

RARE MEDICINAL PLANTS OF ASSAM

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ABSTRACT: *Thirty endangered plants of Assam are mentioned in this report. Some measures to ward off the threat are also suggested.*

Assam is an evergreen state. Enormous medicinal plants and herbs have made her evergreen. The ancient Indian scholars and saints, through their deep contemplation, realization, observation and research work have described the medicinal value of almost all the plants, different product of animal kingdom and mineral and their indications in different diseases.

Though such medicinal plants were originally used by the practitioners of Indian system of medicine, nowadays the scientists and research workers of the world, working in the field of medicine, have established that there are numerous plants which have been proved to have excellent and positive effect on different critical diseases. That is why at present the pharmacopocia of the advanced nations like U.S.S.R, U.S.A., Great Britain etc. have about 25 % to 40 % of drugs of plant origin.

About 80% of the ingredients of the Indian system of medicine is shared by the plants. In Assam there are more than 200 medicinal plants, some of which like **kuchila (Nux-vomice) Surpagandha, kalmegh** etc. have got very good expert value despite their extensive uses in the country itself.

But, as the general people are not aware of their uses and potentialities, some are

growing and dying unused, some are being destroyed willfully by the people for the purpose of animal feeding, fuel etc. and some are being burnt and cut down to clear the jungle.

Such rare or scarce medicinal plants have got the very good demand for the preparation of both modern and Ayurvedic drugs.

While the present authors were on survey tour of medicinal plants took note some of the rare medicinal plants of Assam

1. **Andrographis Pandiculate** Nees **Kalmegh Kalmegh**

Botanical Description: Erect, annual herb with square stem, Leaves-opposite, pointed at both ends, Flowers Small, white, Fruitpcapsuler, glabrous on maturity.

Flowers and Fruit – 8.5.

Part used: - Whole plant.

2. **Acorus Calamus L. Vaca Boch**

Botanical Description: Aromatic marshy herbs with creeping and much branched rhizomes, leaves – distichous, Flowering Shoots supported by a large leaf-like

structure called spathe, Flower small, pall-green, Fruits yellowish in colour. Part used:- Rhizome.

3. **Asparagus racemosus Willd Satavari-Saimul**

Botanical Description: Perennial prickly climber, Flowers white in recemes. Fruit-berry red, Roots many. Flowers 9-10, Fruit-Winter season Part used:- Root.

4. **Bacops monnieri (L) Pennell Brahmi Bhahmi**

Botanical Description: Creeping herb, branches several, ascending, leaves-Fleshy, opposite, apex obovate, roots arise at the nodes of the stem, Flowers-White, arise in the axils of the leaves, capsules-ovoid, seeds numerous, Flowers – 9. Part used:- Whole plant.

5. **Boerhaavia diffuse L. Punarnava Purnarnaba**

Botanical Description: Creeping herb with speeding bhranches stem with opposite, broadly ovate leaves, one leaf in the pair is bigger than the other base of the leaves cordate, lower surface of leaves whitish, upper green, Flowers in small clusters pink,

Fruit with 5 ridges, glandular.
Flowers – 4-8 Fruit 7-8
Part used: - Whole plant.

6 **Butea Monosperma Kuntza Palasha Palsa...**

Botanical Description: Tree, Bark-rough, bluish grey, Leaflets-Broad, elliptic, Flower, Bright orange, red, pod-pendulous, seeds-oval compressed, dark brown.

Flowers 2-3. Fruit 6-7, Part used: - Seed, Bark and fruit.

7. **Cryptolepis buchanani Roem & sch. Krisnmariva, shymalata**

Botanical Description: Evergreen twiner, bark smooth, Leaves- elliptic-oblong, acute, Flower-pale yellow, seeds compressed, oblong.

Flowers 5-7, Fruits-Cold season. Plant used:- Root.

8. **Holarrhena antidysenterica wall Kutaja Dudhkuri**

Botanical Description: Shrub or small deciduous tree with White milky latex, Bark-

Rough, soft, brown, Leaves-opposite, elliptic, acuminate, glabrous, Flowers-white,

Fruit-long, cylindric, seeds-linear, tipped with a cluster of brown hairs.

Flowers 4-6, Fruit – Cold season Part used:- Root, Bark and seeds.

9. **Mesua ferrea L, Nagakesara Nahar**

Botanical description: Evergreen trees, Bark grey, Leaves opposite lanccolite, long- acuminate, glabrous, Flowers-very fragrant white, fruit-ovoid, pented, 1-4 seeded.

