnate, drooping; leaflets 1.0 m long, linear-lanceolate. Spadix interfoliar. Flowers polygamous, monoecious. Nut large, ca 12.0-18.0 cm in dia., 1 seeded with fibrous pericarp.

Fls. & Frts.: Most part of the year.


Habitat: Terrestrial, cultivated.

Ethnomedicinal uses:
Karnel of the fruit is edible which gives strength to the body.

Established reports of uses in medicine: Not recorded so far.

ARACEAE

AGLANEMA


Vern name: Wang cherh (J).

Herbs, caudex elongate, ½ in. thick, nodes. Leaves ovate or oblong, thinly coriaceous, dark green above; base rounded or cuneate and unequal-sided; nerves
very slender. Spathe cymbiform, dark green. Spadix long-stipitate; male and female inflorescence usually contiguous, with rarely neuters interspersed; ovaries few, flagon shaped, narrowed into a conical style. Seeds ½-1 in. long, cylindric.

**Fls. & Frts.:** March - July.

**Specimen collected:** Nunchuri major punji , 11-05-09, Banasree Nath. Coll No. 104.

**Habitat:** Terrestrial, wild.

**Ethnomedicinal uses:**

Tuber is used in constipation.

**Established reports of uses in medicine:** Roots are pounded in a mortar and the juice so obtained is taken orally for few days to get relief from malaria. (Nath, 2011)

**ALOCASIA (Schott) G. Don.**


**Vern name:** Chetonromam (J), Kachu (Beng).

Stout herbs; root stock *ca* 60.0-100.0 cm high. Leaves large, *ca* 45.0-80.0 x 20.0-55.0 cm, broad-ovate, sagittately cordate, repand; basal lobes rounded; petiole stout *ca* 60.0-120.0 cm long. Flowers monoecious. Spathes *ca* 15.0-25.0 cm long, greenish yellow

**Fls. & Frts.:** April – August.

**Specimen collected:** Lalpani Khasia Punji , 11-06-08, Banasree Nath. Coll No. 109.

**Habitat:** Terrestrial, common in homestead complex and in shady places in forest.

**Ethnomedicinal uses:**

Tuber extract is taken in constipation.

**Established reports of uses in medicine:** Plant is used is skin trouble. Rhizome is aromatic, yields an essential oil, stimulant.
COLOCASIA Schott in Schott and Endl.


Vern name: Tetrasopiang (J), Kachu (Beng).

Herbs with root stock and stolons. Leaves cordate or sagittate at the base, peltate, triangular, ovate; base lobes sub-rounded. Petioles ca 30-95 cm. long, green or dark purple blotched. Spathes ca 15-25 cm. long, pale yellow, caudate acuminate. Fruits many seeded berry.

Fls. & Frts.: June – September.


Habitat: Terrestrial, common in homestead complex and in moist places along roadside.

Ethnomedicinal uses:
*Cooked tuber is used as vegetable to cure goiter. Shoot is used to cure jaundice.

Established reports of uses in medicine: Juice of the petiole is styptic, stimulant and rubifacient. Corm extract is used in alopecia and scorpion sting. Taro-lactin and Taro-malt prepared from flour, are good food for infants. The root-stolon, if eaten raw cause irritation in the throat and stomach. The unripe fruits are also acrid and advised not to eat. Root stock also causes kidney diseases and marked degeneration of adrenals.

*Additional medicinal utility.

HOMALOMENA Schott.


Vern name: Chetonronsopiang (J), Gandhi Kachu (Beng).
Rhizomatous herbs. Leaves entire. Petioles ca 25.0-30.0 cm. long, peduncles ca 8.0-12.0 cm., spathe usually erect, convolute. Spadix included, male and female flower inflorescences close together, cylindric, ovaries with or without clavate staminodes. Stamens distinct, 4 in dense groups. Ovaries ovoid or globose, perfectly or imperfectly 3-celled. Stigma sessile, ovules 2 serrate or the placenta anatropus. Berries many seeded. Seeds small, ovoid, albuminous, embroyo axile.

**Fls. & Frts.:** April – August.

**Specimen collected:** Pedla Punji, 28-03-11, Banasree Nath. Coll No. 207. (Pl.-67).

**Habitat:** Terrestrial, common in homestead complex and in shady places in forest.

**Ethnomedicinal uses:**
Juice of rhizome mixed with little water is taken orally to promote urination.

**Established reports of uses in medicine:** Plant is used is skin trouble. Rhizome is aromatic, yields an essential oil, stimulant.

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**CYPERACEAE**

**CYPERUS L.**


**Vern name:** Ghash (Beng).

Perennials 0.3-8.0 cm. high rhizome short or long creeping. Stems 5-19 together, 1.0-2.0 cm. apart, trigonous. Leaves 1-4, much shorter than to equaling stem. Inflorescence capitate. Spikes solitary. Stamens usually 3, sometimes 1-2. Nuts obovoid.

**Fls. & Frts.:** August - December.

**Specimen collected:** Ramchandi Bagan, 11-06-08. Banasree Nath. Coll No.-122.

**Habitat:** Terrestrial, common, in moist and dry places.

**Ethnomedicinal uses:**
Whole plant is pounded and made paste in the mortar. It is applied for one week as a remedy for nail infection.
Established reports of uses in medicine: Roots are used for poulticing sore legs.

POACEAE

BAMBUISA Schre.


Vern name: Bakal (R and Beng)

Densely caespitose bamboos. Clums green, smooth, white ringed below the nodes. 7-14 m tall. 4.0-8.0 cm in dia. Leaves linear-lanceolate, 15.0-30.0 cm long, 2.5-3.7 cm broad. Rounded or alternate at the base in to a short petiole, tip a twisted scabrid point; margins scabrous, secondary veins 7-10 intermediate 8-9, pellucid glands frequent; leaf sheaths striate, hairy when young. Spkieleets 2.0-6.5 cm long with few fertile florets.

Fls. & Frts.: Not known.


Habitat: Terrestrial, cultivated in the homegarden also found along the roadside.

Ethnomedicinal uses:

Bark juice is taken orally in urinary problems.

Established reports of uses in medicine: Not recorded so far.


Vern name: Bansh (Beng).

Leaves linear-oblong or lanceolate, nodes not swollen, spikelets in interrupted clusters mixed with chaffy bracts. Palea shorter cymbiform; anther obtuse glabrous, ovary obovate-oblong.

Fls. & Frts.: Rare.


Habitat: Terrestrial, common in forest.

Ethnomedicinal uses:
Stem juice is used to cure snake bite. Used to make houses and roof by the stem.

**Established reports of uses in medicine**: Powder of stem is applied locally against snake bite, dog bite. (Nath, 2011).

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**COIX L.**


**Vern name**: Sarupsahkhola (J), Koyaloli (Beng).

Annual or perennial spongy grasses, tall, robust, often rooting at lower nodes. Leaves cordate at base, with a glabrous membranous ligule, spinous at margins. Racemes consisting solitary basal female spikelet and several male spikelets upwards with glume hardly or narrowly winged. Female spikelets surrounded by a hardened bracts. Clumese lanceolate. Caryopsis ovoid, enclosed in involucre.

**Fls. & Frts.**: July – September.


**Habitat**: Terrestrial, wild.

**Ethnomedicinal uses**:

Stem and seeds are cut into pieces and are used externally in astring around the neck against jaundice.

**Established reports of uses in medicine**: The roots and grains are useful in menstrual disorders and as blood purifier, tonic and diuretic. The grains are also used for affection of air passage and urinary tract.

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**CHRYSOPOGON**

*Chrysopogon aciculatus* (Retz.) Trin., Fund. Agrost. 188. 1820.

**Vern. Name**: Soborthep (J), Lengra (Beng).
Vigorous creeping grasses with stout, tough rhizomes, the culms ascending to 45 cm. Inflorescence a small panicle, 7.5-10 cm long, with numerous slender branches. Spikelets narrow. Awn bristly, short and fine. The branches at first ascend almost vertically, spread obliquely at flowering and then bend upward again at fruiting. Each branch has three spikelets at its tip, one sessile and two pedicelled.

**Fls. & Frts.:** December-March.

**Specimens collected:** Dinonathpur, Nagra, 27-01-09. Banasree Nath. 114.

**Habitat:** Terrestrial, common along the roadside.

**Ethnomedicinal uses:** Root juice is taken to cure urinary problems.

**Established report in Ethnomedicine:** Not recorded so far.

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**CYNODON Rich.**


**Vern. Name:** Sladubba/Dubri (J), Samprasampri (R), Durba (Beng). 

Stem widely creeping, prostrate and rooting at nodes. Leaves compress sheath, linear-lanceolate, ligule ciliate. Inflorescence 2-6 digitate spike, purple coloured stigma. Glumes lanceolate; lemma 3-nerved; caryopsis oblong.

**Fls. & Frts.:** December-March.

**Specimens collected:** Dinonathpur, Nagra, 27-01-09. Banasree Nath. 114.

**Habitat:** Terrestrial, wild.

**Ethnomedicinal uses:** Leaf is used in cut as antiseptic. Leaf juice is used externally on cut to stop bleeding.

*Leaf juice is taken orally to reduce excess menturation of wome.*

**Established report in Ethnomedicine:** Plant is diuretic, astringent, used in dropsy, epilepsy, insanity, hysteria, diarrhoea and dysentery. Plant useful in catarrh of ophthalmia. Rhizome is used in genitourinary troubles. The plant is also a constituent of the Ayurvedic formulation.
*Additional medicinal utility.

**DESMOSTACHYA** Stapt. Dyer.


**Vern name**: Not known.


**Fls. & Frts.**: July-December.

**Specimen collected**: Ramchandi 4 no. punji. 03-8-08. Banasree Nath. Coll No. 89.

**Habitat**: Terrestrial, common along the roadside.

**Ethnomedicinal uses**: Leaf juice is taken orally in spermatohorrea.

**Established reports of uses in medicine**: Not recorded so far.

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**ELUSINE** Gaertn.


**Vern name**: Trakorpu (J), Monu (Beng).


**Fls. & Frts.**: July - November.

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**Specimen collected**: Ramchandi 4 no. punji. 16-07-09. Banasree Nath. Coll. No.-129.

**Habitat**: Terrestrial, common, in open place of the study sites.

**Ethnomedicinal uses**:
*The whole plant along with root is crushed and given to children in dysentery. Stem juice is applied locally on earache.*

**Established reports of uses in medicine**: Rhizome is crushed into paste with the tuber of *Stephanis glabra* and applied locally to cure itches.

*Additional medicinal utility.*

**OPLISMENUS** P. Beauv.


**Vern name**: Mia prot (J).

Perennial grass. Culms ca 30.0-90.0 cm long, decumbent, rooting at base. Leaves lanceolate, hairy below; sheath ciliate; ligule short, ciliate. Inflorescence a panicle of 3-5 one sided racemes. Spikelets ca 0.3-0.4 cm long, lanceolate. Lower floret barren. Caryopsis dorsally compressed.

**Fls. & Frts.**: August–December.

**Specimen collected**: Nunchuri majer punji. 11-05-09. Banasree Nath. Coll No. 188.

**Habitat**: Terrestrial, wild.

**Ethnomedicinal uses**:
Leaf extract is applied locally on cuts and wounds for early healing.

**Established reports of uses in medicine**: Not recorded so far.
**SACCHARUM L.**

*Saccharum officinarum* L., Mant. 183, 1771; Hook.f., Fl. Brit. India 7:118, 1896; Bor, Fl. Assam 5:315. 1940.

**Vern name**: Kihuar (J), Kushiar (Beng).

Succulent, perennial, erect grassl rhizome thicks; culms solid, upto ca 3.0 m high. Leaves linearly oblong, coriaceous, rigid, acuminate, sheaths auricled, ligule ovate. Panicle of spikelets tufted. Pedicels ciliate. Spikelets 3-5 mm. long, lower floret empty, upper bisexual.; glumes lanceolate, acuminate, palea ovate, ciliate.

**Fls. & Frts.**: February - May.


**Habitat**: Terrestrial, cultivated in different parts of the study area.

**Ethnomedicinal uses**:
Stem juice is taken against dysentery.
Juice of stem is also taken in jaundice.

**Established reports of uses in medicine**: Juice is diuretic, laxative, aphrodisiac and having cooling effect. Roots are diuretic, cooling and demulcent, useful in low blood pressure.

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**THYSANOLAENA Nees.**


**Vern name**: Rema (Beng), Diensuro (J), Naushi (R ).

Perennial grass. Culms ca 100-250 cm long, erect, reed like, solid at base.

**Fls. & Frts.**: October-April.

**Specimen collected**: Arun punji, 21-11-08, Banasree Nath. Coll No. 54. (Pl.-65).
Habitat: Terrestrial, wild.

Ethnomedicinal uses:
Stem juice is applied to eyes in eye problems
Established reports of uses in medicine: Decoction of root is used as mouth-wash in fever. Juice of the young stem applied to eyes when it is red and dirty.

PANICACEAE

PANICUM L.


Vern name: Lapaicheng (J).

Perennial, culms stout upto 2.0 m. high, erect, soft, smooth and glabrous; nodes glabrous. Leaf blades linear-lanceolate from a cordate base, 20.0-40.0 cm. long by 2.0-4.0 cm. broad, tapering to a fine point, many nerved, midrib distinct, smooth and glabrous; branches somewhat erect, branchlets hairy, numerous, crowded. Spikelets 2.5-3.0 mm. long, lanceolate in profile. Lower glume orbicular, obtuse, clasping the base of the spikelet 1.25 mm. long, upper glume ovate-lanceolate when flattened, tip acute, 5-nerved, 2.5-3.0 mm. long. Lower floral male, lamma 2.5 mm. long ovate-lanceolate, tip acute, 5-nerved.

Fls. & Frts.: September – January.


Habitat: Terrestrial, common in the plains..

Ethnomedicinal uses:
Whole plant is used as forewood.
Established reports of uses in medicine: Not recorded so far.
PTERODOPHYTES
GLEICHENIACEAE

DICRANOPTERIS


**Vern name**: Rosco (J).

Terrestrials. Rhizome long creeping, about 0.4 cm. thick, densely covered with hairs, scales absent; hairs minute, multicellular, reddish-brown. Stipes about 11.0-28.0 x 0.1-2.5 cm, slender, straggling, rigid and polished; apical bud covered by brown hairs and stipule like small, 1.0 cm. long, lobed bracts. Fronds about 2.0 m. long, pinnate or dichotomously branched, lanceolate, apex acute or acuminate, deeply pinnatifid, nearly reaching up to the costa; segments narrowly linear or subulate, margin curved, deeply covered with brown hairs; rachis repeatedly forked, covered with dark brown hairs; costae and costules sparsely hairy; veins prominent, 2-forked lamina light green; texture hard. Sori small, globose, without paraphyses, in 2 rows on both sides of the costa. Spores numerous trilette, deeply grooved.

**Sporulation**: June- July.


**Habitat**: Terrestrial, common along the roadsides.

**Ethnomedicinal uses**:

*Frond juice is given to hen to kill the worms.

**Established reports of uses in medicine**: The plant is antimicrobial.

*Additional medicinal utility.*
POLYPODIACEAE

DRYMOGLOSSUM


Vern name: Dam (R).

Epiphytes, rhizome wide creeping, widely, densely sealy; scales dark brown, ovate-pellate. Fronds dimorphic glabrous, fleshy, membranous, shortly stipulate; stipes upto 1.5 mm. long, densely covered with rhizome scales; sterile pinnae thick., coriaceous, orbicular, ovate to elliptic 1.5-2.5 x 1.0-1.5 cm rounded at apex, cuneate at base; fertile pinnae linear to oblong, 5.0-6.0 x 1.5-2.0 cm. Sori linear coifluent oblong both sides of the margin; sporangia oval, shortly stalked, spores oval to elliptic, hyaline, exine tuberculate.

Sporulation: April - August.


Habitat: Terrestrial, common on tree trunk of exposed areas and on humus deposite of rocks.

Ethnomedicinal uses:

Leaves are pounded and applied externally on one sided headache.

Established reports of uses in medicine: Paste obtained by crushing pinnae and applied externally in the form of poultice on fractured bones after setting up the bones. Bamboo splints are usually tied around so as to prevent displacement of fractured bones. (Dutta Choudhury, 1999).

DRYNARIA Willd. ex Roem. & Schult.


**Vern name**: Pankiraj (Beng).

Epiphytic ferns. Rhizome creeping, scale linear, cordate, dark brown. Fronds dimorphic; sterile fronds overlapping at the base of fertile fronds; fronds when young simple with undulating margin, fertile fronds ovate to oblanceolate, pinnatisect, stipitate. Sori small, globose, scattered throughout the surface of lamina in between lateral veins, dorsal, superficial along veinlets. Sporangia round, slender stalk. Spore oval hyaline, light brown, exine with minute blunt projection.

**Sporulation**: May – July.


**Habitat**: Terrestrial, common on old tree trunk.

**Ethnomedicinal uses**: Frond paste is applied externally in fresh cuts and wounds to stop bleeding.

**Established reports of uses in medicine**: Plant is used in pthisis, hectic fever, dyspepsia, cough and as tonic. Rhizome is bitter, astringent. Aqueous extract possess antibacterial properties. Fronds are used for poultice on swellings. Rhizome is used to treat bone-fracture, headache, cough and typhoid fever.

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**SCHIZAEACEAE**

**LYGODIUM** Sw. in Schard.


**Vern name**: Lulangpan (R), Bhutraj (Beng).

Climbing ferns. Fronds glabrous; leaflet pinnate, simple or terminal leaflet forked, basal leaflets large separate or lobed; fertile leaflet narrower than steile...
ones. Sori protruding from the margin of the pinnules ca 1 cm. long. Sporangia large, stalked, arranged in 2 rows.

Fertile: January-December.

Specimen collected: Languangluang Rongmai punji, 14-11-08, Banasree Nath. Coll No. 81. (Pl.-59).

Habitat: Terrestrial, common in forest edge.

Ethnomedicinal uses:
Frond extract is applied externally in skin diseases.

Established reports of uses in medicine: Fresh root is boiled with mustard oil and used as local application in carbuncle, externally in rheumatism, sprains, scabies, eczema and cut-wounds. Plant is expectorant and is also used in high pressure.

ATHYRIACEAE


Vern name: Dheki saak (Beng).

Terrestrials. Rhizome erect about 1.0 cm. thick, stout, densely scaly at the apex; scales linear-lanceolate, apex acuminate, hair-tipped, fibrillose, dark brown. Stipes about 30.0-95.0 x 2.0 cm, tufted, stout, sparsely scaly at the base, muricate, all over the surface, dark brown to blackish at base, grey-brown above. Lamina 120 x 80 cm. broadly lanceolate, tripinnatifid; primary pinnae about 10 pairs, alternate shortly stalked, oblong-lanceolate, apex acuminate, secondary pinnae upto 25 pairs, sub-opposite to alternate, sessile or shortly stalked, margin deeply toothed or serrate; costules and veins slightly distinct; texture thin, herbaceous; lamina dark green, glabrous. Sori upto 0.5 cm. long. Linear, oblique, in two rows on each lobe; indusia thin, membranaceous, margin fimbriate brown, exine smooth.

Sporulation: July- January.

Habitat: Terrestrial, common on the roadsides and also cultivated in homestead garden.

Ethnomedicinal uses:
Fronds juice is very useful for blood purification and it is also used as vegetable.

Established reports of uses in medicine: It is used as laxative.

SINOPTERIDACEAE

CHEILENTHES


Vern name: Slityrkhang (J).


Spotulation.: May – August.


Habitat: Terrestrial, common in shady roadside cuttings.

Ethnomedicinal uses:
Paste of fronds are applied on cuts or wounds as poultice for early healing.

Established reports of uses in medicine: Fronds are cut into pieces made to a paste and applied on abscess in the form of poultice to liberate pus and also used as antiseptic. The poultice is given once a day till abscess is cured (Dutta Choudhury, 2000)