

DENR Recommends

Volume 11

**FOREST TREE SPECIES
WITH MEDICINAL USES**

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Foreword

The search for an alternative approach to the possible improvement of the health condition of the Filipino people has long been a problem by the government. The cost of modern medicine is very prohibitive such that going back to the so-called traditional medicine seems to be inevitable.

Today, there is an increasing interest in the development of traditional medicine (referred to by other people as herbal medicine) in the country as evidenced by the growing number of organizations focusing on it. Experts all over the ASEAN Region have advocated the continued use of medicinal plants which are proven effective. They have further recommended greater awareness on the potential values of traditional remedies/indigenous materials which can be used either alone or together with modern medicine.

Among these indigenous materials are forest trees. Early records of Quisumbing (1978) indicated 196 species of such forest trees. Forest tree species have been found to have potential therapeutic values that could meet the medicinal needs of people in the rural areas and those in the upland. People do not have to depend on commercial medicines in the drugstore to cure certain ailments. They cannot always afford to buy these so-called modern medicines due to exorbitant prices.

This 11th series of the *DENR Recommends* presents a list of some forest tree species found to have curative properties based on observations and actual experiences of a number of people, as well as on previous research works of experts such as Quisumbing (1978), de Padua and others (1977; 1978; 1981), the Department of Health (1995) and sources listed in the References. Recently, a local pharmaceutical enterprise, however, has been manufacturing and distributing narra capsules. The company claims that its narra capsules can help improve the immune system. The capsules are also taken to cure rheumatoid arthritis, diabetes mellitus, problems in the bladder or kidney stone, acne, asthma and certain types of cancer. In addition, the narra capsules are claimed as good fat burner and cleansing substance for the body.

This publication is an attempt to answer to call of the government for agencies concerned to document information and create awareness on the medicinal value/uses of forest tree species. Thus, researchers, students and the public will find the series practical and useful.

The continuing research efforts of various agencies, public and private, would eventually enable ERDB to update the series. That is, when information shall become available.

CELSO P. DIAZ
Director

AFRICAN TULIP

Spathodea campanulata Beauv.
Bignoniaceae

Description:

It is a medium-sized evergreen tree reaching a height of 20 m. The leaves are pinnate, 20-25 cm long and divided into 5-8 pairs of leaflets. The flowers are orange-red, large, about 10 cm long and 5 cm wide, and borne in terminals; inflorescences (racemes) are erect with a peculiar smell. The fruit is boat-shaped, 12-33 cm long, flat and thick. It splits lengthwise and releases numerous flat seeds. The seed is about 2.5 cm wide with a broad, silvery-white transparent wing.

Distribution:

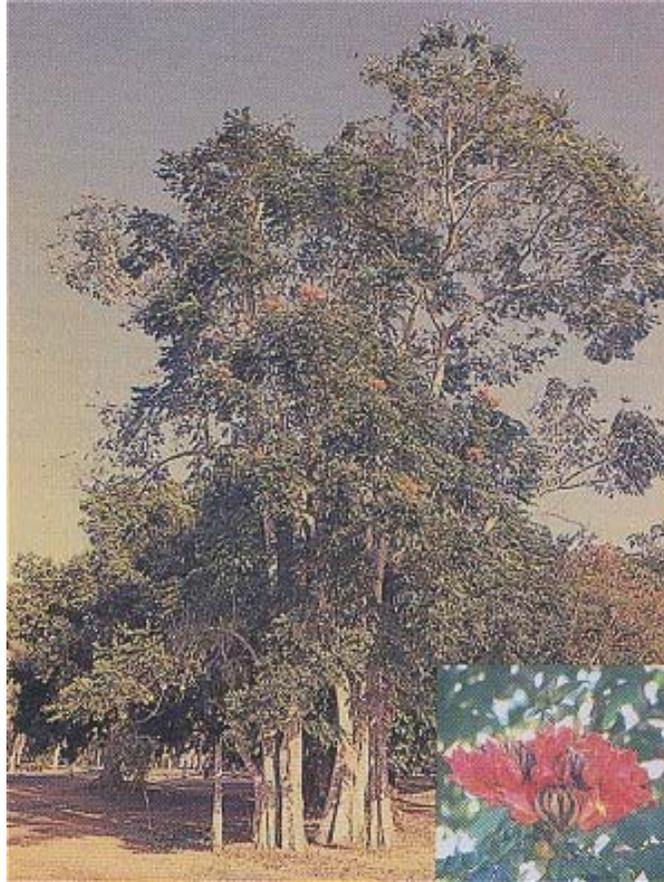
The species can be found in different parts of the country and is widely distributed in Luzon. It thrives within elevations up to 1,500 m asl. It is indigenous to tropical Africa and is now pantropic in cultivation.

Propagation:

It is propagated by seeds and by stem and root cuttings.

Uses:

- A decoction of the bark is used for constipation, gastrointestinal troubles and dysentery.
- A decoction of bark and leaves is used as lotion.
- Dried bark and pulverized or fresh inner bark are used as dressing for ulcers (superficial inflammation of sore of the skin or mucous membrane, discharging pus) and other skin diseases.
- Bruised leaves and flowers are applied on wounds.
- An infusion of the leaves is used for urethral inflammation.



AGOHO

Casuarina equisetifolia L. Casuarinaceae

Description:

A large evergreen tree, 20 m high, with a 65-cm diameter. The crown is narrowly pyramidal resembling some of the conifers in appearance. The bark is brown to dark brown and rough. The inner bark is light in color and has a bitter taste. The leaves are actually reduced to small sheaths on the needle-like branchlets. The leaf tips are like teeth. The flowers are unisexual. The fruits appear like cones with persisted bracts. These are woody, 6-7 mm long and 2.5-3 mm wide; when ripe, the fruits release small winged seeds through the fruit cells.



Distribution:

The species is found throughout the Philippines along sandy seashores, extending inland in open sandy valleys along streams. It is sometimes seen growing at altitudes as high as 800 m. It also occurs in the Indo-Pacific Region and is now pantropic in cultivation.

Propagation:

Agoho is usually propagated by seeds. It can also be propagated vegetatively using cuttings, or by air layering.

Uses:

- A decoction of the bark is an excellent astringent.
- A decoction of the bark is used as an emmenagogue (promotes menstruation) and ecbolic (alleviates menstruation pains) when taken in large doses. It is also helpful for hemoptysis (expectoration of blood from some part of the respiratory tract).
- The bark is also used to arrest diarrhea and dysentery; a lotion of the bark is also used for beriberi; a powder of the bark is prescribed for pimples on the face.
- An Infusion of the bark is used as a tonic.
- A decoction of the twigs is used as a lotion for swellings; an infusion of the branches is used as a diuretic. The leaves are used for colic (sudden recurrence of acute abdominal pain caused by spasm, obstruction, or twisting).

ALAGAU

Premna odorata Blanco
Verbenaceae

Description:

A small-sized hairy tree, 3-8 m high with a 20-cm diameter.

The leaves are opposite, ovate or broadly ovate and 10-20 cm long with broad, rounded or somewhat heart-shaped base and pointed tip. The lower surface of the blade is densely covered with soft hairs. These



are very aromatic when crushed. The flowers are greenish-white or nearly white, 4-5 mm long and borne on terminal inflorescences 8-20 cm in diameter. The fruit is fleshy, dark purple, rounded and about 5 mm in diameter.

Distribution:

The species is endemic in the Philippines. It is commonly found in thickets and secondary forests at low altitudes; sometimes purposely planted around dwellings in most provinces, from Luzon to Mindanao.

Propagation:

The species is propagated by seeds, or by branch cuttings.

Uses:

- A decoction of the leaves with sugar and a little “calamansi” or lemon juice is effective for coughs.
- A decoction of the fresh leaves is prescribed for vaginal irritation.
- The leaves, applied over the bladder, facilitate urination.
- An infusion of the leaves is carminative (expels gas from the alimentary canal).
- A decoction of the leaves and flowers is used for fever, abdominal pains and dysentery.
- A decoction of the roots, leaves, flowers and fruit is used as a sudorific and pectoral.
- The leaves with coconut oil, or sesame oil are applied on the abdomen of children to cure tympanites (local term, “kabag”).
- The leaves are boiled in water, the water is used for bathing babies. The boiled leaves, applied on the affected part of the patient’s body, are used as a treatment of beriberi.
- A decoction of the shoots is a parasiticide.
- Masticating the roots and swallowing the saliva is prescribed for cardiac troubles.

ANONANG

Cordia dichotoma G. Forst.
Boraginaceae

Description:

Smooth and deciduous, anonang grows 5-10 m high. The leaves are alternate, ovate to oblong-ovate or elliptic-ovate with entire or somewhat undulate margins, pointed tip and somewhat rounded or heart-shaped base. The flowers are stalkless, white or yellowish-white and borne in lax inflorescences. The fruit (drupe) is yellowish-white or pinkish, ovoid with rather scenty pulp and a hard stone.

Distribution:

The species is found in secondary forests throughout the Philippines, in thickets at low and medium altitudes. It also occurs in India, southern China and Formosa, and throughout Peninsular Malaysia to tropical Australia and Polynesia.



Propagation:

The species is propagated by seeds.

Uses:

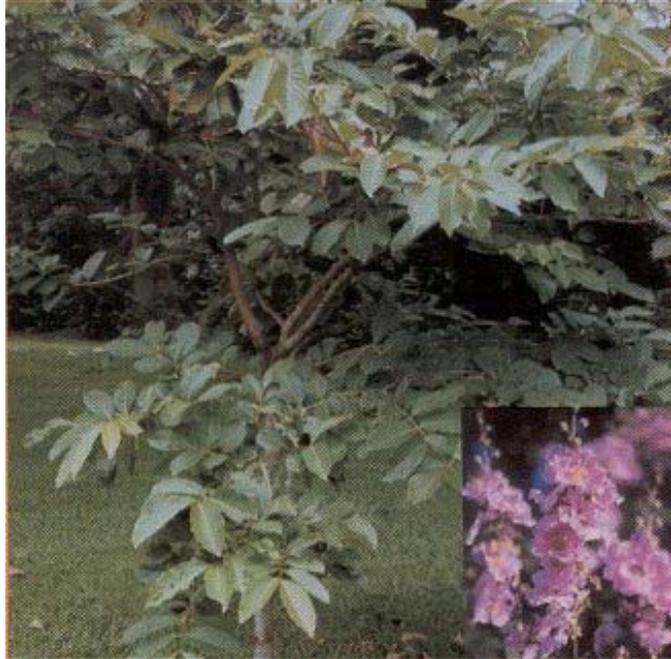
- The bark, moistened, is applied externally on boils and tumors to hasten ripening. It is used for headaches and stomachaches.
- A decoction of the bark is used as an antidyspeptic and a febrifuge. It is also given for dysentery and fever.
- In powder form, the bark is used as a cure for ulcers in the mouth. The bark, in infusion, is used as a gargle.
- The juice obtained from the bark, if administered in coconut milk, relieves severe colicky pains.
- The fresh fruit is used as a laxative and pectoral. It is also used for gonorrhoea.
- The dried fruit is used as an expectorant.
- The kernels, powdered and mixed with oil, are a good remedy for ringworm.

BANABA

Lagerstroemia speciosa (L.) Pers.
Lythraceae

Description:

Banaba is a deciduous tree, 5-20 m high, with a diameter of 40 cm. The bark is smooth, gray to cream-colored and peels off in irregular flakes. The leaves are smooth, oblong-ovate to elliptic-ovate and 12-25 cm long. The flowers are six-parted purplish lilac or mauve pink, rarely pink, 5-7.5 cm across and borne in large, terminal panicles up to 40 cm in length. The fruit is a large capsule, obovoid or ellipsoid and 2-3.5 cm long. The seed is pale brown with a wing 12-18 mm long.



Distribution:

Banaba abounds throughout the country: in the Batan Islands; from northern Luzon to Palawan; in Mindanao and the Sulu Archipelago; and in most, or all islands and provinces. It is chiefly found in secondary forests at low and medium altitudes. The species is also reported to occur in India, southern China and southward through Peninsular Malaysia to tropical Australia.

Propagation:

The species can be propagated by seeds, or by branch cuttings.

Uses:

- A decoction of the bark is used as a stimulant and febrifuge (a remedy for fever) and for abdominal pains.
- An infusion of the bark is taken to stop diarrhea.
- The bark, leaves and flowers are used as a purgative.
- A decoction of the old leaves and ripe/dried fruit, taken like tea, reduces blood sugar.
- A decoction of the leaves is used as a deobstruent (clears obstructions of the natural ducts of the body) and a diuretic.
- A decoction of the roots is used against small ulcers of the mouth.

BANI

Pongamia pinnata (L.) Merr.
Fabaceae

Description:

Bani is a gnarly tree reaching a height 6-25 m and a diameter of 45 cm. Its bark is dull gray, or pinkish-brownish, smooth but shallowly fissured. The inner bark has a strong smell of crushed bean-pod. The leaves are alternate, pinnately compound, 20-25 cm long with 5-7 leaflets which are smooth, ovate, 6-15 cm long; the terminal one is larger than the other and pointed at the tip, usually rounded at the base. The flowers are numerous, purplish-pink or nearly white and borne on axillary, hairy racemes, 15-20 cm long. The pod is woody, smooth, oblong, 5-7 cm long, 5-8 cm thick, shortly beaked at the apex, and containing one seed which is 3.5-5 cm long.



Distribution:

The species is commonly found throughout the Philippines. It occurs along seashores. In some localities like Laguna, it extends inland near the borders of the lakes. Bani is also widely grown in Southeast Asian countries.

Propagation:

It can be grown easily from seeds, cuttings and spreads from root suckers.

Uses:

- The flowers can be used to treat diabetes; juice of the roots with coconut milk and lime water is used as a remedy for gonorrhoea.
- The young shoots are used to treat rheumatism.
- A decoction of the leaves is applied as a bath or fomentation on the rheumatic joints. It is also given to children with coughs.
- Pounded seeds, roots, bark are used for hemorrhoid.
- The oil has antiseptic and stimulant healing properties for skin diseases, scabies, sores and herpes.

BATINO

Alstonia macrophylla G. Don
Apocynaceae

Description:

Batino is a medium-sized tree. The leaves are in whorls of three's, oblong-ovate, 10-30 cm long and 5-7 cm wide, pointed at both ends and short-stalked. The flowers are small, yellowish-white and borne on short, terminal cymes. The fruit is a double follicle, pendant, very long (20-40 cm) and slender. The seeds are small and very flat, with deep-brown hairs, especially along the edges.

**Distribution:**

Batino is common in open primary and secondary forests and in thickets at low and medium altitudes throughout the Philippines. It also occurs in the Peninsular Malaysia, Borneo and New Guinea.

Propagation:

The species is propagated by seeds.

Uses:

- The bark in the form of powder, decoction, infusion, tincture, or wine preparation is used as a febrifuge, a tonic, an antidyenteric, and emmenagogue, an anticholeric and a vulnerary (heals wounds).
- The leaves, greased with coconut oil and heated, are applied (while hot) as a poultice on sprains, bruises and dislocated joints.

HAULI

Ficus septica Burm. F.
Var. *septica* Moraceae

Description:

This is an erect, small tree, 3-8 m high, smooth, with the young shoot more or less hairy. The leaves are smooth and shiny, oblong-ovate to elliptic-ovate, 10-20 cm long, with the tip tapering to a rather sharp point, and the base pointed. The receptacles are axillary, solitary, depressed globose or turbinate, obscurely ridged or angled, 1.5-2 cm in diameter, and shortly peduncled.



Distribution:

Hauili is an endemic species commonly found throughout the Philippines. It also occurs in thickets at low and medium altitudes.

Propagation:

The species is propagated by seeds.

Uses:

- A decoction of the roots helps the body dispose of excess water through urination.
- The roots are used as a poultice for boils.
- The fresh leaves are used as a sudorific (induces sweating) and for headaches.
- The leaves, applied externally, are said to be antirheumatic.
- The latex is used to cure certain varieties of herpes.

IPIL

Intsia bijuga (Colebr.) O.
Kuntze Caesalpiniaceae

Description:

Ipil is a tree reaching a height of 20-45 m and a diameter of 150-180 cm. The bark is 5-8 mm thick, gray with an orange tinge. The inner bark is light brown and mottled with brown specks. The leaves are alternate and simply compound with usually two pairs of leaflets, 8-12 cm long and 5-8.5 cm wide. The flowers are white and reddish, fragrant, and borne in panicles, 6-10 cm long. The pods, 10-25 cm long and 4-6.5 cm wide, and contain 3-6 orbicular seeds.

**Distribution:**

Ipil is usually found along seashores, and in some localities, in inland forests, from the Babuyan islands and northern Luzon to Mindanao and Palawan. It also occurs in Madagascar, across Peninsular Malaysia to the Caroline and Fiji islands.

Propagation:

The species is propagated by seeds. Seeds are scarified through nicking to hasten germination.

Uses:

- A decoration of the bark, which contains tannin, is used to stop diarrhea.
- The fruit, when eaten, is laxative.

IPIL – IPIL

Leucaena leucocephala
(Lam.) De Wit. Mimosaceae

Description:

Ipil-ipil is a small tree. The leaves are compound, 15-25 cm long, with hairy rachises. There are 10-18 pairs of small leaflets along each primary branch of the main axis. The flowers, numerous, small and white, are in globular clusters (head). The pod, 12-18 cm long and 1.4-2 cm wide, is thin, flat, strap-shaped and contains 15-25 elliptic, shiny brown seeds. When mature, the pod splits open and releases the seeds.



Distribution:

The species is grown abundantly throughout the Philippines, in settled areas at low medium altitudes. It was introduced from tropical America and is presently distributed in all tropical regions of the world.

Propagation:

Propagation is by seeds, or by stump planting.

Uses:

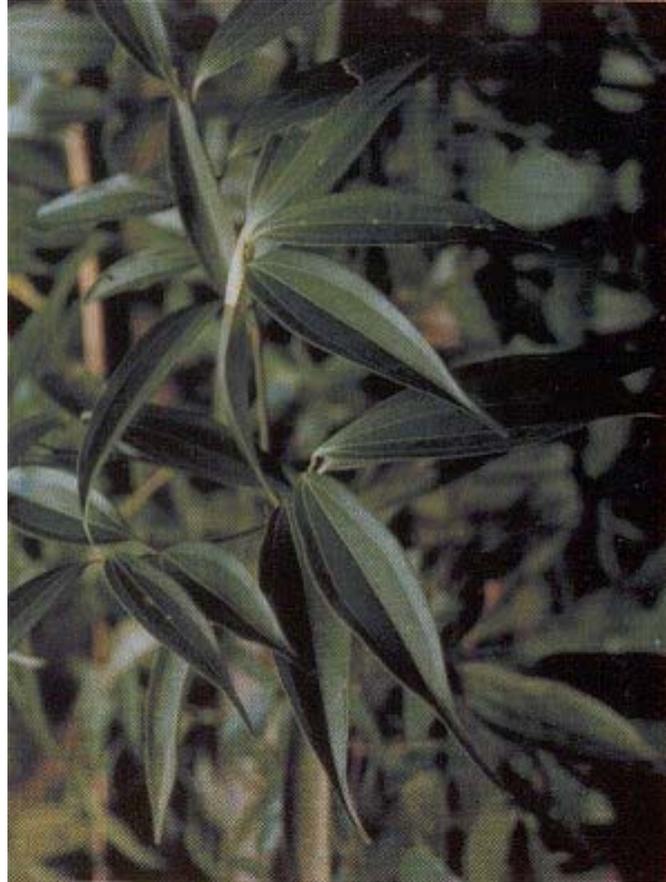
- The roasted seeds are used as an emollient (softens or soothes the skin or mucous membrane).
- A decoction of the bark and roots is used as an emmenagogue (stimulates menstrual flow).
- The seeds have a beneficial effect in ascariasis.

KALINGAG

Cinnamomum mercadoi Vidal
Lauraceae

Description:

Kalingag is a small-to medium-sized tree with relatively thick, aromatic bark. It reaches a diameter of 60 cm or more. The bark is gray, without fissures or cracks and covered irregularly with corky pustules, which give it a slightly rough appearance. The leaves are smooth, opposite, elliptical, 7-14 cm long and 3-6.5 cm wide; apex is acute, tip is rounded; texture is leathery; both faces are glabrous, the upper face is shiny while the lower has a glaucous ochre bloom. The fruit is smooth, ovoid, 12 mm long and 7 mm wide, shiny, steel blue, embedded at the base by the enlarged persistent calyx.



Distribution:

Kalingag is found only in the Philippines, from the Babuyan islands and northern Luzon to Mindanao, in forests at low medium altitudes.

Propagation:

The species is propagated by seeds.

Uses:

- The bark, masticated and taken internally, helps digestion.
- It is also used for flatulence (gas accumulation in the alimentary canal) and as an expectorant.
- The bark is also chewed for stomach trouble.
- It is used for tuberculosis and as a remedy for headaches and rheumatism.

KALIOS

Streblus asper Lour. Var. *asper*
Moraceae

Description:

Kalios is a rigid and densely-branched tree, 4-10 m high. The leaves are oblong-ovate to subrhomboid, 4-12 cm long, very rough on both sides, with finely-toothed margin, the tip tapering to a point, and the base narrowed. The fruit is ovoid, 8-10 mm long, pale yellow, the pericarp soft and fleshy. The seed is ovoid, 5-6 mm long.



Distribution:

Kalios is found in thickets at low and medium altitudes. It is especially common in regions subject to a long dry season, from northern Luzon to Palawan and Mindanao. It also occurs in India, southern China and Peninsular Malaysia.

Propagation:

The species is propagated by seeds, or by cuttings.

Uses:

- The water in which the bark has been boiled is used for disinfecting wounds. It is also used internally for skin diseases called "culebra".
- A decoction of the bark is given for fever, dysentery and diarrhea.
- The bark is chewed as an antidote to snakebite and poisoning.
- An infusion of the leaves is drunk as tea.
- Powdered root is used for dysentery and as poultice applied on unhealthy ulcers (of the skin).
- The root is used for epilepsy, inflammatory swellings, and is applied on boils.
- The root extract is astringent and antiseptic.
- The latex is applied on sore heels and chapped hands and put on glandular swellings.
- The seeds are good for epistaxis (nosebleed), piles (hemorrhoids) and diarrhea.

KAPOK

Ceiba pentandra (L.) Gaertn.
Bombacaceae

Description:

This is an erect, deciduous tree, 15 m high. The trunk is cylindrical, usually bearing scattered, large spines. The branches are in distant whorls, and spread horizontally. The leaves are compound with 5-8 lanceolate leaflets, 6-15 cm long, pointed on both ends. The flowers are numerous, whitish, 3 cm long. The capsules which are pendulous, oblong, about 15 cm long and 5 cm thick contain numerous black seeds, compressed globose, smooth and embedded in fine silky hairs.



Distribution:

Kapok is widely planted in settled areas throughout the Philippines. It is possibly indigenous to tropical America.

Propagation:

The species is usually propagated by seeds, cuttings and budding.

Uses:

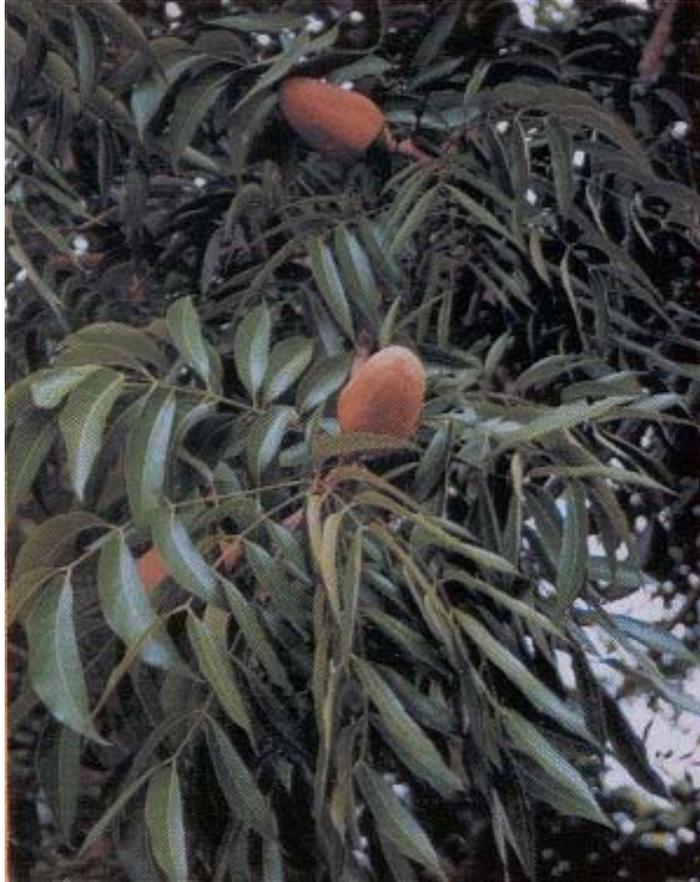
- The bark is used as a vomitive and diuretic. It is used for fever and diarrhea. It is also applied on wounds and swollen fingers.
- An infusion of the bark is used as a mouthwash.
- A decoction of the flowers is used for constipation.
- An infusion of the leaves is used for cough, hoarseness, intestinal catarrh and urethritis. The tender leaves are administered for gonorrhoea.
- The unripe fruit is regarded as a demulcent (smooth medicine; provides a protective coating on mucous membranes) and an astringent.
- The tender fruit is used as an emollient.
- A decoction of the roots is given for chronic dysentery, diarrhea, ascites and anasarca.
- The tender taproot of the young plant is used for gonorrhoea and dysentery.
- The gum is an astringent and useful as a styptic. It is given with milk as a cooling laxative to children. It is also used for incontinence of urine of children.

MAHOGANY

Swietenia macrophylla King
Meliaceae

Description:

This is a more or less deciduous, erect tree growing up to 10 m or more in height, with a heavy, dark-green, dense crown. It sheds its leaves during summer. The trunk is more or less buttressed. The bark is dark gray and ridged. The leaves are alternate, smooth (with the upper portion shiny, brownish, or purplish), compound and about 15 cm long, comprising 3-6 pairs of leaflets. The flowers are greenish-yellow, about 8 mm wide, and borne in axillary panicles shorter than the foliage. The fruit is large, cylindrical, barrel-shaped, woody, grayish-brown and rough, 2-6 cm long with a 1-2 cm diameter. The body of the fruit splits into five thick outer valves and five thinner, inside valves. The outer valves fall off when ripe and expose the closely packed seeds attached by the tips of their wings. The seed is brownish, 5-7 cm long with a broad, thin wing and a rather corky, thickened part containing embryo.



Distribution:

Indigenous to Peru and Brazil in South America, it was introduced in the Philippines in 1914. It is now growing in Mt. Makiling, Los Baños, Lagna and in the provinces of Benguet, Ilocos, Isabel, Abra, Samar, Marinduque and Zamboanga.

Propagation:

Mahogany is propagated by seeds, or by stump planting.

Uses:

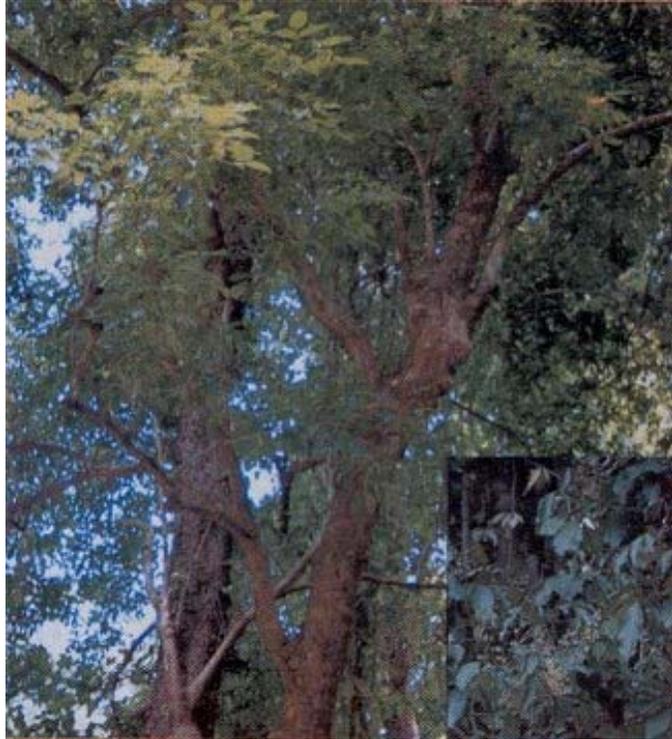
- A decoction of the bark may serve as an antipyretic (reduces fever).
- It may serve also as an astringent.
- It is also used as a tonic (increases body tone).

MOLAVE

Vitex parviflora Juss.
Verbenaceae

Description:

Molave is a medium-to large-sized tree reaching a height of 25-30 m and a diameter of 100-150 cm. In exceptional cases, it reaches a height of 35 m or more and a diameter of 200 cm. Generally, it has an irregular, short, crooked and fluted bole with thick, low, medium to moderately large buttresses. The leaves are typically opposite or whorled and deciduous. It partially, or entirely sheds its leaves during the later part of the dry season. The fruit is either dry, separating at maturity into 2-4 nutlets, or a drupe containing the nutlets. The average number of seeds per fruit ranges from one to three.



Distribution:

The species is distributed throughout the Philippines. It is commonly found in secondary and open primary forests at low altitudes. It also occurs in Timor, Java, Celebes and Amboina.

Propagation:

Molave is propagated by seeds.

Uses:

- An infusion or a decoction of the wood is an antidote to poisoning.
- A decoction of the bark is used for diarrhea.
- The wood and the bark are used to cure wounds and poisonous bites.

NARRA

Pterocarpus indicus Willd.
Forma *indicus* Fabaceae

Description:

This large tree grows to a height of 25 m or more. The leaves are compound and 15-30 cm long with 7-11 leaflets, ovate to oblong-ovate, 5-10 cm long. The flowers are numerous, yellow, fragrant and about 1.5 cm long on branched, axillary panicles. The fruit is flat, dry, very shortly beaked, containing 1-5 seeds.

Distribution:

Narra is widely distributed and found in the primary and secondary forests at low and medium altitudes throughout the country. It also occurs in Southeast Asia, Peninsular Thailand, Cambodia, islands of Pacific, Ryukyu and Caroline, Bismarck Archipelago, New Hebrides and Solomon islands.



Propagation:

It can be propagated by seeds, stump planting and tissue culture.

Uses:

- A decoction of the bark is used for diarrhea.
- The young leaves are applied on ripening boils, skin ulcers and prickly heat.
- The root extract is applied on syphilitic sores
- A decoction of the resin (gum) is used for diarrhea and dysentery.
- An infusion of the leaves relieves stomach trouble, sprue (a tropical disease affecting mouth, throat and digestion), palpitation of the heart, rheumatism and abnormal mucous discharge from the vagina.
- A light infusion of the leaves controls fever; also used as lotion, disinfectant and insecticide.
- The wood has diuretic, antidyenteric, antithermic and antimalarial properties; also used for intermittent fever.
- The fruit kernel is given as emetic.

NEEM

Azadirachta indica A. Juss.
Meliaceae

Description:

This is a medium-to large-sized tree which reaches a height of 12-20 m and a diameter of 18-25 cm. Its trunk is straight with thick bark. The leaves are alternate, compound, 23-38 cm long with 7-17 leaflets, alternate or opposite, short-stalked, 6-7 cm long, oblique and toothed. The flowers are white, small and mildly fragrant. The fruit is green smooth, ellipsoidal drupe, 1.25-1.8 cm long, greenish-yellow or yellow when ripe. The seeds are linear, oblong-ovoid.

Distribution:

Neem is endemic to India. It is extensively grown in Burma, Indonesia, Thailand and Togo. The species which was introduced in the Philippines in 1983 is now raised or cultivated in different parts of the country.



Propagation:

The species can be propagated by seeds, cuttings and tissue culture.

Uses:

- A decoction of the bark is used for malaria, fever, dysentery, and intestinal worms.
- Slurry of bark is externally used for inflammation and injuries.
- A decoction of the leaves and flowers is used for diabetes and for antiseptic purposes.
- Dried powdered leaves and flowers are orally taken for diabetes; also used as carminative.
- The ashes of the leaves and flowers are externally used for skin diseases.

PILI

Canarium ovatum Engl.
Burseraceae

Description:

This large tree reaches a height of about 35 m and is a meter or more in diameter. The leaves are alternate, pinnate and about 30 cm long with usually three pairs of opposite leaflets and a terminal leaflet. The leaflets are ovate-oblong, 12-20 cm long and 3-7 cm wide, smooth and shiny on both sides, pointed at the apex and rounded or



obtusely pointed at the base. The flowers are clustered, and are borne on large compound inflorescences. The fruit is ovoid, 4-5 cm long, 2-2.5 cm wide, entirely smooth, drupe-like. It consists of green or brown thin resinous pulp and contains thick-shelled triangular seed.

Distribution:

Pili is found only in the Philippines where it is common in primary forests at low and medium altitudes. It grows particularly in Cagayan Province of northern Luzon; in the Bicol region including Masbate; and in some areas of eastern Visayas and southern Mindanao regions.

Propagation:

It may be propagated by seeds and asexual methods such as budding, grafting and marcotting.

Uses:

- The “saheng” (oleoresin) is used as a stimulant; a rubefacient (an external skin application causing redness of the skin); and an antirheumatic when applied externally.
- Poultices of brea are used externally for swellings of the legs
- Oleoresin, prepared in the form of ointment, is applied on indolent ulcers.

RAIN TREE

Samanea saman (Jacq.)
Merr. Mimosaceae

Description:

It is a hardy large spreading tree that reaches a height of 20 m or more and a diameter at breast height of more than 100 cm. The bark is dark brown with ridges. The leaves are evenly bipinnate with 8-12 pinnae. The flowers are small with extended stamens crowded together in a cluster (head) which appears like a small powderpuff. The seedpods



are straight, nearly black and somewhat fleshy, 15-20 cm long, turgid with pulpy mesocarp.

Distribution:

Rain tree is widely grown in the Philippines. It is an introduced species from Central America. The species grows in the West Indies, tropical America and Mexico.

Propagation:

The species is easily grown from seeds.

Uses:

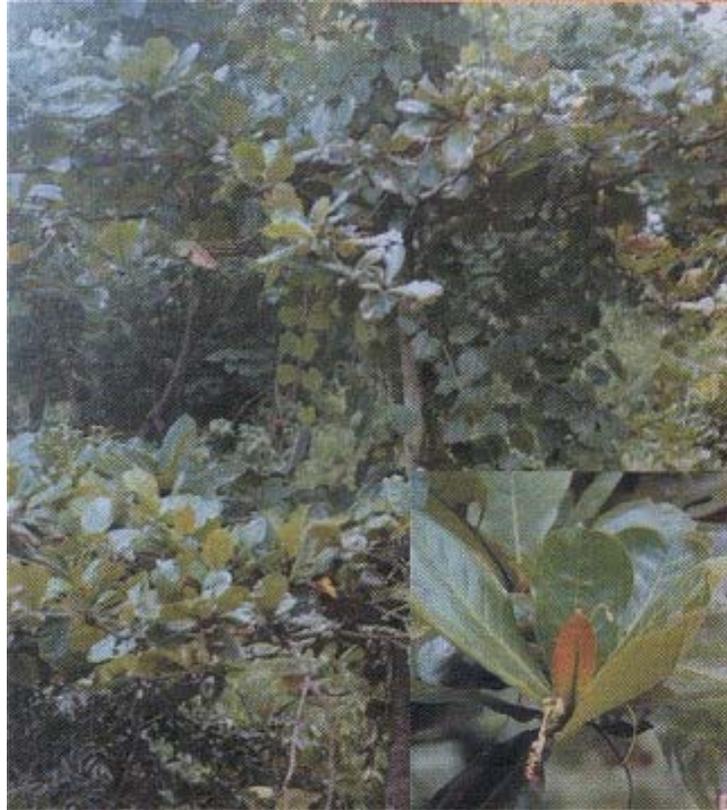
- A decoction of the inner barks and fresh leaves is used as remedy for diarrhea.
- Roots are prescribed for cold, fever, influenza and snakebite.
- Roots are also used to counteract the effects of croton oil and other poisonous drugs.

TALISAI

Terminalia catappa L.
Combretaceae

Description:

A large deciduous tree, sometimes reaching a height of 25 m. The branches are horizontally whorled. The leaves are shiny, obovate, 10-25 cm long, tapering below to a narrow heart-shaped base. The leafstalks are short and stout. The flowers are white, small and borne on spikes on the axils of the leaves. The fruit is smooth, compressed, ellipsoid, 3-6 cm long and prominently two-ridged down the sides. The pericarp is fibrous and fleshy but the endocarp is hard.



Distribution:

The species is found throughout the Philippines along seashores and often planted inland as a shade tree and commonly used in landscaping parks and gardens.

Propagation:

Talisai is a perennial species usually propagated by seeds.

Uses:

- The bark is an astringent and used against gastric fevers and bilious diarrhea.
- A decoction of the bark is used for dysentery, gonorrhoea and leucorrhoea.
- The red leaves are used to expel worms. The leaves, macerated in palm oil, are applied as a remedy for tonsillitis.
- The sap of young leaves, mixed and cooked with the oil of the kernel, is used against leprosy.
- Juice from young leaves is used in the preparation of an ointment for scabies, leprosy and other skin diseases. It is also taken internally for headache and colic.
- The leaves, applied on the head and sides, are refreshing and sudorific (induces sweating).
- A decoction of the fruit is purgative.

TEAK

Tectona grandis zL.) f.
Verbenaceae

Description:

It is an erect, large, deciduous tree growing up to at least 20 m high. The branches are four-angled. The leaves are large, elliptic or obovate, pointed on both ends, usually wedge-shaped at the base and entire at the margins. The upper surface is rough but without hairs, whereas the lower is densely covered with grey, or yellowish hairs. The flowers are numerous, short-stalked and arranged in large terminal, much-branched panicles 30-80 cm long. The fruit is somewhat rounded, about 1.3 cm in diameter and four-lobed. The soft pericarp is densely clothed with felted, stellate hairs.



Distribution:

The species is grown in various parts of the Philippines, especially in the Sulu Archipelago and in some parts of Mindanao.

Propagation:

The species is usually propagated by seeds.

Uses:

- A decoction of the fresh and dried leaves is used for menstrual disorders, for hemorrhages, for hemoptysis; also taken as a gargle for sore throat.
- A plaster of the powdered wood is used for bilious headaches and for dispersion of inflammatory swellings; can be taken internally for dyspepsia, also as a vermifuge.
- The powdered wood with water is applied as paste on swelled eyelids; also useful for acute dermatitis.
- The flowers and seeds are diuretic.
- The oil from nuts is used as hair grower; it also soothes itches of the skin.

TIBIG

Ficus nota (Blanco) Merr.
Moraceae

Description:

An erect, spreading, dioecious tree, 8 m high. The branchlets are hairy. The leaves are oblong to elliptic or obovate, 15-35 cm long and 8-12 cm wide; beneath are soft, pubescent, the margins are irregular but distinctly toothed, the apex is abruptly acute and the base is auriculate. The midrib of the leaves is stout, with 7-9 pairs of ascending, curved nerves; the petiole is brown, tomentose, 3-5 cm long. Tubercles are mostly cauline, occasionally from larger branches, clustered, rebranched, rigid, 20 cm long, bracteate; the figs are subglobose, 2-3.5 cm in diameter, glabrous, fleshy, pedunculate, green, becoming yellowish-white at the base; the umbilical scales are exerted; the peduncle is acute, 2 cm long and has three bracts.



Distribution:

The species is found in thickets and forests at low and medium altitudes. It occurs in Batan Island, Polilio, Mindoro, Palawan (Culion and Balabac), Panay, Samar and Leyte (Biliran). It also occurs in North Borneo.

Propagation:

The species is propagate by seeds.

Uses:

- The water extracted from the standing tree is drunk thrice a day for fever.
- The extracted water can also be applied to relieve muscle pain.

WHITE LAUAN

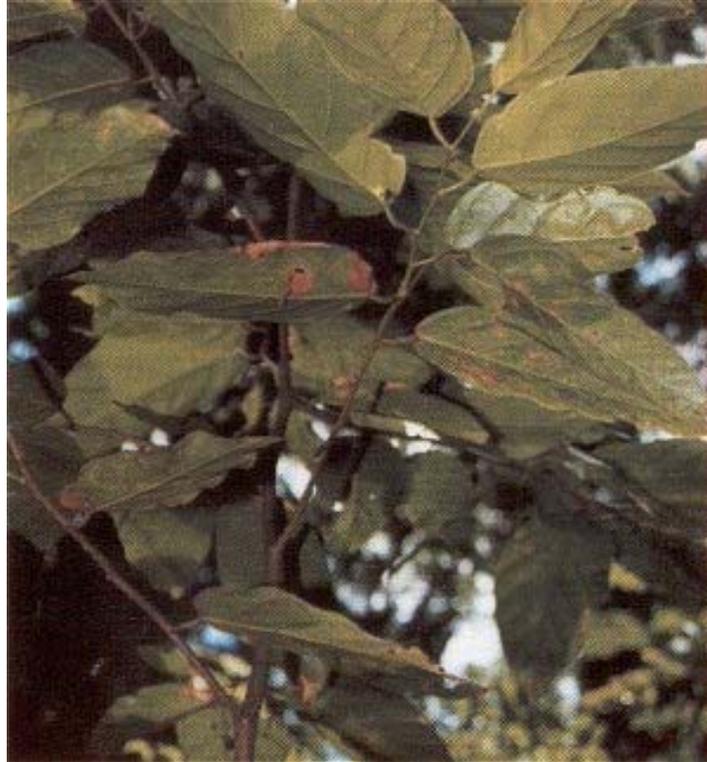
Shorea contorta Vidal
Dipterocarpaceae

Description:

It is a large tree, 50 m in height and 182 cm in diameter. The crown is flat, irregular and open. The leaves are simple, alternate, ovate, acuminate at the apex, rounded at the base and smooth. The secondary nerves are pairs of six, prominent and further apart.

The blade (leaf) is 10-14.5 cm long. The inflorescence is paniculate, 22 cm long if terminal, 14 cm long if axillary, singly or doubly branched; the branchlet is 4 cm long. The flowers are 7 mm long and 4 mm wide, ovoid, lanceolate; the sepals are ovate, obtuse,

the outer three somewhat larger; the petals are broadly oblong, elliptic, acute; the stamens are 15, subequal; the anther cells are linear and as long as the stout appendages; the style is columnar, about thrice the length of the ovary. The fruit (nut) is enclosed by two long wings (up to 13 cm), one medium-sized wing (8 cm) and two small wings (about 4 cm). A healthy mature seed is elongated, 3-4 cm long. The wings at the base are contorted ("contorta") around the nut.



Distribution:

White lauan is endemic throughout the Philippines. Associated with apitong and other lauan species, it is widely distributed in most provinces and islands, from Babuyan to Mindanao. The species is available in large quantities in all lumbering regions of the country.

Propagation:

The species is propagated by seeds.

Uses:

- A decoction of the bark is used for cough.
- A decoction of the bark and leaves are used as antipyretic, tonic and astringent.
- A decoction of the wood inhibits tumor.

References

- De Guzman, E. T. et al. 1981. Guide to Philippine flora and fauna. Vol. I. Natural Resources Management Center. Ministry of Natural Resources. Quezon City. 114 pp.
- Department of Health. 1995. Circular No. 168-A Series.
- Ecarma Products (two-page handout). 259 Doña Soledad Ext., Better Living Subdivision, Parañaque City, Metro Manila.
- Fernando, E. S. and M. L. Castillo. Checklist of species in FBS 21 (Taxonomy of Forest Plants): Handout. Department of Biological Sciences, College of Forestry and Natural Resources, UPLB, College, Laguna. 23 pp.
- Gutierrez, H. G. 1982. An illustrated manual of Materia Medica. Vol. 2, National Research Council of the Philippines, Bicutan, Taguig, Metro Manila. pp. 375-376.
- Madulid, A. D. 2002. A pictorial guide to the noteworthy plants of Palawan. Palawan Tropical Forestry Protection Programme and the Palawan Council for Sustainable Development in Partnership with the European Union.
- Merril, E. D. 1968. A flora of Manila. Manila: Bureau of Printing. 490 pp.
- Padua, L. S. de, G. C. Lugod and J. V. Pancho. 1977. Handbook on Philippine medicinal plants. Vol. I. College of Sciences and Humanities, UPLB, College, Laguna. pp. 1-64.
- _____. 1978. Handbook on Philippine medicinal plants. Vol. II. College of Arts and Sciences, UPLB, College, Laguna. pp. 1-67.
- _____. 1981. Handbook on Philippine medicinal plants. Vol. III. College of Arts and Sciences, UPLB, College, Laguna. pp. 1-66.
- Quisumbing, E. 1978. Medicinal plants of the Philippines. Katha Publishing Company, Inc., Quezon City, Philippines. 1,262 pp.
- Rojo, J. P. 1999. Revised lexicon of Philippine trees. Forest Products Research and Development Institute, College, Laguna. 484 pp.