Flowers 4-5 Fruit 8-10

Part used:- Flowers and anthers.

10. **Piper longum L., Pippali Pipoli**

Botanical Description: Aromatic herb, trailing on ground also climbing on tree, leaves

Ovate-oblong, acuminate,

Inflorescence a spite, Flowers, minute, Fuite-Fleshy, black

when ripe.
Fruit – 9,
Part used:- Fruit and Root.

11. **Plumbage zeylanica L.**
Swetachitraka Boga-Agyachit

Botanical Description: Under shrub, stem, glabrous, Leaves ovate acute, Flowers- White, Capsule oblong. Splitting upwards in to 5 values.
Flowers – 8-9, Fruit – Cold season
Part used:- Root.

12. **Rauwolfia serpentine Benth, ex Kurz**
Sarpagandha Sarpagangha

Botanical Description: Erect evergreen herbs, bark pal brown, Leaves-Whorled, gradually tapering into a short petiole, Flowers White (Tube usually pinkish) in small clusters, Fruit, small, round, smooth, black when ripe.
Flowers 4-10, Fruit 7-1.
Part used:- Root.

13. **Semecarous anacardium Linn. f**
Bhallatak Bhola

Botanical Description: Deciduous tree, Bark-darkbrown, Leaves-oblong, nerves 16-25 pairs, bracts, lanccolate, Flowers greenish white, Fruit oblong smooth, shining, black, capsule-orange red.
Flowers 7-9 with new leaves, Fruit 12-3
Part used:- Fruit

14. **Strychnos nux-vomica L. Visha-**
Mushti Makurijab, Kuchila.

Botanical Description: Large tree, leaves broadly elliptic acute glabrous,

shining, Flowers-white, Fruit-Globose, yellow orange.
Flowers 3-4, Fruit Cold season.
Part used: - Seed

15. **Sarace indica L. Ashoka, Ashok**

Botanical Description: Evergreen tree, bark-brownish, Leaves-alternate, glabrous leaflets four pairs flower-Fragrant, orange red in clusters, pod-tapering at both ends, seeds 2-8, ovoid slightly compressed.
Flowers 2-4, Fruit 5-9
Part used: - Bark

16. **Terminalie arjuna W & A Arjuna,**
Arjun

Botanical Description:- Large deciduous tree, bark light grey, smooth, wood brown leaves-oblong,sub. Opposite rounded at both end: Flowers yellow with Fruits-ovoid, divided into valves.
Flowers 4-5, Fruit 7-8
Part used:- Bark.

17. **Wedelia calendulacea** less
Pitabhringi, Bhringaraj

Botanical Description: Herb, stems thinly glabrate; leaves sub-entire, crenate, variable in breadth, hairs on both surfaces.
Flowers – yellow.
Part used:- Whole plant.

18. **Operculine Turpethum (L) Tribrit**
Teuri, Lath

Botanical Description: Climber with milk juice, stem quadrangular; Leaves cordate, Flowers-White; capsule-globose, normally 4 seeded.

- Flowers 10-12, Fruit 1-2
Part used:- Root
19. **Mucuna Pruite** HK **Atmagupta**
Bandarkekowa
- Botanical Description: A twining annual climber; leaves pinnately 3 foliate Leaflets ovate, grey silky beneath, Flowers dark purple; pod 5-6 seeded ends curved in opposite directions, covered with dense pale brown bristles.
Flowers 1-3, Fruit 4-5
Part used:- Seed.
20. **Elaeocarps ganutrus** Roxb.
Rudraksha Rudrakha
- Botanical Description: Tree bark-greyish brown; Leaves-oblong Lanceolate, acute, Racemes drooping; Flower-white, Drupe-Globose, deep blue, stone normally 3-celled
Flowers 3-6, Fruit 11-12
Part used: - Fruit.
21. **Desmodium Gangoticum** DC
Salaparni Salparni
- Botanical Description: Erect under-shrub; Leaves – 1, foliate, striate, Leaflets-acute, obovate, glabrous, racemes; longer slender Flowers purplish white; pod-Falcate, joints 6-8, usually cotted with minute hooked hairs.
Flowers: 9-10, Fruit 10-12
Part used:- Root.
22. **Cissampelos pareir** L. **Patha**
Topaurilota
- Botanical Description: Climber with woody root; Leaves-orbicular, 5-7 nerved, yellow
Before falling, base cordate; Drupe-globose, hirsute, scarlet when ripe.
Flowers 10-1, Fruit 3-5
Part used:- Whole plant.
23. **Caesalpipe Crista** L. **Latakarnja**
Letaguti
- Botanical Description: Prickly perennial shrubs; Leaves stipules large, leaflets 6-10 pairs on each pinna, opposite oblong, Flower-light yellow; linear oblong beaked pods; seeds 2-3 testa very hard shining lead coloured. Flowers-Rainy season, Fruit – Cold season
Part used:- Seed and leaves.
24. **Barringtonia acutangula** (L) Gaertn
Dhatrifa Hiddal
- Botanical Description: Small tree, wet-loving; Bark grey to Black; leaves alternate, crowded at the end, ovovate, glabrous; Flowers fragrant elongate pendulous racemes; Fruit-bluntly quadrangular oblong, 1 seeded.
Flowers 3-7; Fruit 6-7
Part used:- Fruit and seed
25. **Baliospermum montanum** Muell-Arg. **Danti Danti**
- Botanical Description: Shrub, Leaves alternate, strongly veined acute, cordate; Bark-brownish, Flowers monoecious, capsule-ovoid 3 lobed; seeds –oblong.
Flowers and Fruit – Throughout the year.
Part used:- Root and bark.

26. **Aloe vera** Tourn. Ex. L.
Ghritakumari Chalkunwori

Botanical Description: Herb, stem short, thick, leaves-lanceolata, erect scedling spiny toothed at the margin, acute branched , perianth reddish yellow and green cylindrical, Fruit – 1 loculidical capsule.

Part used:- Leaf (Juice and dried juice)

27. **Acacia catechu** Wald **Khadira Khair**

Botanical Description: Deciduous tree, Bark-rough brown leaflets usually 30-50 pairs, Flowers-Creamy white, pod Flat, orbicular.

Flowers 4-6, Fruit 11-2

Part used:- Bark, wood (extract of heart wood) Twigs.

28. **Corton tiglium** L. **Jaypala Koni-bih**

Botanical Description: Small evergreen tree, Bark-Grey, Leaves ovate acute, more or less-serrate, glabrous, capsule obovoid, whitish seeds, pale brown, oblong.

Flowers- Hot season. Fruit - Cold season.

Part used:- Seed.

29. **Hydnocarus** **Kurzil** Warb.
Chaulmoogra Chaulmugra

Botanical Description: Tree, Bark grey, brown or black, Leaves-oblong rounded at base, Flowers-pale-yellow, scented, fruit-globose always on the trunk, seeds oblong.

Fruit – 11

Part used:- Seed

30. **Ichnocarpus frutescens** R.Br. **Sariva Anantamul**

Botanical Description: A woody twining climber, Leaves-lanceolate to ovate, acute, Flowers white, fragrant, 3-4 mm. long, Follicles 5-15 cm long.

Flowers 4-6, Fruit 10-12

Part used:- Whole plant.

Impending danger for their existence

Due to the following facts all those valuable plants are gradually going to extinct:-

- (1) Due to lack of knowledge of the potencialities of these plants, the common people destroy them willfully for the purpose of fuel and fodder.
- (2) Some are being burnt down or cut down for clearing the jungle.
- (3) Some are growing and dying unused due to lack of collection.
- (4) Shifting cultivation on the vast areas of forest land which steadily extinct the natural resources.
- (5) Rapid deforestation.
- (6) Injudicious and unscientific collection of several rare plants by the agents of business concerns.
- (7) Indiscriminate cutting down of trees by mischievous contractors enjoying political patronage.
- (8) Cutting down of trees by the underground marketers for getting valuable essence or precious wood like **Agaru, Nahar, Bhela** etc.

Means and ways for preservation and cultivation

1. A thorough and complete survey is to made for the availability of these plants and herbs both in plains and hills. The common people must be made conscious of the value of the plants and herbs are available in their respective localities.

2. Some paramedical staff must be trained for their collection time to time, as the different parts of the plants are to be collected in different seasons as per their availability and maturity.

If a reasonable price is paid to the common people for their collection, they will no doubt be much inspired for their preservation.

3. The social forestry may bear an important share for plantation of different medicinal and fruit bearing plants like Amlaki, (**Emblica officinalis** G), Jamu (**Syzygium cumini** (L) Skeels) etc. which are the sources of different natural vitamins and minerals.

4. The forest department also may take the responsibility to prevent the indiscriminate extinction of plants. Some valuable plants like **pipali**, **marich** etc. may be planted in the forest areas.

5. The state Govt. also must come forward to accept the financial help for establishment of the medicinal plant gardens in different areas in the state.

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