

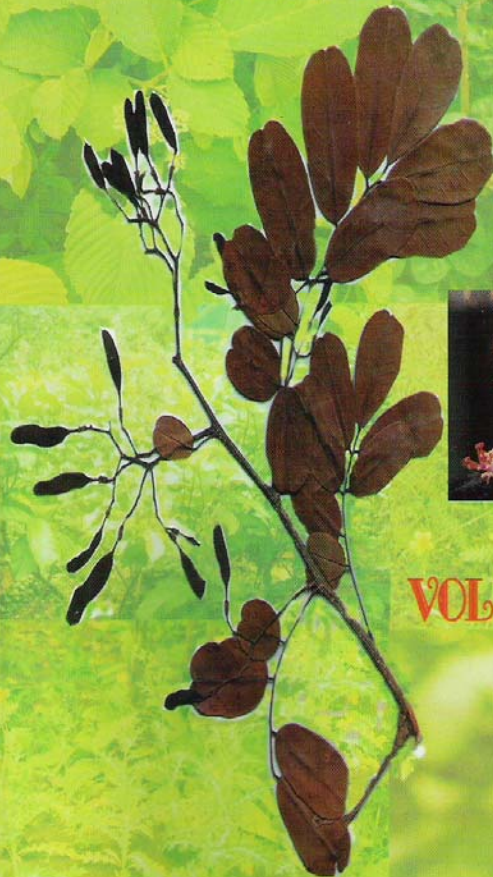


MINISTRY OF HEALTH



DEPARTMENT OF TRADITIONAL MEDICINE

MEDICINAL PLANTS OF MYANMAR



VOL ~ 2

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PREFACE

Nowadays, medicinal and healthy products are developed tremendously from plant kingdom and strongly support to possess healthy life style. People have become favoured and accepted the safe and effective role of medicinal plants with traditional medicine knowledge and scientific reports. Meanwhile the exploration of the knowledge of plants used in traditional medicine is increased to disseminate as an important research area.

Myanmar, a tropical country has a dramatic history of traditional medicine system and has a great resource of medicinal plants. In 2001 the volume one including monographs of 60 plants was published in order to exchange Myanmar traditional medicine knowledge throughout the world. This time, another 60 numbers of Myanmar medicinal plants are compiled and published as volume 2. Likely to volume 1, the volume 2 is composed of plants with local name and scientific names, family, description, traditional therapeutic indications, drug preparations and dosage, and adverse effect. Moreover those information regarding the biological activities and chemical constituents of each plant which are mentioned in the Compendium of Indian Medicinal Plants(Volume 2-5, 1960-1988) are supplemented in this volume 2.

It is truly believed that the knowledge of Myanmar medicinal plants are great value for scientific research programmes, traditional drug manufacturing, family health care by traditional medicinal plants and international knowledge exchange of Myanmar traditional medicine system.

Department of Traditional Medicine
Ministry of Health
Myanmar

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Medicinal plants of Myanmar volume 2 has been successfully prepared and published for all people who are interested in traditional medicine and medicinal herbs. I was honestly proud of this publication and I would like to express that a systematic compilation of medicinal plants with traditional and basic scientific knowledge could not be achieved without contribution of multidisciplinary professionals. The data of each monograph are results from the effort of a working group involving members of traditional medicine council, botanists, medical doctors, chemists and pharmacists. Therefore I am really indebted to all persons and who are mentioned in the list of contribution for this volume preparation. I am also thankful to all researchers and technicians of Research and Development Division of the Department for their endeavours to conduct experimental works and printing.

Thanks are also due to World Health Organization (WHO) for supporting appropriate financial assistance to conduct some laboratory tests and to do survey trips, and to print this colorful volume which would be definitely beneficial to people concerning traditional medicine.

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**List of professionals who contribute for the preparation of
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သံပချုပ်

Abutilon indicum (L.) Sweet.



***Abutilon indicum* (L.) Sweet.**

Malvaceae

Myanmar name : Than pa choke (သံပချိုင့်)

English name : Country mallow, Moon flower.

Description

Tomentose perennial herb, woody at the base, shoots produced perennially. Leaves alternate, simple, cordate, tip acute, margin irregularly toothed, surface with closely-felted white. Inflorescence solitary and axillary; flowers yellow, opening in the evening. Fruit carpels 20, glabrescent, truncate, awns spreading. Seeds brown, marked by shallow depressions.

Distribution

Grows wild as weed on hillsides, in grassland and by roadsides in Myanmar.

Part(s) used

Root, Leaves

Indications

Acute submandibular lymphadenitis, chronic lymphadenitis, dysentery.

Preparation & Dosage

Root slurry is externally applied three times a day. Leaves and sugar are boiled in water until 1/3 of original volume is left. In a dose of 25 ml of such decoction is taken three times a day for dysentery.

Adverse effect

None reported

Chemical constituents

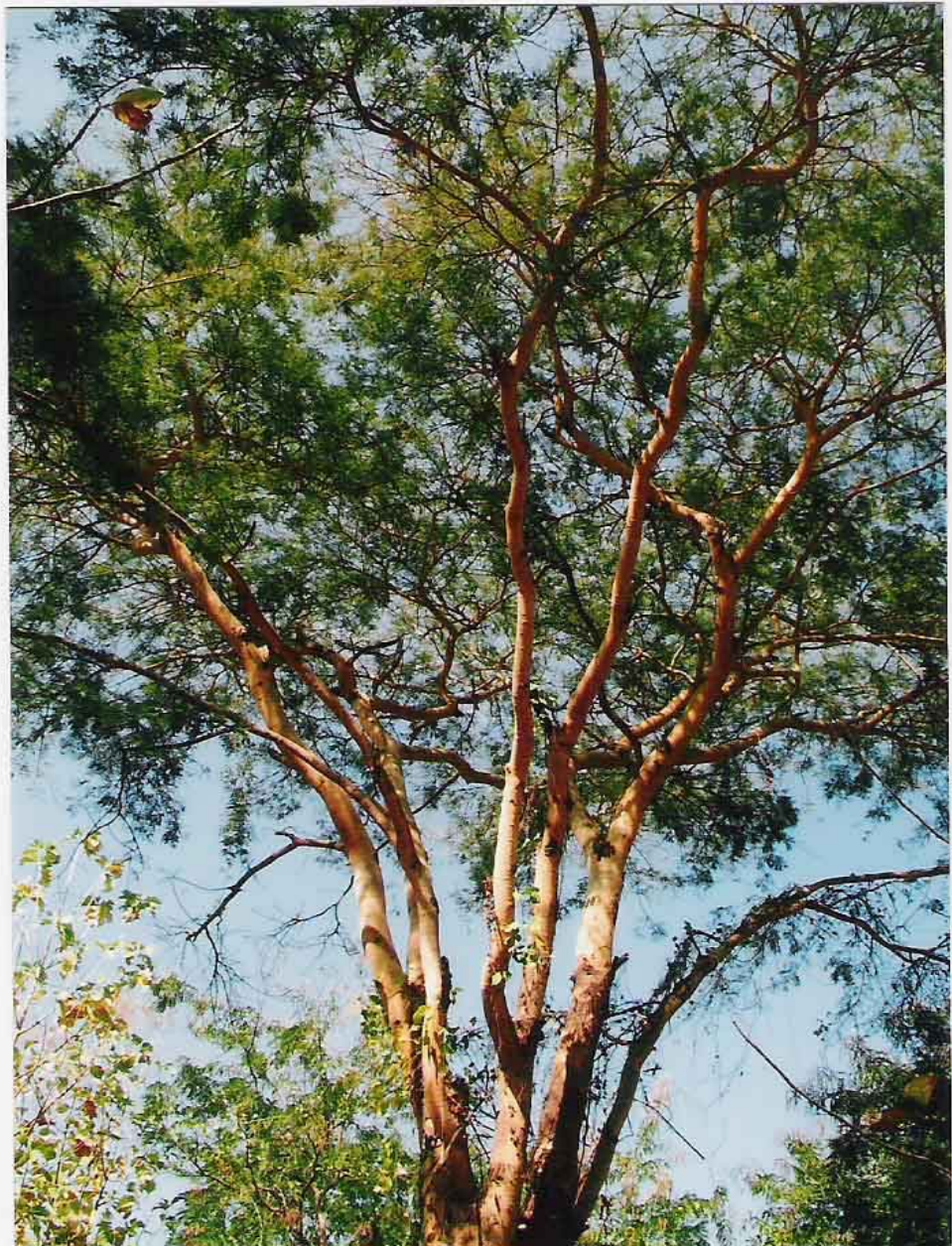
Glossypetin - 8 and 7 - glucosides, cyanidin - 3 - rutinoside, amino acid, glucose, fructose, galactose, gallic acid, alantolactone and isoalantolactone.

Biological Activity

Analgesic activity.

ထနောင်း

Acacia leucophloea Willd.



***Acacia leucophloea* Willd.**

Mimosaceae

Myanmar name : Hta Naung (ထနောင်း)

English name : White Babool

Description

Tall tree, bark yellowish white, branches densely spreading. Leaflets bipinnate, 5-15 pairs, linear-oblong, sub sessile. Inflorescence globose head; flowers numerous. Fruit thin flat pods, slightly curved, covered with pale brown tomentum, seeds 10-20.

Distribution

Grows naturally along the road sides and garden especially found middle part of Myanmar.

Part(s) used

Bark , Leaves

Indications

Renal oedema, cardiac oedema, indigestion.

Preparation & Dosage

Externally apply the bark slurry three times a day. Bathe the decoction of leaves at noon.

Chemical constituents

N-hexacosanol, β -amyrin, β -sitosterol, diterpenoid, tannin, isookannin, cyanin, leucodelphinidin-3-O- α -L-rhamnopyranoside and glycosides.

ကြောင်ရိသေ

Acalypha indica Linn.



Acalypha indica Linn.

Euphorbiaceae

Myanmar name : Kyaung yo thay (ကြောင်ရီသေ)

English name : Indian Acalypha

Description

An annual herb. Leaves long- petioled, ovate, crenate-serrate. Inflorescence spikes, slender, erect; flowers 3-5, clustered at the top. Fruit capsule, one seeded. Seeds ovoid, acute.

Distribution

Grows wild in the lower and middle parts of Myanmar.

Part(s) used

Whole plant.

Indications

Bronchial asthma

Preparation & Dosage

4g of the whole plant powder or one teaspoon of expressed juice is orally taken with honey two times a day.

Adverse effect

Nausea, vomiting, high dose is quite dangerous and it may lead to death. Pregnant women should not use this plant.

Chemical constituents

Acalyphamide, aurantiamide, succinimide, 2-menthyl anthraquinone, ellagic acid, β -sitosterol and its glucoside isolated from leaves and twigs, acalyphin from aerial parts, stigmasterol from roots and leaves and acalyphol acetate isolated only from leaves.

လင်းနေ(လင်းလေ)
Acorus calamus Linn.



***Acorus calamus* Linn.**

Araceae

Myanmar name : Lin nay/ Lin lay (လင်းနေ/လင်းလေ)

English name : Sweet flag

Description

An aromatic perennial herb, branching; rhizome aromatic, immersed in the mud. Leaves numerous, distichous, equitant, tapering into a long acute point, smooth, the central portion thick, margin entire. Inflorescence spadix, straight, arising from the axils of the outer leaves; flowers small, dense, cylindrical. Fruit berry prismatic-clavate. Seeds cylindrical green.

Distribution

Grows wild or cultivated as a medicinal herb. Mostly found near the streams, ponds and lakes.

Part(s) used

Rhizome

Indications

Indigestion, mental supportive.

Preparation & Dosage

A dose of (2-3g) of rhizome powder with honey two times a day orally taken for indigestion, colic and diarrhoea. It is used as an ingredient in the drug formulations for child diseases. Take 0.72 gm of rhizome powder with honey three times a day for mental supportive.

Adverse effect

Overdose can cause vomiting. It should be used carefully in pregnant women and lactating mother.

Chemical constituents

Essential oil, tri methoxyben-zaldehyde, dimethoxybenzoquinone, galangin and sitosterol

Biological Activity

Spasmolytic activity

Antimicrobial activity

Antifungal activity

တောင်မရိုး

Alstonia scholaris (L.) R.Br.



Alstonia scholaris (L.) R.Br

Apocynaceae

Myanmar name : Taung mayoe (တောင်မရိုး)

English name : Not known

Description

A tall evergreen tree. Bark grey, rough, exudes a bitter milky sap. Leaves 4-7 in a whorled, oblong or obovate, apex acute dark green above, pale beneath; petiole short. Inflorescence cymes; flowers greenish-white. Fruit cylindrical. Seeds small, flat, numerous.

Distribution

Naturalized in the forest of Myanmar. Now cultivated for its medicinal value.

Part(s) used

Bark

Indications

Arthritis, diabetes mellitus

Preparation & Dosage

For arthritis patients, 4 gm of bark powder itself or with 4 gm of honey is orally taken with warm water three times a day. A dose of 4 gm of bark powder with lemon juice three times a day is beneficial for diabetes mellitus control.

Adverse effect

Nausea, vomiting, laxative effect. (caution in pregnant mother)

Chemical constituents

Echitamine hydrochloride, echitamine, α -amyrin acetate, lupeol acetate, venoterpine glucoside, scholaricine, picrinine, 17-O-acetylechitamine and β -sitosterol.

Biological Activity

Antimicrobial activity

Antidepressant activity

ပုစွန်စာ

Alternanthera sessilis R.Br.



***Alternanthera sessilis* R.Br**
Amaranthaceae

Myanmar name : Pa zun za (ပုဇွန်စာ)

English name : Not known

Description

An annual or a perennial herb, prostrate, much-branched from the root, often rooting at the lower nodes. Leaves opposite, linear-oblong, lanceolate or elliptic, obtuse or subacute, petiole sessile. Inflorescence axillary, sessile heads, often cluster; flowers small white. Fruit uricle, winged margins. Seeds minute suborbicular, brown.

Distribution

Grow wild among the grass land.

Part(s) used

Whole plant.

Indications

Leucorrhoea, amenorrhoea, disease with vomiting of blood (Haematemesis)

Preparation & Dosage

4 gm of the fresh whole plant and 800 ml of water are boiled until $\frac{1}{3}$ of original volume is left. 25 ml of this decoction itself or with a little sugar is taken three times a day for leucorrhoea. Mix 80 gm of whole plant powder, 48 gm of ginger, 16 gm of pepper and 16 gm of lemon grass. 2 gm of this preparation is orally taken with warm water two times a day for amenorrhoea. 8 gm of the whole plant expressed juice and 4 gm of sugar are mixed and taken three times a day for Haematenesis.

Adverse effect

This plant should be carefully used for pregnant mother. It disturbs milk secretion in lactating mother, indigestion.

Chemical constituents

α and β -spinasterols, lupeol, 24-menthylencycloortanol, cycloeucaleanol, campesterol, β -sitosterol, stigmasterol, nonacosane, 16-hentriacontane, handianol, saponin and flavone glycoside.

သံမနိုင်းကျောက်မနိုင်း
Alysicarpus vaginalis DC.



Alysicarpus vaginalis DC.

Papilionaceae

Myanmar name : Than ma naing kyauk ma naing (သံမနိင်ကျောက်မနိင်)

English name : Not known

Description

Diffuse annuals herbs, stems glabrescent, ascending. Leaves simple, odd-pinnate, oblong obtuse, cordate at the base, about as long as the broad, stipillate, scarious. Inflorescence peduncle elongated; flowers 2-3, purplish, standard broad, keel obtuse, adhering to the wings. Stamen diadelphous. Fruit pod, faintly pubescent, rugose, a little thickend at the end.

Distribution

Widely grow among the grass land in temperate region of Myanmar.

Part(s) used

Whole plant

Indications

Renal stone, dysuria, frequency, urgency associated with fever, renal oedema.

Preparation & Dosage

Taking 4 gm of the whole plant powder with lime juice three times a day is beneficial for renal stone. Boil 80 gm of the whole plant in 320 ml of water until $\frac{1}{4}$ of original volume is obtained. 20 ml of this preparation with little sugar is orally taken three to five times a day. 4 gm of the whole plant powder with sugar is used three times a day for the renal oedema.

Adverse effect

It impairs milk production in lactating mother.

ဟင်းနုနွယ်ဆူးပေါက်
Amaranthus spinosus Linn.



***Amaranthus spinosus* Linn.**

Amaranthaceae

Myanmar name : Hin nu nwe su bauk (တင်းနုနွယ်ဆူးပေါက်)

English name : Spiny amaranthus

Description

A diffuse spinous herb. Leaves, ovate or oblong. Inflorescence spikes; flowers greyish-green, dense. Fruit dehiscent. Seeds black, shining.

Distribution

Grows wild as a weed along the road sides and waste places.

Part(s) used

Whole plant

Indications

Leucorrhoea, anaemia.

Preparation & Dosage

Fresh whole plant 80 gm and 320 ml of water are boiled until $\frac{1}{3}$ of decoction is obtained. 40 gm of sugar is dissolved in 25 ml of this decoction and take it three times a day for leucorrhoea or anaemia.

Adverse effect

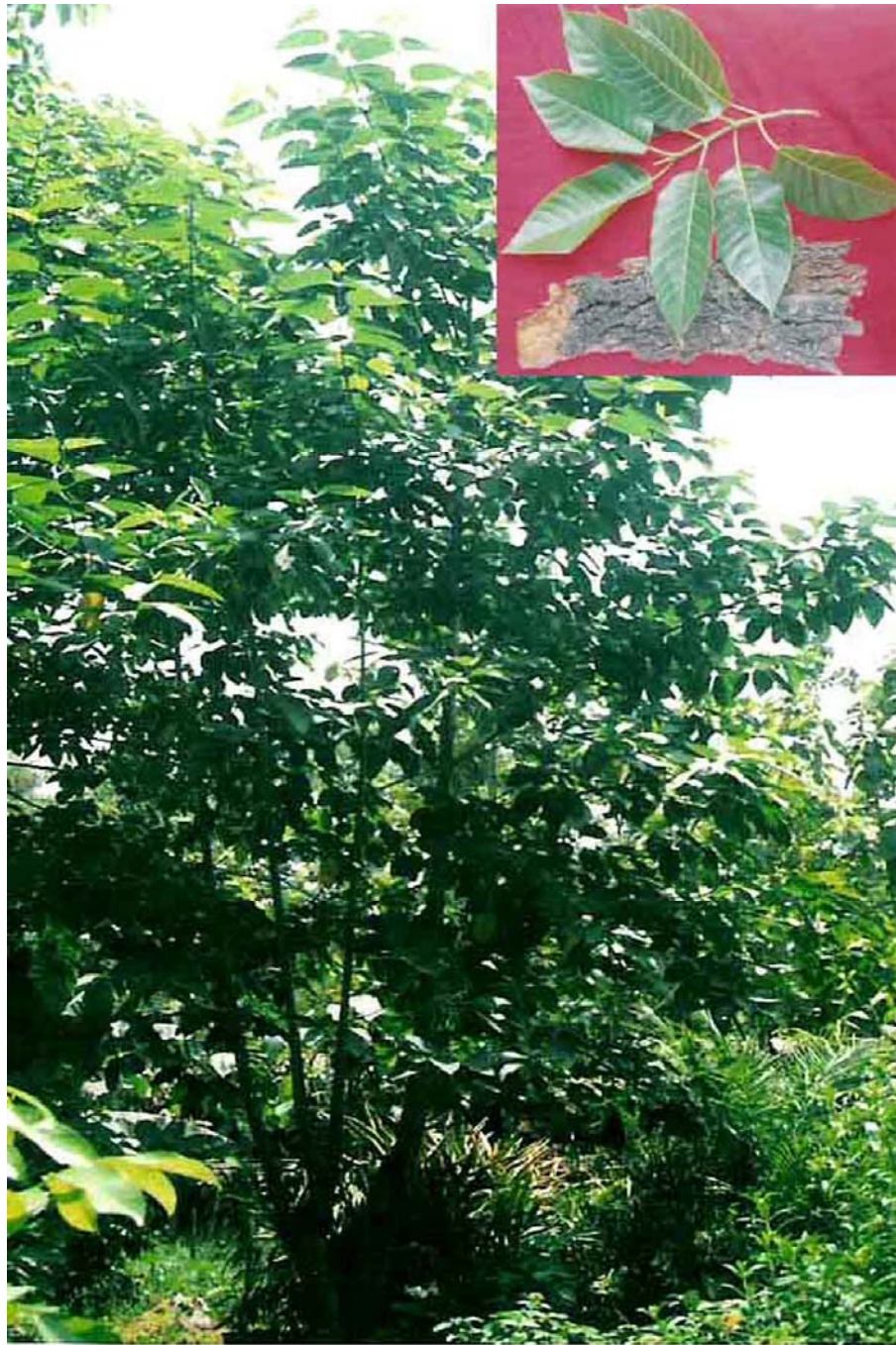
None reported.

Chemical constituents

Saponins, Hentriacontane, α -spinasterol, α -spinasterol octocosanoate, β -sitosterol, stigmasterol, campesterol, cholesterol, stearic, oleic and linoleic acid.

မဒု

Anthocephalus cadamba Miq.



***Anthocephalus cadamba* Miq.**

Rubiaceae

Myanmar name : Ma u (မာ့အူ)

English name : Not known

Description

A large tree, branches spreading, bark dark-brown. Leaves simple, opposite, entire, , caducous, coriaceous, stipules lanceolate. Inflorescence globose, peduncled solitary head; flowers orange coloured with white stigma, scented at night. Fruit confluent into a fleshy globose mass.

Distribution

Naturalized throughout the forest of Myanmar.

Part(s) used

Root , Bark

Indications

Tinnitus , tingling and numbness

Preparation & Dosage

Root slurry or root powder boiled with sesame oil is used as external application. In the same ratio of bark decoction and lemon juice are mixed. 25 ml of such mixture is taken three times a day for Tingling and numbness.

Adverse effect

None reported.

Chemical constituents

Glycosidic alkaloid, triterpenic acid, β -sitosterol and saponins.

ကုန်းခရာ

Argemone mexicana Linn.



Argemone mexicana Linn.

Papaveraceae

Myanmar name : Kon Khaya (ကုန်းခရာ)

English name : Mexican prickly Poppy, Prickly poppy, Mexican Poppy, Yellow Mexican Poppy

Description

An erect prickly annual herbs with yellow juice, covered with a whitish substance. Leaves thistle-like, pinnately cleft, base of two sides overlapping each other, stem-clasping, margin deep wavy. Inflorescence terminal on short leafy branches; flowers bright yellow. Fruit a prickly capsule, oblong, opening by valves. Seeds many, globose.

Distribution

Grows wildy roadsides and fields in various parts of Myanmar.

Part(s) used

Whole plant

Indications

Sea- snake bite

Preparation & Dosage

4 g of the whole plant powder is made poultice with warm water and it is used externally to lesion.

Adverse effect

Nausea, vomiting

Chemical constituents

Myristic palmitic, oleic, linoleic acid, helectrine, sanguinarine, protopine, berberine, coptisine, protopine nitrate, berberine nitrate, ceryl alcohol, β -sitosterol, succinic, citric, tartaric, maleic acid, glucose and fructose, flavonol glycosides, Phenolic-origemexitin, lutcolin, eriodictyol, cryptopine, β -sitosterol,

Biological Activity

Anti-inflammatory activity.

တ္တသရမူလီ

Aristolochia indica Linn.



***Aristolochia indica* Linn.**

Aristolochiaceae

Myanmar name: Eik thra muli (ဣန္ဒြေရမူလီ)

English name: Indian birthwort

Description

Scandent shrub, twining. Leaves alternate, linear to obovate-oblong, baseshallowly cordate. Inflorescence solitary or in axillary clusters; flowers often strange coloured and bad smell. Fruit a septicidal capsules, dehiscing basally (parachute like).

Distribution

Occurs in many forms, cultivated and wild throughout Myanmar.

Part(s) used

Whole plant

Indications

Febrile fits, mild to moderate pain.

Preparation & Dosage

Take 0.135 gm of the whole plant powder with warm water. The powder with sesame oil is externally applied three times a day.

Adverse effect

None reported.

Chemical constituents

Isorhamnetin-3-glucoside, β -amyrin, cysteine, Phenylalanine in leaves, norsanguinarine, berberine, protopine, β -sitosterol from roots, 3-menthoxyquercetin, vanillic acid from flowers, tryptophan, methionine, proline, alanine, tyrosine, histidine, glycine, leucine, aspartic acid and glutamic acid, mexicanol, mexicanic acid, Aristolochic acid, aristololactam β -D-glucoside, cephaeradione, aristolactam, β -sitosterol- β -D-glucoside, aristolindiquinone from roots.

Biological Activity

Mutagenic activity

ငံုးဆေး

Aristolochia tagala Cham.



***Aristolochia tagala* Cham.**

Aristolochiaceae

Myanmar name : Nga phone say (ငနံးခေး)

English name : Not known

Description

An extensively climbing shrub with stout stems, glabrous, grooved. Leaves alternate, broadest at the deeply cordate base, ovate-oblong, basal nerve produced for beyond the middle. Inflorescence racemes; flowers numerous in lax, mostly abortive, usually only one fertile. Fruit a capsule, stipitate, oblong or subglobose. seeds broadly ovate-deltoid.

Distribution

Throughout various regions of Myanmar.

Part(s) used

Stem, leaves, roots

Indications

Breast lump, tuberculosis, malaria.

Preparation & Dosage

For breast lump, 2 gm of stem powder with warm water is taken three to five times a day. The stem slurry can also be used external application. 2 gm of stem powder with warm water is taken three times a day for tuberculosis. 4 gm of stem powder with warm water is taken three times a day in the treatment of malaria. 4 gm of leaf or root powder is dissolved in oil and apply or inhale three times a day for chronic rhinitis.

Adverse effect

None reported.

Chemical constituents

Aristolochic acids , allantoin , tetralone

Biological Activity

Anti-malaria.

ရှဉ်မတက်

Asparagus racemosus Willd.



***Asparagus racemosus* Willd.**

Liliaceae

Myanmar name : Shint ma tet (ရှင်မတတ်)

English name : Asparagus

Description

A tall climbing under shrub. Stem cylindrical, branchlets three-edged with three protruding angles. Spines recurved or rarely straight . Cladodes long in tufts of 2-6, curved. Inflorescence racemes ; flowers white, fragrant. Fruit berry. Seeds red.

Distribution

Cultivated as an ornamental plant in garden.

Part(s) used

Rhizome

Indications

Impotence , renal oedema, anaemia

Preparation & Dosage

Fresh rhizomes are macerated in milk for 24 hours and dried in sunshine, and make it powder. 4 gm of such dried powder with honey two times a day for impotence and anemia. For renal oedema, boil the rhizome with water and dried it. 2-4 gm of such dried powder is taken three to four times a day with honey.

Adverse effect

None reported.

Chemical constituents

Quercetin-3-glucuronide, sitosterol, stigmasterol and their glucosides, sarsapogenin, spirostanolic, finostanolic saponins, shatavarin, benzaldehyde and asparagamine,

Biological Activity

Antioxytocic activity
Hypotension.

ပရနွဝါ

Boerhavia diffusa Linn.



***Boerhavia diffusa* Linn.**

Nyctaginaceae

Myanmar name : Payan nawa(ပရနွဲဝါ)

English name : Hogweed, Pigweed, Spreading hogweed

Description

A spreading, much branched herb, stems thickened at the nodes, branches long stout glabrous pubescent or viscous, often purplish. Leaves at each node in unequal pairs, broadly ovate or suborbiculate, green and glabrous above, usually with minute scales beneath, often coloured pink. Inflorescence axillary paniced umbel, arranged in slender long-stalked; flower minute, perianth-tube short, limb funnel-shaped, 5-lobed, pale purple. Fruit shortly clavate 5-ribbed viscid, glandular on the ribs, top round.

Distribution

Wildly grows as weed in many places of Myanmar.

Part(s) used

Whole plant, Root

Indications

Arthritis, renal oedema, dysuria

Preparation & Dosage

Mix 2 gm of root powder and 2 gm of drum stick flowers with honey. Take orally such mixture three times a day in the treatment of arthritis. Boil 80 gm of the whole plant in 320 ml of water until ($\frac{1}{4}$) of original volume is obtained. 25 ml of this decoction is added 4 gm of sugar and taking it three times a day is useful in renal oedema. Boil 168 gm of the whole plant in 800 ml of water until $\frac{1}{2}$ of original volume is left. 25 ml of such decoction is taken with sugar three times a day for dysuria.

Adverse effect

None reported.

Chemical constituents

Ash (11.8), Ca (1.2) and k (2.3 %) alkaloids, amino acids, ursolic acid, Polysacchoride, β -Ecdysone, triacontanol, flavone, boerovineones, punarnavoside.

Biological Activity

Ca²⁺ channel antagonistic effect

ပဲစဉ်းငုံ

Cajanus indicus Spreng.



***Cajanus indicus* Spreng.**

Papilionaceae

Myanmar name : Pesin ngon (ပဲခင်းငုံ)

English name : Pigeon Pea, Congo- pea

Description

An erect shrub, covered with silky hairs on branches and shoots. Leaves alternate, tri-foliolate compound; leaflets oblong- lanceolate, acute, margin entire. Inflorescence corymbose raceme, often forming a terminal panicle; flowers with downy pedicels, red in colour. Fruit pod, finely downy, tipped with the lower half of the style. Seeds varying in colour from yellow and red to brown or black.

Distribution

Cultivated in the upper parts of Myanmar for its edible seeds and leaves .

Part(s) used

Seed, Root

Indications

Cardiac oedema, promotes milk production in lactating mother, generalized weakness

Preparation & Dosage

Boiled seeds salad in a dose of two times a day can be given in cardiac oedema. The root slurry is applied externally. Seeds are soaked in water and dried when completely dry, roasted and made into powder. 8 gm of such roasted powder and 8 gm of honey are mixed with 15 ml of milk and taken at morning and bed time for generalized weakness.

Chemical constituents

Vitexin, salicylic acid, hentriacontane, laccero, longistylins, pinostrobin, naringenin, β -amyrin, β -sitosterol, isoflavones, cajanin and cajanol, isoflavone glucoside, sitosterol- β -D-glucoside, genistein, sitosterol, lupeol, cajaquinone.

အနံ့ကျွဲ
Cassia tora Linn.



***Cassia tora* Linn.**

Caesalpiniaceae

Myanmar name: Dan gywe (ဒန့်ဂွဲ)

English name: Not known

Description

An annual herb with foetid smell; stem stout, erect, glabrous. Leaves alternate, paripinnate, rachis grooved, pubescent; leaflets 3- pairs, obovate- oblong, less pubescent beneath. Inflorescence terminal to axillary raceme; flowers yellow, nearly sessile, pairs in axil, crowded in terminal. Fruit pod, long, slender, curved. Seeds uniseriate, rounded or rhombohedral, deep brown in colour, smooth, glossy.

Distribution

In Myanmar, grows wild along roadsides, abandoned fields and gardens.

Part(s) used

Seed, Leaves

Indications

Insomnia, leucorrhoea, oliguria.

Preparation & Dosage

2 gm of roasted seeds powder with honey is orally taken at bedtime or 4 gm of roasted seed powder and the same amount of sugar are mixed and taken with warm water three times a day for insomnia. The leaves salad or decoction is useful in the treatment of leucorrhoea and oliguria.

Adverse effect

None reported

Chemical constituents

Sterol , myricyl alcohol, rubrofusarin glucoside

ကြက်မောက်ပန်း
Celosia cristata Linn.



***Celosia cristata* Linn.**

Amaranthaceae

Myanmar name : Kyet mouk pan (ကြက်မောက်ပန်း)

English name : Cock's comb.

Description

Annual erect herbs. Leaves alternate, simple, without stipule. Inflorescence terminal paniculate spikes, clusters. Flowers blood red colour, small, excessively developed and monstrous, bracts thin, membranous, bracteole, thin, dry, not green in colour. Fruit dehiscent capsule. Seeds shining black.

Distribution

Occurs wild throughout Myanmar but mostly cultivated in gardens and parks for ornament.

Part(s) used

Flowers

Indications

Dizziness, breathlessness, palpitation

Preparation & Dosage

Apply expressed juice of flowers three times a day is beneficial for paresis, paralysis, tingling and numbness. 2 gm of dried flower and 2 gm of honey or lime juice are mixed and taken for dizziness, breathlessness and palpitation .

Chemical constituents

Celosianin, isocelosianin, Hordenine, β -sitosterol, ancistrocladine.

Adverse effect

None reported

မြင်းခွာ

Centella asiatica Linn.



***Centella asiatica* Linn.**

Umbelliferae

Myanmar name: Myin khwa (မြင်းခွာ)

English name: Asiatic Penny wort

Description

A prostrate herb, slender, rooting at the nodes. Leaves alternate or tufted at each node, kidney-shaped, rounded teeth along the margin, glabrous. Inflorescence umbel; flowers white, sessile, very minute. Fruit small laterally compressed, hard with thickened pericarp.

Distribution

Grows wild in wet and shady places.

Part(s) used

Whole plant, Leaves

Indications

Memory impairment, oliguria, eye diseases.

Preparation & Dosage

4 gm of the whole plant powder is orally taken with honey or water three times a day for memory impairment. 16 gm of pepper and ten times of leaves powder are mixed and taken one teaspoon with warm water three

times a day for the treatment of oliguria. 8 gm of leaves powder and honey are mixed and taken with milk for eye disease.

Adverse effect

None reported

Chemical Constituents

Triterpenc acid, polyacetylenes, ocetylenes, glucosylquercetin, 3-glucosyl kacmpferols, triterpenoid trisaccharides.

Biological Activity

Sedative action, Antistress activity

အောင်မဲညို
Clitoria ternatea Linn.



Clitoria ternatea Linn.

Fabaceae (Papilionaceae)

Myanmar name : Aung mai nyo (အောင်မဲညို) (Blue-flowered variety)

English name : Butterfly-pea, Winged-leaved (Litoria Mazarion)

Description

A perennial Climber without tendrils. Stem downy and slender. Leaves imparipinnate, 3-7 leaflets, ovate, tip and base obtuse. Inflorescence solitary and axillary; flowers standard bright-blue with an orange centre. Fruit flattened-pod. Seeds 6-10, Yellowish brown, smooth.

Distribution

Occurs wild on the edges of villages in Myanmar.

Part(s) used

Leaves, whole plant

Indications

Promotes milk production in lactating mother, urinary disorder.

Preparation & Dosage

40 gm of fresh leaves and 160ml of water are boiled until 1/3 volume of decoction is left. 25 ml of this decoction is orally taken three times a day. 25 ml of the whole plant decoction is taken with sugar three times a day.

Adverse effect

Wind colic, Indigestion.

Chemical Constituents

A lactone aparajitin, taraxerol, phenol glycoside, alkaloid, P-hydroxycinnamic acid polypeptide, hexacosanol, anthoxanthin, kaempferol, clitorin, stigmast-4-ene 3, 6-dione, cyanin chloride, palmitic, stearic, oleic, linoleic, linolenic acids, protein and amino acid.

အောင်မဲဖြူ

Clitoria ternatea Linn.



Clitoria ternatea Linn.

Fabaceae (Papilionaceae)

Myanmar name : Aung mai phyu (အောင်မဲဖြူ) (white-flowered variety)

English name : Butterfly-pea, Winged-leaved (Litoria Mazarion)

Description

A perennial climber without tendrils. Stem downy and slender. Leaves imparipinnate, 3-7 leaflets, ovate, tip and base obtuse. Inflorescence solitary and axillary; flowers standard white with a creamish white centre. Fruit flattened-pod. Seeds 6-10, Yellowish brown, smooth.

Distribution

Occurs wild on the edges of villages in Myanmar.

Part(s) used

Root , whole plant

Indications

To remove all animal poisons, urinary disorder

Preparation & Dosage

Root powder together with same amount of pepper is prescribed two times a day. 25 ml of the whole plant decoction is taken with sugar three times a day for urinary diseases.

Adverse effect

Indigestion

Chemical constituents

Cyanin chloride, palmitic, stearic, oleic, linoleic, linolenic acids, protein, amino acid, a lactone aparajitin, taraxerol, phenol glycoside, alkaloid, P-hydroxycinnamic acid polypeptide, hexacosanol, anthoxanthin, kaempferol, clitorin, stigmast-4-ene 3, 6-dione.

ကင်းပုံ
Coccinia indica W&A.



Coccinia indica W&A.

Cucurbitaceae

Myanmar name : Kin bon (ကင်းပုံ)

English name : Not known

Description

Perennial tendril climber, much branched. Leaves alternate, 5-angled lobed, broad, base cordate. Inflorescence axillary and solitary; flowers unisexual, white in colour. Fruit fleshy, fusiform-ellipsoid, slightly beaked, marked when immature with white streaks, change bright scarlet when fully ripe. Seeds many, ovoid, compressed.

Distribution

Widely cultivated throughout Myanmar for its edible value.

Part(s) used

Whole plant, root

Indications

Diabetes mellitus

Preparation & Dosage

4 gm of whole plant powder with warm water is given in a dose of three times a day or 160 gm of root is boiled in 800 ml of water until $\frac{1}{2}$ of the original volume is obtained. Take 25 ml of such decoction three times a day.

Adverse effect

None reported.

Chemical constituents

B-amyrin, lupeol, cucurbitacin B, cephclandrol, tritriacontane, β -sitosterol, cephalandrines, palmitic, oleic and linoleic acid, β -carotene, lycopenal, taraxerone, taraxerol, glucoside.

Biological Activity

Hypoglycaemic activity.

နန္ဒင်း(ဆန္ဒင်း)
Curcuma longa Linn.



Curcuma longa Linn.

Zingiberaceae

Myanmar name : Sanwin (ဆန္ဒင်)

English name : Turmeric

Description

An annual herbs, consists of rhizomes which are thick, bright orange, ovate, oblong or pyriform. Leaves tuft, glabrous, oblong – lanceolate, entire, base narrow, apex acuminate, petiole thin abruptly towards the sheath. Inflorescence scape from the apex of the rhizome; flowers yellowish-white, funnel shade, cluster. Fruit capsules globose to ellipsoid. Seeds arillate.

Distribution

Cultivated all over the country for culinary use and medicinal purpose.

Part(s) used

Rhizome

Indications

Indigestion.

Preparation & Dosage

The rhizome is used for diarrhea , indigestion and to control bowel habit. Crushed fresh rhizome is externally used in cases of fracture, injuries and abscess. Dried rhizome powder is also orally taken in a dose of 1.5-3 gm for the above indications.

Adverse effect

None reported.

Chemical constituents

Curcumins, turmerones, pinenes, camphene, limonene, terpinene, caryophyllene, curcumene, linalool, turmerone, borneol, camphor, eugenol, cineole, curdione and curzerenone.

Biological Activity

Anti inflammatory activity, cytotoxic activity, Anticoagulant activity, Antitumor promoting activity, Anti oxidant activity

စပါးလင်

Cymbopogon citratus (DC.) Stapf.



***Cymbopogon citratus* (DC.) Stapf.**

Poaceae

Myanmar name : Sabalin (စပါးလင်)

English name : Lemon grass

Description

Perennial grass with long stem and elongated rhizome. Leaves sheathing at the stem base, narrow flat, scented, aromatic.

Distribution

Cultivated for vegetable as spicy and medicinal purpose.

Part(s) used

Rhizome and base of the leaves sheath.

Indications

Gall stones, indigestion, wind colic, infected wound, abscess.

Preparation & Dosage

Base of the leaves sheath is made powder, then soak in rice rinsing water. 4 ml of this preparation is orally taken three times a day for gall stone. 80 gm of the leaves and 80 gm of sesame oil are boiled in 800 ml of water until oil is only left. 1 gm of such oil and 4 ml of lemon juice are mixed and applied three times a day.

Adverse effect

Abortion. It should not be used by pregnant mother.

Chemical constituents

Triterpenoid, Myrcene, chlorogenic, caffeic, P-coumaric acids.

နွားမြေရင်း(ဝက်မြက်ညို)
Cyperus scariosus R.Br.



Cyperus scariosus R.Br.

Cyperaceae

Myanmar name : Nwa myay yin (နွားမြေရင်း)

Wet myet nyo (ဝတ်မြတ်ညို)

English name : Not known

Description

Stem and stolon slender, at top triquetrous. Leaves narrow, weak, short. Inflorescence umbel, spikelets linear pale straw colour; flowers minute. Fruit minute.

Distribution

Widely distributed in various regions of Myanmar.

Part(s) used

Rhizome

Indications

Fever with chills and rigor, indigestion, bronchial asthma.

Preparation & Dosage

Taking 4 gm of rhizome powder with warm water, three times a day is recommended for fever with chill and rigor. For indigestion and bronchial asthma, one teaspoonful of a mixture of 4 gm rhizome powder and honey is orally taken two times a day. Rhizomes are cut into pieces and boiled with water. 20 ml of such decoction with honey is taken three times a day for fever.

Adverse effect

None reported

Chemical constituents

Isopatchoulene, sesquiterpene, ketone, sesquiterpene alcohols from essential oil, rhamnoside and saponin from leaves.

ပဒိုင်းဖြူ

Datura metal Linn.



Datura metal Linn.

Solanaceae

Myanmar name : Pa daing byu (ပုခဲးခဲး)

English name : White Datura, White thorn apple.

Description

Herbaceous plant with pubescence branches in young shoots. Leaves alternate, minutely pubescent on both surface, unequal at the base; margins wavy. Inflorescence axillary and solitary; flowers large funnel shaped, white. Fruit capsule, globose, covered with slender spines, nodding. Seeds numerous blackish-brown, compressed.

Distribution

Occurs wild or cultivated throughout Myanmar.

Part(s) used

Fruit.

Indications

Bronchial asthma.

Preparation & Dosage

Discard the seeds from the fruit and add a little salt then bake until it becomes ash. About 0.3gm of ash with honey or lime juice is taken three times a day.

Adverse effect

Abortion, not indicated for pregnant women.

Chemical constituents

Alkaloids from seeds , leaves , fastusic acid.

Biological Activity

Anti-arrhythmic activity, analgesis activity and anaesthetic activity.

လောကီသေ

Desmodium triquetrum DC.



Desmodium triquetrum DC.

Papilionaceae

Myanmar name: Lauk thay (လော့ကဲထေး)

English name :Not known

Description

Herbs; branches with three angled. Leaves compound; leaflets alternate, ovate in young, lanceolate in mature, tip acute, rigidly subcoriaceous, glabrous above, hairy on the ribs below. Inflorescence axillary and terminal racemes; flowers purplish with white tinge. Fruit pod glabrous or pubescent, joint nearly square.

Distribution

Completely naturalized in lower parts of Myanmar.

Part(s) used

Leaves

Indications

Helminthic infection, tuberculosis, lung disease.

Preparation & Dosage

2 gm of leaves powder is mixed with honey and a little amount of salt. This mixture is given two times a day for helminthic infection. 1 gm of dried leaves powder is given with warm water two times a day in the treatment of tuberculosis. 25 ml fresh leaves express juice with a little salt is taken three times a day for lung diseases.

Adverse effect

None reported

Chemical constituents

Friedelin , epifriedelinol and stigmasterol.

ဆီးဖြူ

Emblica officinalis Gaertn.



officinalis Gaertn.

Euphorbiaceae

Myanmar name : Zibyu (ဆီးဇြဲ)

English name : Indian gooseberry, Emblic myrobalan.

Description

A deciduous tree with spreading branches, bark flaking, greenish grey, branchlets slender, pubescent. Leaves closely set along the branchlets, equal and symmetrically arranged, like the leaflets of pinnate leaf, light green, glabrous, narrowly linear, subsessile. Inflorescence raceme in axillary fascicles on branchlets; flowers yellow or greenish yellow, male flowers numerous, on short slender pedicles. Female flowers few, subsessile, disk absent in male flower, a lacerate cup in female flower. Fruit flesh, globose with 6 obscure lobed, pale yellow.

Distribution

Wildly grow or cultivated for its edible fruit throughout tropical zone of Myanmar.

Part(s) used

Fruit.

Indications

Menorrhagia, insomnia.

Preparation & Dosage

Regularly or frequently have fresh fruit as edible fruit for general well being. For menorrhagia, the mixture of 16 gm of fruit powder and ten times of sugar, and 2 gm of such mixture is orally taken two times a day itself or with milk. Take 25 gm of fruit powder is mixed 4 gm of honey with warm water for insomnia.

Adverse effect

It decreases milk production in lactating mother.

It also disturbs regular menstruation.

Chemical constituents

Trigalloy glucose , terchebin , corilagin , ellagic acid from fruit
Seed fat contained linoleic acid 64.8% ellagic acid and lupeol from roots,
Tannin from bark.

Biological Activity

Anti inflammatory activity, hepatic cholesterol lowering activity.

ခေါင်ရမ်းကြီး

Hibiscus rosa-sinensis Linn.



***Hibiscus rosa-sinensis* Linn.**

Malvaceae

Myanmar name: Khaung yan gyi (ခေါင်ရမ်းကြီး)

English name: Shoe flower, Common Garden Hibiscus

Description

Shrubs, stems glabrous. Leaves alternate, simple ovate or ovate-lanceolate, more or less acuminate, base entire, margin serrate towards the tip, glabrous. Inflorescence axillary, solitary cymes; flowers red, anthers monothealous, staminal tube exerted far beyond the petals. Fruit capsule. Seeds numerous.

Distribution

Cultivated for ornamental foliage and showy flowers.

Part(s) used

Flowers

Indications

Alopecia, bronchical asthma, cough.

Preparation & Dosage

The same volume of the expressed juice of flowers and green tea leaves are mixed with honey or lime juice and it is used as external application for alopecia. 160 gm of flower and 80 gm of sugar are boiled in water until $\frac{1}{3}$ of original volume is left. Take 25 ml of this preparation three times a day for bronchial asthma.

Adverse effect

None reported.

Chemical constituents

Quercetin-3-diglucoside, diglucoside, cyanidin-3, 5-diglucoside, kaempferol-3-xylosylglucoside, 8-nonynoic, 9-decynoic acids, aliphatic esters, β -rosasterol, 2-hydroxystercolate from root bark, cyclopeptide alkaloids, polysaccharide, aliphatic, enone ethers from roots.

Biological Activity

Hypotensive activity , anti-spasmodic activity, antifertility activity.

လက်ထုတ်ကြီး

Holarrhena antidysenterica Wall.



***Holarrhena antidysenterica* Wall.**

Apocynaceae

Myanmar name : Let htoke gyi (လက်ထုတ်ကြီး)

English name : Teliicherry Bark, Dysentery Rose bay, Conessi Bark

Description

Tree, younger branches tomentose, older one glabrous, bark pale. Leaves opposite, broadly ovate to elliptic-lanceolate. Inflorescence terminal corymbose cymes; flowers white. Fruit follicles, cylindrical, dotted with white spots. Seeds linear-oblong.

Distribution

Grows wild or cultivated for its medicinal value.

Part(s) used

Bark

Indications

Indigestion, dysentery, flatulence.

Preparation & Dosage

A dose of bark powder 4 gm with warm water three times a day is reputed for indigestion. The mixture of bark powder 4 gm and 8 gm of sugar is taken with cold water three times a day for dysentery. Bark is boiled in water until $\frac{1}{3}$ of original volume is obtained. Take 10 ml of this decoction with honey three times a day for flatulence.

Adverse effect

None reported

Chemical constituents

Alkaloid, digitenol, glycoside.

ကြာဖက်သိမ်(နဘက်ကလေး)
Leea crispa Linn.



***Leea crispa* Linn.**

Leeaceae

Myanmar name : Kyar phetthein (ကြာဖက်သိမ်)၊

Nabet-gale (နဘက်ကလေး)

English name : Not known.

Description

An erect shrubs, stems woody, jointed, swollen above the joints, branches, peduncles and petiole with crisped wings. Leaves simply pinnate; leaflets ovate, acuminate, rounded at the base, prominently peninerved, glabrous above, parallel straight nerves running towards the serrate margin. Fruit black, succulent.

Distribution

Widely distributed in Myanmar.

Part(s) used

Leaves , roots

Indications

Bronchitis, tightness of chest, non productive cough associated with acute febrile illness, septic wound.

Preparation & Dosage

Fresh leaves 40 gm and 160 ml of water are boiled gradually until 1/3 of original volume is left. 15 ml of decoction itself or with 5 ml of honey is taken orally three times a day. Root slurry is used as external application for wound healing.

Adverse effect

Premature labour, abortion.

ကြာဖက်ကြီး

Leea macrophylla Roxb.



***Leea macrophylla* Roxb.**

Leeaceae

Myanmar name : Kya phet gyi (ကျာဖက်ကြီး)

English name : Not known

Description

Perennial herbaceous erect plant, the nodes swollen or jointed. Leaves simple, alternated broadly ovate, cordate coarsely dentate, glabrous, dark green above, nearly white beneath. Inflorescence Cymose, arising opposite of a leaf. Flowers small white, Fruit berry, black, 3-6 lobed.

Distribution

Widely grow throughout Myanmar.

Part(s) used

Root, Leaves, Buds.

Indications

Acute lymphadenitis, dry cough, tingling and numbness, septic wound.

Preparation & Dosage

Dried root slurry is applied externally three to five times a day for acute lymphadenitis. Tender leaves and buds are cooked as soup and it is to be for dry cough. Root is made slurry with rice rinsing water and applied.

Adverse effect

Premature labour, Abortion.

အမဲတံစို့

Leonotis nepetaefolia Br.



***Leonotis nepetaefolia* Br.**

Labiatae

Myanmar name : Ah mae ta so (အမဲတံစို့)

English name : Not known

Description

A tall annual shrubs with thick stem about a size of finger, 4-angled with furrows. Leaves opposite ovate, crenate without stipule. Inflorescence whorls axillary, globose;flowers orange-red in colour,bracts slender, linear, tube slender exserted, villose.Fruit nutlets, linear oblong. Seeds small.

Distribution

Occurs wild or cultivated in gardens for its showy flowers.

Part(s) used

Whole plant

Indications

Indigestion, wind colic, promotes milk production in lactating mother.

Preparation & Dosage

Take 4 gm of whole plant powder with lime juice or honey or warm water three times a day for wind colic.

Adverse effect

Abortion

Chemical constituents

Labdane diterpene-nepetafolin, campesterol, octacosanoic acid, quercetin, β -sitosterol- β -D-glucopyranoside.

ပင့်ကူထိပ်ပိတ်(ပန်းသုံးဆင့်)
Leucas cephalotes Spreng.



***Leucas cephalotes* Spreng.**

Labiatae

Myanmar name: Pint ku htaik peik (ပင့်ကူထိပ်ပိတ်),

Pan thone sint (ပန်းသုံးဆင့်)

English name: Not known

Description

An annual, stout, hairy and pubescent herb. Stem and branches quadrangular. Leaves opposite, decussate, ovate- lanceolate, sub-acute, crenate- serrate, base tapering. Inflorescence globose head in axillary whorl; flowers white sessile floral leaves like the cauline, bracts imbricate. Fruit nut , nutlet obovoid- oblong, apex rounded, smooth, brown.

Distribution

Grows wild along the roadsides throughout Myanmar.

Part(s) used

Whole plant, Root

Indications

Anaemia, repeated chest infection and febrile fits in children .

Preparation & Dosage

4 gm of whole plant powder with a little honey is given three times a day for anaemia. Apply the root slurry with sesame oil to relieve the fever, sneezing and cough in children. The whole plant powder is boiled in sesame oil. Apply such ointment and wrap thin clothes three times a day is beneficial for febrile fits in children.

Adverse effect

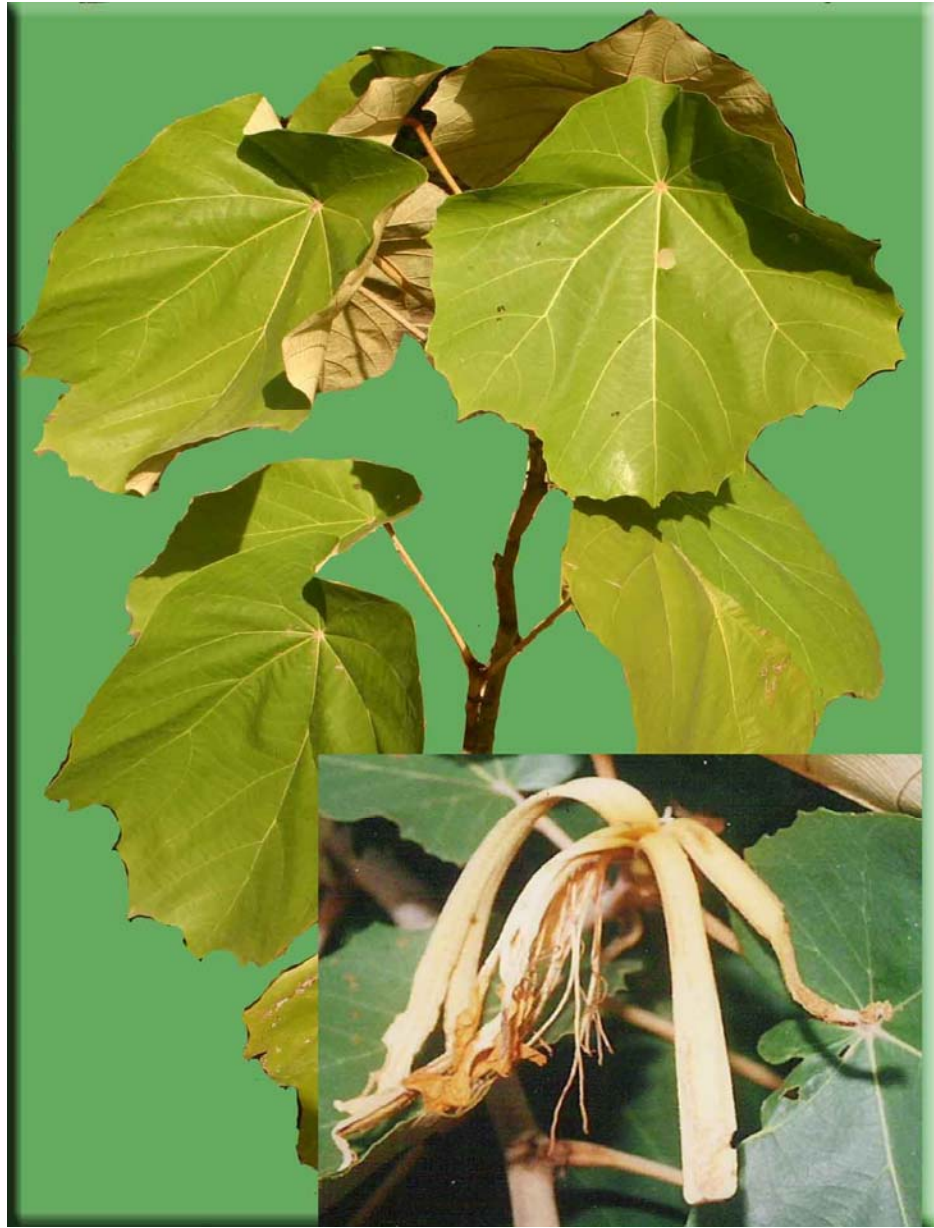
None reported.

Chemical constituents

β -sitosterol glucoside

ကရမက်

Mansonia gagei J.R. Drummond.



***Mansonia gagei* J.R.Drummond.**

Sterculiaceae

Myanmar name : Kalamet (ကရမတ်)

English name : Bastard Sandalwood.

Description

Soft-wooded trees, heart wood brown, bad smell after cutting recently, a good scented in long lasting. Leaves alternate, simple partly divided into lobes, a few star-shaped hairs are found on the upper surface, light brown beneath. Inflorescence corymbose cymes; flowers the outer parienth brown and covered abundently with star-shaped hairs, the inner pale yellow in colour. Fruit capsule, one seeded.

Distribution

Naturalized in the temperate forest of Myanmar. Now it is cultivated for medicinal purposes.

Part(s) used

Heart wood

Indications

Heart burn, malabsorption syndrome, palpitation.

Preparation & Dosage

Prepare heart wood powder and water to provide slurry which is used as lotion. Taking 2 gm of powder and 2 gm of sugar with warm water is beneficial for malabsorption. For palpitation, 2 gm of powder and 4 gm of sugar with water or lime juice are taken three times a day.

Adverse effect

It increases sputum viscosity.

ကံ့ကော်

Mesua ferrea Linn.



***Mesua ferrea* Linn.**

Guttiferae

Myanmar name : Gangaw (ဂံင်္ဂေဝ်)

English name : Cobra's Saffron, Ceylon Ironwood Tree.

Description

Evergreen tree, trunk straight, erect, bark smooth, ash coloured. Leaves opposite in ranks, oblong-lanceolate, acuminate, red when young, shining above, covered with a whitish waxy coated beneath when mature, rounded or acute at the base. Inflorescence axillary or terminal and solitary or in pairs; flowers subsessile, white petals with golden yellow stamens, fragrant. Fruit semi-woody, ovoid with conical point. Seeds 1-4, angular, smooth, brown.

Distribution

Naturalized or cultivated for its fragrant flowers and medicinal purposes. Found in southern parts of Myanmar.

Part(s) used

Pollens, flowers

Indications

Insomnia, palpitation, dizziness, breathlessness.

Preparation & Dosage

4 gm of pollen powder with 4 gm of honey is taken two times a day or 4 gm of flower powder and lemon juice mixture is taken orally three times a day for specified indications.

Adverse effect

None reported.

Chemical constituents

Xanthone, 4-alkylcoumarin feruol, phenylcoumarin, mesuagin, biflavonc, mesuaferrones, flavanone glycoside mesuein, β -amyrin, β -sitosterol, 4-phenylcaumarin-mesuanin, oleic, Palmitic, linolenic, stearic, lindeic, palmitollic, octadecatrienoic,hexadeconoic acid in seed, betulinic, epicatechin.

Biological Activity

Anti inflammatory activity, antibiotic activity.

කතෘ: 01

Michelia champaca Linn.



***Michelia champaca* Linn.**

Magnoliaceae

Myanmar name : Sa ga wah (စတားဝါ)

English name : Golden champa, Yellow champa.

Description

A tall ever green tree, straight trunk with branches ascending and spreading. Leaves lanceolate, glabrous above, pubescent beneath, apex acute, margin entire. Inflorescence axillary, solitary, enclosed in bud by spathaceous bract; flowers deep yellow or orange, perianth segments oblong, acute in the outer whorl and linear in the inner, pedicels long, stout, wrinkled, annular scar round on the middle portion. Fruit capsule, dark brown in colour. Seeds polished, rounded at the back.

Distribution

Natural or cultivated for its fragrant flowers in gardens or parks.

Part(s) used

Flowers, Bark

Indications

Dysuria, frequency, urgency, mucus discharge per urethra, gum infection, gingivitis.

Dosage

Dried flower powder is mixed with two times of sugar. 4 gm of this mixture with lime juice is orally taken three times a day for dysuria. Apply bark slurry to the base of the gum is good for gum infection and gingivitis.

Adverse effect

Dizziness

Chemical constituents

Costunolide , porthenolide, dihydroparthenolide and micheliolide , magnosprengerine and salicifoline.

Biological Activity

Muscle relaxant activity and hypotensive activity.

ခရေ(ချယား)

Mimusops elengi Roxb.



***Mimusops elengi* Roxb.**

Sapotaceae

Myanmar name : Kha ye (ခေရ), Cha ya (ချာယား)

English name : Star flower

Description

A large evergreen tree, erect trunk, bark smooth scaly. Leaves simple, leathery texture, elliptic, apex shortly acuminate, margins undulate, base acute. Inflorescence solitary or fascicles; flowers creamish white, fragrant. Fruit berry, ovoid, orange when ripe. Seeds hard, solitary, ovoid, compressed, brown, shining.

Distribution

Found wild plain area, flat land of Myanmar as an avenue or roadside tree.

Part(s) used

Bark, Leaves.

Indications

Dental infection, gum infection, diabetes mellitus, heart disease.

Preparation & