# Wild Edible Fruits of Meghalaya



**Bio-Resources Development Centre Upper Shillong** 

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## BOGBOGBOG

# Preface

Wild Edible fruits play a crucial role in the tribal communities of Meghalaya. They provide a means of food and nutrition to the local population and are of great importance in view of their contribution to the local economy of the rural population of the State.

The 45 wild edible fruits included in this booklet are not exclusive but a lot more can be incorporated. The Centre acknowledges the Planning Department, Govt. of Meghalaya for the support in the generation of this Booklet. It is hoped that the contents of the Booklet provides knowledge to the people of the State and inculcates in us a temperament to upscale the potential of the wild edible fruits as a source of livelihood to the rural community in our State.

Introduction:

Meghalaya, a small State in the north eastern region of the country is rich in bio-diversity. It has a high magnitude of landscape heterogeneity and climatic gradient making the state a key biotic sub-province and life supporting system for a myriad of life forms. It is endowed with rich genetic resources of horticultural, medicinal, food and feed, forestry and industrial value. The forest cover is 17,275 sq. Km which is 77.02% of the State's geographical area (FSS 2011). The tribal population in the State, which consists of the Khasis, Garos and the Jaintias, are very strongly connected with nature and the forests. The forest products serve for their daily needs particularly food.

Wild edible fruits play a significant role in the dietary requirements of the tribal population in the State, especially the rural population. These fruits are often brought to the market for sale usually as seasonal fruits and are source of additional income to the rural people.

This booklet is an attempt to bring into focus the potential of these underutilized wild edible fruits. Most of them are very rich sources of vitamins, minerals, and other nutrients such as carbohydrates, proteins and fats. Since, the wild edible fruits have a long history of consumption, the local people are aware about their nutritional and medicinal properties. In spite of their contribution to the economy of the rural people, the wild edible fruits have not been brought into horticulture promotion programmes. They are neither grown commercially on large scale nor traded widely. It is therefore time to develop strategies to scale up production through domestication, overcoming constraints of production of good seed material, planting material, in-vitro/tissue cultured material etc. This would boost production, meeting local needs, promoting domestic markets and thereby, enhance income generation of small farming communities.

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## 1. Aegle marmelos L (Rutaceae) Local name: Soh bel Distribution: Ri-Bhoi District

**Description :** Large deciduous tree with a lax, oblong, oval crown; bark reddish-brown or brownish grey, often fluted with thorns at base; leaves up to 15 cm long; leaflets 4-9 x 1.5- 3.5 cm, elliptic, elliptic lanceolate, oblanceolate, acuminate, base narrowed, cuneate, crenate, glaborous or glabresent; flowers 2-2.5 cm



across, yellowish; calyx obscurely lobbed, rounded; petals oblong, deflexed; 1-1.5 c long; stamens basifixed, anthers nearly equaling the length of the filaments; stigma club-shaped; berries 5-10 cm in diameter, pulpy.

#### Flowers & Fruits: March- May (next year).

Uses: Fruits are edible and used for making juice. Fruits also have medicinal properties and are used in diarrhea, dysentery, nausea, jaundice, gastric troubles. Leaves used for treating diabetes and contains essential oil.

#### **Economic value: NA**

Actinidia callosa L (Actinidiaceae)
 Local name: Mie soh-khan, Mie- jaior (K).
 Distribution: Sub-tropical forests of Khasi Hills.
 Description: A deciduous climber or straggling shrub growing to 9m.Leave s ovate oblong or obovate, finely acuminate generally cuneate at the base. Flowers whitish, polygamous or dioecious in few flowered axillary umbellate cymes. Sepals and petals 5 each. Stamens many. Ovary obong, villous celled.



Uses: The ripe fruit is acidic and eaten.

#### **Economic value: NA**

3. Aglaia edulis (Meliaceae) Local name: Diengsohlongor (K) Distribution: Common in tropical evergreen forests.

**Description:** Tall trees: crown dense; bark grayish-brown, smooth; leaves 19-35 cm long; leaflets 5-9; 7-17 x 2.5-4.5 cm, lanceolate, oblanceolate, oblong-lanceolate, acute or subacute, base acute to rounded, entire, glabrescent at maturity, rusty tomentose when young; nerves obscure above; panicles rusty



tomentose; flowers minute, yellow, 1-2 mm across; calyx lobes minute, ovate; petals ovate-oblong; fruits subglobose, yellowish, pulpy.

Flower & fruits: April-November.

Uses: Fruit are eaten- raw or cooked with very delicate and acidic flavour. The fruit can be dried. The fruits are grayish-green when fully ripe (18 - 50mm long).

#### **Economic Value: NA**

### 4. Artocarpus heterophyllus (Moraceae) Local name: Dieng soh-phan Distribution: Commonly found to grow wild in Meghalya.

**Description:** Large trees with oval, dense crown; bark dark grey, blackish-brown, scaly with white patches; leaves 5-20 x 4-10 cm, obovate, obovate oblong, obtuse, retuse or shortly acute, base obtuse, cuneate, coriaceous; stipules 2-4 cm long, glabrescent; receptacles greenish, obovate, cylindric; mature ones 30-70 cm long, sharply pointed, tubercled.

#### Flowers & Fruits: February-October.



**Uses:** Fruits are edible, seeds are cooked as vegetable, unripe fruits used for pickling.

**Economic Value:** Ripe fruits are sold at the rate of Rs.40-90/ fruit depending on the size.

5. Averrhoa carambola L (Averrhoaceae) Local name: Soh pyrshong Distribution: Cultivated and occasionally run wild in lower elevations particularly in sandy soils.

Description: Small trees up to 10m high; crown compact, ovoid; bark blackish or dark-grey, horizontally wrinkled; leaves 7-18 c long; leaflets 1-7 x 0.7-3.5 cm, (terminal largest), ovate, ovaye –elliptic, rhomboid or oblong-elliptic, acuminate,



base truncate or cuneate, often oblique; panicles up to 10cm across; flowers axillary 3-5 mm long, white or purple, pentamerous Stamens 10, unequal.

Flowers & Fruits: September- February

**Uses:** The fruit is edible and made into stew, curries and pudding. Slightly green ones are used in making jam and jelly. The fruit are laxative, refrigerant and anti-scorbutic.

Economic value: The fruits are sold in local market at the rate of Rs. 100-120/ Kg.

Baccaurea sapida (Roxb) Muell.-Arg.
 Syn. B. ramiflora Lour. (Euphorbiaceae)
 Local name: Dieng soh ramdieng
 Distribution: Common in Meghalaya.

**Description:** Trees small or middle sized, young parts having bark dark grey with vertical tentacles. Leaves 10-20 cms.long obovate, elliptic obovate or oblanceolate, acuminate, glabarous, membranous, narrowed at base,



petiole long, geniculate, thickened at both ends. Flowers dioecious, apetalous. Shortly pediceled in densly fascicled, hairy tomentose racemes from old wood and branches. Male flowers sub sessile, solitary, or grouped on very small lateral branches of raceme in the axils of stipular bracts. Calyx lobe four, sepals yellow tomentose, Stamens 4-8 free anthers small, pistillode 3 lobed pubescent. Female flowers yellow in simple racemes, elongating in fruits, orange tomentose with two ovules in each cell stigma peltate, fimbriate. Fruit globose, yellowish brown. Seeds planoconvex with white aril and red testa.

**Uses:** The fruits posses a pleasant acid taste. Fruits are used for making wine. The flowers and leaves are also said to be eaten. : Leaves and bark are used for dyeing

#### **Economic value: NA**

 Casearia zeylanica (Flacourtiaceae)
 Local name: Diengsohlor-maw (K), Bolduiagrang (G).

Distribution : Common in Meghalaya upto 1000m.

**Description:** Trees up to 20m high; bark gray, grayish-white, smooth or nearly so; leaves



8-15 x 2-3.5 cm, narrow, lanceolate or oblong- lanceolate, acuminate, acute, base slightly oblique, cuneate, obscurely serrate or sub-entire, shining above; inflorescence glabrescent; flowers yellowish ca. 2-3 mm across; sepals ovate; stamens united at base; capsules 5-7 mm long, allipsoid; seeds red, arillate.

**Uses:** The fruits are edible. Decoction of roots used in diabetes and piles. Roots and bark are astringent.

#### **Economic value: NA**

8. Castanea sativa (Fagaceae) Local name: Soh-ot-heh Distribution: Cultivated in Shillong

**Description:** Middle sized treeswith a gradually spreading crown; bark blackish or dark brown, scaly, reticulately fissured; leaves 12-25 x 4-8 cm, broadly oblong, oblong elliptic, acuminate, base rounded, often oblique or subcordate, glaucous



and pubescent beneath, lateral nerves ending in spinous serrature, spikes greenish or creamy white, 12-20 cm long, usually unbranched; female at base; fruits 4-6 cm in diameter, densly long spiny.

Flowers & Fruits: May- November

Uses: The fruits are edible.

Economic Value: The fruits are sold in local markets at the rate of Rs. 100/ Kg.

 Castanopsis indica (Fagaceae)
 Local name: Chhakkhu-khokrak (G); Diengsoh-ot-rit, Soh stap (K); Dieng-sarang (J)
 Distribution: Common in evergreen forests throughout the State.

Description: Large trees with much spreading, umbrella-shaped crown; bark grayish, deeply vertically fissured, scaly, young parts rusty tomentose; leaves 6-20 x 2-9 cm, oblong-



elliptic, oblong lanceolate, acute or obtuse, base rounded or obtuse; male spikes laxly branched; female solitary, simple, brown tomentose; cupule 2-4 cm across, densely covered with spines, brown when ripe.

Flowers & Fruits: February- December. Uses: Fruits are edible

Economic Value: Fruits are sold in local markets at the rate of Rs.80-120/ Kg.

**10.** Castanopsis hystrix (Fagaceae)

Local name: Diengsohstap(K), chaukhu(G) Distribution: Very common in Meghalaya, forming canopy trees in association with Castanopsis tribuloides.

Description: Large trees; yunng parts pubescent; bark grayish-cinnamon brown, horizontally wrinkled; leaves 7-18 x 2-5 cm, oblong- lanceolate, lanceolate-ellipic, acuminate, base cuneate or rounded, sparingly toothed towards the tip; tomentose when



young; spikes panicled, 5-10 cm long; involucres covered by short, stout spines, 1-2 cm across; nuts obscurely 3-angled.

Flowers & Fruits: Nearly throughout the year.

## 11. Citrus hystrix (Rutaceae) Local name: Soh kyniet, Soh-kymphor (K) Distribution: Meghalaya

**Description:** A tree upto 20 m or more in height and 1m. girth, spines ascending. Leaflets ovate elliptic or lanceolate obcordately obvate or oblanceolate in shape, retuse at the apex, dark green, glabrous, punctuate with oil gland dots. Flowers white or light purplish axillary, solitary



or in few flowered short cymes. Stamens 20-25, filaments free, stout, ovary globose. Stigma large.

**Uses:** The fruits are edible and resemble small pumelo. The fruits also have insecticidal properties.

12. Citrus latipes (Rutaceae)
 Local Name: Soh kymphor
 Distribution: Grown in semi-wild form at an altitude below 900 m.

Description: Commonly called "Khasi papeda", is found in the Khasi Hills. It is a small, thorny tree that closely resembles both kaffir limes and Ichang papedas. The leaf blades are variable in size and shape and with the tips subacute or even bluntly rounded, not apiculate or



subcaudate with blunt points as in C. ichangensis. The flowers, are sometimes borne in small axillary racemes with 5-7 flowers and are much smaller. The fruits are borne singly and resemble those of C. ichangensis except for having a thicker peel, of which the inner layer is chalky white just below the outer green layer. The seeds are also smaller and more numerous than those of C. ichangensis and are arranged 5-7 in each segment. Though rarely eaten, and extremely rare in cultivation, the fruit is edible.

Uses : Fruits are edible.

Economic Value : Fruits are sold in local markets at the rate of Rs.20-25/ Kg.

## 13. Citrus macroptera (Rutaceae) Local Name: Soh kwit Distribution: Grown in semi-wild form at an altitude below 900 m, respectively.

**Description :** Citrus macroptera is so-named because of the large "wings" (-ptera) on the petiole, which is as large as the blade of the leaf. The tree, which has thorns, can reach 5 m in height. Its fruit is about 6–7 cm in diameter, has a fairly smooth, moderately thick rind, and



is yellow when ripe. The pulp of the fruit is greenish yellow and dry (does not produce much juice). The juice is very sour, and somewhat bitter.

**Uses** : The fruit juices are medicinal and used for local application to bring down fever. The inner-coat is used for making curry.

**Economic Value :** Fruits are sold in local markets at the rate of Rs.10-15 per fruit depending on the size.

## 14. Citrus medica L (Rutaceae)

Local name: Sohmad Distribution: Commonly cultivated throughout Meghalaya

**Description:** Shrubs with erect thorns, leaflets ovate, elliptic-oblong lanceolate, crenate, obtuse, narrowed at the base. Flowers white tinged with red, sweet scented, solitary or racemose



**Uses:** The fruit is edible. The leaves are boiled in water and used for fomentation especially for infants and children to prevent and cure mild colds and fever.

**Medicinal and other uses:** Fruit in an expellant of poison. Rind is tonic and anti-scrobutic.

**Economic value:** Fruits are sold in local markets at the rate of Rs.5-10 per fruit depending on the size.

## 15. Citrus sinensis (L.) Osbeck (Rutaceae) Local name: Soh nairiang Distribution:

Description: Citrus sinensis is a small, shallowrooted evergreen shrub or tree about 6-13 m high with enclosed conical top and mostly spiny branches. Twigs angled when young, often with thick spines. Leaves smooth, oval, 5-15 x 2-8 cm, dark green above, glossy, with a distinctive smell often similar to the fruit, petiole winged



Flowers small, waxy greenish-white, fragrant; calyx broad saucer-shaped, petals 5, white elliptic, 1.3-2.2 cm long Fruits orange, reddish-green to yellowish-green, round, 4-12 cm, consist of a leathery peel 6 mm thick, tightly adherent, protecting the juicy inner pulp, which is divided into segments that may not contain seeds, depending on the cultivar.

Uses: Fruits are edible.

Economic value: Fruits are sold in local markets at the rate of Rs.50-80 /Kg.

#### 16. Calamus erectus (Arecaceae) Local name: Soh thri

**Description:** This is a clustering species with none climbing stems that are covered with many flat 2-5 cm long spines, in lines, with small black bristles to either side. The ocrea is over 15 cm, covered in short bristles, it begins as a tube but soon splits to form an ear on each side of the petiole. The whole leaves are 3-5 m



long. Sheaths are 5-7 cm diameter and a dull green-brown. The largest leaflets are 60-80 cm x 3.5-5 cm and have one (rarely 2-5) prominent veins, with long or short bristles above. Below, the central vein may also have bristles. Margins are also bristly. Many large younger leaves are irregularly pinnate. Petiole of upper leaves is 50-150 cm long. Petiole spines are 5-15 cm, joined in combs running around the petiole. Inflorescence is erect, amongst petioles, and 0.5-

1 m long with no flagellum, and highly lacerated primary bracts, covering the base of partial inflorescences. Fruit is 3-3.5 cm long and 2-2,5 cm wide. Covered in reddish brown scales with light patches, deeply channeled.

Economic value: Fruits are sold in local markets at the rate of Rs.50-80 /Kg.

### 17. Docynia indica (Rosaceae) Local name: Soh phoh-khasi Distribution: Khasi Hills.

**Description :** A moderate sized to tall deciduous tree, young parts and inflorescence woolly. Bark cinereous brown or grey usually with white blotches, warty with lenticels, nearly smooth on upper parts of stems, rough with dark patches on older parts towards the base. Leaves 2-4 by 0.9-2.2 in., ovate or oblong lanceolate,



acuminate, serrate or serrulate or almost entire, coriaceous and glabrous when mature; petiole 0.5-1.2 in., ultimately sparsely hairy or glabrescent; stipules 0.15-0.2 in., long subulate, reddish , early deciduous. Flowers about 1 in. across in fascicles of 2-3 or solitary; pedicles 0.4- 1 in. long, dilated upwards. Petals spreading, obovate-oblong, 0.5-0.6 in. long claw about 0.1 in. long. Filaments unequal, subulate, glabrous. Seeds 3 in each cell.

Flowers & Fruits: March-November.

**Uses:** The acidic fruits are eaten both raw and cooked. The stem is sometimes used as root-stock for grafting apple on. The wood is used for tool handles and the branches make good walking sticks.

**Economic value:** The grated fruits are sold in local markets in packets of Rs. 5-10 and provide additional income to women folks of Khasi Hills.

#### 18. Docynia hookeriana (Rosaceae) Local name: Sohphoh-heh Distribution: Khasi Hills

**Description** : A large tree with spreading branches; young parts and inflorescence densely covered with deciduous wool. Bark dark grey or black, 0.5-0.75 in. thick. Leaves 1.7-3.5 by 0.6-1



in.; lateral nerves 7-10 on either half, obliquely accurate; petiole 0.2-0.7 in. long. Flowers 1 in. across, solitary or in fascicles of 2-3; pedicels stout, 0.2-0.4 in. long. Calyx tube densely wooly, 1.5-2 in. long, broad, turbinate or pyriform. Petals 0.4 in., broadly elliptic or suborbicular, abruptly narrowed to the minute claw. Pome contracted below the remains of the sepals.

Flowers & Fruits: March-November.

Uses: Fruits edible and wood is used for making drums. Economic value: The fruits are sold in local markets at the rate of Rs. 80-120/ Kg

19. Duchesnea indica Focke.

Syn. Fragaria indica Andr. (Rosaceae) Local name: Soh-shan

**Distribution:** It is distributed in subtropical and temperate region of Himalayas including Assam ascending upto 2500 m and also in Khasi hills.

**Description:** A silky pubescent herb with perennial root stock and slender runners. Leves

usually digitally trifoliate. Leaflets obvate toothed, base cuneate. Flowers yellow solitary on long axillary, peduncles equalling the petioles. Petals 5, obvate stamens many persistent. Carpels many on a convex receptacle. Fruit numerous minute black.

Uses: Fruit is edible. Whole plant is used in local drink.

**Medicinal and other uses:** The fruit is used in the ulcer of tongue. Leaf is used in cuts and bruises. Flower decoction is used in eye diseases.

Economic value: Fruits are sold in local markets at the rate of Rs. 100/Kg.

20. Elaeagnus latifolia Linn (Elaeagnaceae) Local name: Soh-shang Distribution: All over N. E. Region.

**Description:** A large woody evergreen straggling or scandant shurb, often spiny. Bark blakish grey. Leaves alternate very variable, ovate, oblong or elliptic, acute or acuminate, entire or slightly undulate, glabrous above, clothed beneath with





silvery or ferruginous scales. Flowers often peduncled scented, few or in dense axillary fascicles.

Part Used: Fruits are edible when ripe and made into jellies.

Medicinal & Other Uses: Flowers cardiac and astringent.

Economic Value: The fruits are sold in local markets at the rate of Rs. 50-80/ Kg.

21. Elaeagnus pyriformis (Elaeagnaceae) Local name: Soh-shang khlur, Dieng-sohblor (K); Dieng sashang (J).

Distribution: Frequent in Meghalaya, usually along forest margins, often climbing on other bushes.

**Description:** Scandent or straggling shrubs with spreading branches; branches brown, rusty scaly, leaves 2.5-9 x1.5-4 cm, base narrowed cuneate,



shining silvery beneath; racemes up to 2 cm long; flowers 0.5-0.8 cm long, coppery scaly; fruits 0.8-1.2 cm long yellowish, pyriform.

Uses: the fruits are edible

Economic value: NA

22. Elaeocarpus lancifolius (Elaeocarpaceae) Local name : Diengsohkhyllam (K); Diengsohlyngka (J).

Distribution: Frequent in dense evergreen forests of Tura and Jowai ranges.

**Description:** Trees up to 15 cm high; crown dense, bark grayish-brown, rugose, lenticellate; leaves 6-15 x 2.5- 5 cm, lanceolate, base cuneate,



distantly crenate, serrate, thinly coriaceous, glabrous, glabrescent, postulate beneath when dry; lateral nerves 6-8 pairs, arched, bifurcating near the margin forming loops; petiole 0.7-2.5 cm long; flowers white, buds lanceolate ; sepals oblong-lanceolate; petals slightly longer than sepals, laciniate to about half the length, margins ciliate, filaments pubescent' disk with pale yellow glands; ovary

and style base villous; drupe ovoid, 2.5-3 x 2-2.5 cm; pyrenes oblong, rugose, longitudinally 3-grooved.

Flowers & Fruits: March- December

**Uses:** Fruits edible, timber used for tea chests, poles and charcoal and also for fuel.

#### Economic value: NA

#### 23. Elaeocarpus varunua (Elaeocarpaceae)

Local name: Dieng-sohdkhap, Dieng-rilam, Dieng-siasoh (K), Gangma chining (G)

Distribution: In mixed deciduous forests along lower altitudes.

**Description:** Large trees up to 25 m high; crown large spreading; bark gray, nearly smooth, usually lenticellate, often with stilt roots at



base; branchlets silky tomentose; leaves 13-20 x 4.5-8 cm, broadly oblong lanceolate, oblong-elliptic, acuminate, rounded at bas, cuspidately crenate serrate, chartaceous or thinly coriaceous, grayish- silky when young, dark green, glabrescent when mature, deep red at senescence; petiole 3.5-7 cm long, tomentose at first; racemes densely crowded, silky pubescent; flower 1.2-1.5 cm across, buds silky, lanceolate, obscurely angled; sepals ca. 0.7 cm long, lanceolate, silky outside; petals nearly equaling the sepals, dilated at base, shortly laciniate; stamens numerous, anthers shortly awned; disk red or orange red, lobed; drupe 1.5-2 cm long, rounded at both ends, shining green; pyrene 3-grooved, rugulose.

Flowers: March-April, Fruits: August-October

Uses: Fruits are edible.

Economic value: NA

## 24. Emblica officinalis Gaertn (Euphorbiaceae) Local name: Soh Mylleng Distribution: All over N. E. Region

**Description:** A small deciduous tree with smooth greenish grey, exfoliating bark. Leaves feathery with small narrowly oblong, pinntely arranged leaflets. Fruits depressed, globose containing 6 trigonous seeds.



Flowers & Fruits: July and February.

**Uses:** Fruit is edible. Fruit astringent and cooling diueretic, good for liver complications. Fruit is rich in vitamin C contains more than 20 times as compared to orange juice. Bark and leaves are rich in tannins.

Economic Value: The fruits are sold in local market at the rate of Rs.30/ Kg.

## 25. Eriosema sinense (Leguminosae) Local Name: Soh pen Distribution: 4-5000 ft., fairly common in grasslands.

**Description:** An erect shrub 1-2 ft high growing from a tuberous rootstock; stem slender, sparingly branched, covered with patent brown hairs. Leaves 1-folialate; stipules about 0.15



in. long subulate, persistent. Leaflet 0.5-2 by 0.1-0.25 in., ligulate, acute or sub-acute, cuspidate, sub-coriaceous, margins recurved, pilose, dark-green and with a few adpressed hairs above, glacous, densely grey canescent with concealed glands beneath; midrib prominent, brown pilose; lateral nerves very oblique, indistinct. Flowers axillary, solitary or two together. Calyx 0.1- 0.15 in. long, densely pilose. Corolla 0.2-0.3 in. long, yellowish. Stamens 2-adelphous. Ovary sessile, 2-ovuled, densely villous with speading silky hairs; style filiform, glabrous; stigma capitate. Pods about 0.4 by 0.2 in., compressed, often slightly inflated, densely pubescent, 1-2 seeded. Seeds obliquewith the funicle attached to the end of linear helium.

Uses: the tuberous roots are eaten raw and their cortex is used medicinally.

Economic Value: NA.

26. Eribotrya angustissima (Rosaceae)
 Local name: Diengsohthlong, Soh-thyllong,
 Dieng sarang (K).
 Distribution: Endemic to Meghalaya; along
 river banks at lower elevations, forming
 gregarious patches.

Description: Bark brown, smooth; branchlets with prominent leaf scars, young parts



deciduously woolly; leaves 7-15 x 1-2 cm, linear- lanceolate or oblanceolate, acute to obtuse at tip, base attenuate, cuneate, distly serrate, glabrous; stipules subulate; panicles 3-6 cm long; flowers 0.8- 1.2 cm across, white; calyx 0.2-0.6 cm long; berries 1-1.5 x 1-1.2 cm, pyriform, yellow when ripe, 2-seeded.

Flowers & fruits: march- November.

Uses: Sub- sweetish pulp edible.

Economic Value: NA.

#### 27. Ficus auriculata Lour.

Syn Ficus roxburghii Wall. (Moraceae) Local name: Dieng soh shied, Soh dymbur Distribution: It distributed in whole of N.E. Region

Description: Shrub or small tree. Leaves elliptic or ovate undulate, abruptly caudate alternate at the base. Coriaceous glabrous stipules minute, subulate. Male flowers- Perianth segment 4,



stamen, 1 jointed to pistillode. Female flowers: Perianth 3 fid, style short.

Uses: The fruit pulp is made into curries and jam.

Economic Value: Not Available

#### 28. Ficus hispida Linn (Moraceae)

Local name: Dieng soh-dymbur (K); Thamusa (G)

Distribution: Common along streams, Garo Hills, Garampani and Jaintia Hills

**Description:** Small trees with fistular branches. Leaves opposite, variable, obvate to acuminate, scabrid above hispid pubescent beneath. Receptacles on short tubercles, hispid, greenish yellow, faintly



ribbed when ripe. Male flowers: Perianth lobes 3, Stamen I, Female flowers: Perianth rudimentary, style long hairy.

**Uses:** Leaves used as fodder. Immature inflorescence, young leaves and fruits edible Medicinal and other uses: Emetic. laxative, coolling and astringent

#### Economic Value: NA

## 29. *Garcinia paniculata* Roxb. (Clusiaceae) Local name: Dieng Soh-longkor Distribution: Whole of N.E. Region and Khasi hills.

**Description:** Trees middle sized, evergreen, dioecious, with many ascending branches, and greyish brown bark present. Leaves opposite, decussate, oblong, lanceolate or obovate acuminate, repand, midrib conspicuous below, lateral nerves 7-10 on each side parallel. Male flowers in terminal brachiate panicles, white. Sepals 4, decussate, outer smaller petals 4,



three times longer than the sepals. Stamens many in a globose mass, filaments short. Female flowers in few flowered spicate racemes, ovary pentagonous, 5 loculed stigma sessile, entire, tubercled. Berry- globose yellow.

**Uses:** The aril of the fruit like that of mango steen is highly flavoured and is eaten with relish. The plant has been recommended as a suitable root stock for mango.

#### Economic Value: NA

#### 30. Gynocardia odorata (Flacourtiaceae)

Local name: Dieng-sohliang, Dieng sohphailing (K); Balibu, Masribu, Thithpha (G).

Distribution: Occurs throughout the tropical evergreen and mixed evergreen forests.

**Description:** Middle sized trees upto 20 m high; bark gray or grayish brown; leaves 10-20 x 3.5-6 cm; flowers yellow;



sepals ovate, 0.5-0.8 cm across, petals ovate-oblong, appendaged; stamens (in male flowers) with silky filaments; staminodes in female flowers; ovary green; stigma spreading; fruits indehiscent, depressed globose with a thick, hard lenticelled rind, 8-14 cm in diameter; seeds immersed in pulp.

Flowers & Fruits: March- January.

**Uses:** The seeds after boiling are sliced into small pieces and sold in local markets.

#### 31. Hodgsonia macrocarpa (BI) Cogne (Cucurbitaceae)

## Local name: Soh ben Distribution: Lailad, Khasi Hills

**Description:** Climbers, woody. Leaves, large 3-5 lobed. Flowers, dioecious. Male flowers in raceme yellow outside white inside, Stamens 3, filaments inconsipicous. Female flowers solitary, ovary, globose



Uses: Seeds are eaten after roasting

Economic Value: NA

32. *Myrica esculenta* Buch-Ham (Myricaceae) Syn. M. tarquhariana Wall; Syn. M. sapida Wall.

Local name: Soh-phie.

**Distribution:** Entire N.E. region particularly Meghalaya.

**Description:** An evergreen diocious tree. Leaves lanceolate or obovate, obtuse acute

or acuminate entire or serrulate towards the tip, young sharply serrate, male spikes solitary. Stamens 3-6, Fruit globose or ellipsoid.

Flowers & Fruits: October – July.

Uses: Fruits edible.

Economic Value: Fruits are sold in local markets at the rate of Rs.30/Kg.

#### 33. Myrica nagi (Myricaceae)

Local name: Soh phie-nam Distribution: Entire N.E. region particularly Meghalaya

**Description:** A small or moderate sized evergreen tree. Bark grayish-brown, rough, wrinkled, finely fibrous, 0.3 in. thick, reddish-brown; inside mottled with yellow streaks; extremities pubescent. Leaves 2-6 by 0.5-1.5 in., lanceolate, oblanceolate or



obovate, nearly entire or sharply spinous-serrate, obtuse or acute, coriaceous, glabrous above, with resinous dots beneath; lateral nerves 12-20 on either half, anastomising at the ends to form a marginal vein; base acute; petiole 0.2-0.6 in. long. Male spikes sometimes with female flowers at the top. Fruit 1 in. long, ellipsoid or ovoid, tubercled, reddish or cheese coloured when ripe.

**Uses:** Fruits are edible. Bark used as aromatic stimulant, as an external plaster for rheumatism. Other medicinal uses include resolvent, astringent and carminative. Bark is also used as a dye, colour produced being yellow. It is also used as a fish poison.

Economic value: Fruits are sold in local markets at the rate of Rs. 50/Kg.



#### 34. Meyna laxiflora (Rubiaceae)

Local name: Soh-mon, Dieng- sohmyren (K); Dieng-samatan (J); Thitchekeng (G).

Distribution: Fairly common in Meghalaya at lower elevations often in secondary forests or open forests.

**Description:** Middle sized trees 10-15 m high; crown compact, oval; bark brown or



deep grey, vertically cracked, often with short spines; leaves 4-12 x 2.5-6 cm, elliptic, ovate-elliptic, abruptly acccuminate, base shortly cuneate, glabrous or nearly so, tufted hairy at nerve axils beneath; stipules long, cuspidate; cymes axillary, very shortly peduncled or fascicled; flowers greenish-white. 0.5-0.7 cm across; corolla villous within; lobes spreading or reflexed; stigma 5-lobed ; drupes 2.5-4 cm long, yellowish-when ripe.

Flowers and Fruits: April-November.

Uses: Fruits are edible.

Economic value: The fruits are sold in local markets at the rate of Rs. 30 /Kg.

35. *Morus australis* (Cannabaceae) Local name: Soh-lyngdkhur Distribution: Mainly cultivated and run wild in Meghalaya for rearing silkworm.

Description: Small or middle sized trees up to 10 m high; branches spreading, bark brown lenticellate; leaves3.5-12 cm long; ovate, ovate-orbicular, caudate acuminate, base cordate or sub-cordate, glabrous at length;



male spikes green, cylindrical, 1-4 cm long; female subglobose, 0.5-1.2 cm long; fruits shining, blackish-purple.

#### Flowers and Fruits: February-July.

Economic value: The fruits are sold in local markets at the rate of Rs. 30 /Kg.

#### 36. Passiflora nepalensis Wall. Tent. (Passifloraceae)

Local name: Soh brab Distribution: Common in Meghalaya along forest margins and secondary forests, generally sown in kitchen gardens.

Description: Climbers with foetid smell; leaves 3-10 x 1.5-6 cm, ovate, ovate deltoid, acute or subacut e, base truncate or subcordate, usually very narrowly peltate, glaucous beneath, 3-5 nerved from base,



tendril generally simple; pedicels axillary, fascicled; flowers 1-1.5 cm long, plae yellow or white; calyx 5-lobed, united at base; petals equally or slightly longer than calyx lobes; corona filiform; fruit 1.5-3.5 cm across, globose, purplish or blackish when ripe

#### Flowers & Fruits: July- October

**Uses:** The fruits are edible and leaves are medicinal and used for diabetes, diarrheoa, dysentery, gastritis, and hypertension.

Economic value: the fruits are sold in local markets at the rate of Rs.90-100/Kg

#### 37. Prunus nepalensis (Rosaceae)

#### Local name: Sohiong

Distribution: Common in Meghalaya at higher elevations of Khasi and Jaintia Hills, often cultivated

**Description :** Middle sized trees 10-15 m high; crown oval; branchlets spreading, bark grayish or dark brown, smooth or shortly fissured; branchlets lenticellate; leaves 4-13

x 1.5-3.5 cm, ovate-lanceolate, oblong-



lanceolate, acuminate, base rounded or slightly oblique, minutely crenate serrate; stipules 0.7-1 cm long, linear-lanceolate, caduceus, racemes 8-15 cm long; flowers white, 0.7-0.8 cm across; petals obovate, spathulate; drupes fleshy, blackis-purple when ripe; pyrenes smooth, hard.

Flowers & Fruits: November- August.

Uses: Fruits are edible and is used for making juice and wine.

Economic Value: The fruits are sold in local markets at the rate of Rs. 100/ Kg.

#### 38. Prunus persica (Rosaceae)

Local name: Soh phareng (K). Distribution: Cultivated in Meghalaya for their edible fruits as well for ornamental purposes.

**Description:** Trees up to 8 m high; crown lax, spreading; bark dark grey or blackish; leaves 10-16 x 3-5 cm, oblong lanceolate, acute, glabrous at length, sharply serrate, serratures



gland tipped; flowers axillary or fascicled, pink or rose, 2-2.5 cm across; calyx lobes densely silky tomentose; petals oblong, rounded at tip; drupes 3-5 cm long, ellipsoid- ovoid with a rugose, red-tinged, ellipsoid pyrene.

Flowers & Fruits: January-August.

Uses: Fruits are edible.

Economic value: The fruits are sold in local markets at the rate of Rs. 80-120/ Kg.

#### 39. Pyrus communis (Rosaceae)

Local name: Sohphoh-nongkhlaw (K) Distribution: Found wild in Meghalaya at higher elevations.

Description: Middle sized trees, bark dark or grayish brown, rectangular scaly; leaves 7-112 x 5-9 cm, broadly ovate, ovateorbicular, abruptly acuminate, base rounded or truncate, minutely crenate, glabrous



and pale beneath; corymbs 5-10 cm across, deciduously tomentose; flowers white, 2-2.5 cm across; calyx lobes 0.3-0.4 cm long, ovate; petals spreading, often sinuate at tip; pome 7-10 cm, ovoid-ellipsoid, depressed at both ends, greenish-yellow ripe, pulp sweet.

Flowers & Fruits: March- September

Uses: Fruits are edible.

Economic value: The fruits are sold in local markets at the rate of Rs. 60-80/ Kg.

## 40. Pyrus pashia Buch-Ham ex D.Don (Rosaceae) Local name: Soh-shur, Soh-Jhur. Distribution: Meghalaya upto 3000 m.

**Description:** A medium sized deciduous tree, bark rough, dark grey to almost black. Leaves ovate-elliptic, lanceolate or lanceolateacuminate or sometimes caudate, finely serrate to crenate. Flowers white in short corymbs, umbels or fascicles at the end of



short lateral branches. Stamens 25-30, carpels 3-5.

Uses: Fruits are edible.

Economic value: The fruits are sold in local markets at the rate of Rs. 40-50/ Kg.

#### 41. Rhus javanica L. (Anacardiaceae)

Local name: Soh ma, Dieng–soh–ma, Dieng soh-sma (K); Dieng sa-ma (J)

# Distribution: Common in Khasi Hills above 2,500 ft.

**Description:** A small deciduous tree somewhat gregarious in habit, young parts and inflorescence covered with dark-grey pubescence; bark ashy grey, warty, dull greenish white inside. Leaves imparipinnate,



over a foot long; common petiole usually winged between upper leaflets. Leaflets 4-6 pairs, opposite, lateral sessile, 2-4 by 1-2 in., elliptic ovate or oblonglanceolate, acuminate, deeply crenate or dentate, membranous, pubescent along the midrib, otherwise glabrous above, densely grey-tomentose beneath; main lateral nerves 10-15 on either half, parallel, almost tranverse; base rounded, oblique. Panicles terminal, 6-8 in. long, conical, dense- flowered. Flowers 0.1 in. across, whitish or pale-green; pedicels minute. Sepals small, ovate, pubescent. Petals oblong, ciliate, much exceeding the sepals. Drupes 0.15-0.2 in. across, sub globose, compressed, pink when mature.

**Uses:** Sub-acidic pulp much relished. The ripe fruit has a sharp acid taste. It is said to be a remedy for colic.

Economic Value: NA

#### 42. Rubus ellipticus (Rosaceae)

Local name: Dieng shiahsoh-prew (K) Distribution: Common in Meghalaya as an undergrowth of pine forests.

Description: Straggling or bushy shrubs; leaves up to 15 cm long; leaflets 1.5-8 x 1.5-5 cm, ovate-orbicular, obovate-orbicular or broadly elliptic, acute to truncate, base rounded or truncate, sharply double serrate,



grayish tomentose beneath; panicles 3-10 cm long; calyx lobes ca. 0.5 cm long, broadly ovate, mucronate, puberulous without; petals exserted, obovate; fruits orange-yellow, succulent.

#### Flowers & Fruits: January- June

**Uses:** Fruits are edible. Roots are medicinal and are used for diarrheoa and dysentery, constipation, gastric, gripe and diabetes.

**Economic value: NA** 

43. Rubus niveus (Rosaceae)

Local name: Dieng soh khawiong (K); Sohkhoiong (J)

Distribution: Common in Meghalaya as an undergrowth of pine forests.

**Description:** Bushy shrubs; branchlets reddish, green, glabrous, densely prickly, prickles recurved; leaves up to 15 cm long, rachis prickly; leaflets 2.5-6 x 1-3 cm. elliptic,



elliptic- lanceolate, acute, base acute-cuneate, subsessile or sessile, sharply dentate, grey tomentose beneath; panicles corymbose, terminal and upper axillary; flowers red or pinkish, 0.6-0.8 cm across; calyxlobes ovate, lanceolate, up to 0.5 cm long; petals shorter or equaling sepals; fruita ovoid, globise, 1-1.3 cm long, blackish when ripe, pruinose.

Flowers & Fruits: March-October.

Uses: Fruits are edible and roots are medicinal.

Economic Value: NA

#### 44. Viburnum foetidum (Caprifoliaceae)

Local name: Dieng-sohlang, Soh-langksew (K) Distribution: Common in Meghalaya, particularly under pine forest and forest margins.

Description: Shrubs up to 3-5 m high; bark grayish or dark brown, leaves 2-6 x 1-3 cm ; flowers white, 0.2-0.25cm long, lobes spreading or inflexed; drupes ca. 0.5cm long, ellipsoid, acidic, bright red when ripe.

Flower & Fruits: June-November.

Uses: Fruits are edible and also used for fishing.

Economic Value: NA

#### 45. Ziziphus jujube (Rhamnaceae)

Local name: Soh-broi (K)

Distribution: Common in tropical forests of Khasi and Garo hills.

**Description:** It is a small deciduous tree or shrub reaching a height of 5–10 metres, usually with thorny branches. The leaves are shiny-green, ovate-acute, 2–7 centimetres wide

and 1–3 centimetres broad, with three conspicuous veins at the base, and a finely toothed margin. The flowers are small, 5 millimetres wide, with five inconspicuous yellowish-green petals. The fruit is an edible oval drupe 1.5–3 centimetres deep; when immature it is smooth-green, with the consistency and taste of an apple, maturing brown to purplish-black and eventually wrinkled, looking like a small date. There is a single hard stone similar to an olive stone.

Flowers & Fruits: September-February.

Uses: Fruits are edible.

Economic value: NA





## **Future Plans :**

Bio-Resources Development Centre will take up the assessment of the nutritional values and contents of these wild edible fruits. The data generated will serve to provide awareness to the people on the nutritional values of these fruits. Development of agrotechnology and production of quality planting materials is undertaken by the Centre. Partnering with the traditional knowledge holders of the State for traditional methods of propagation of certain species of wild edibles is underway.

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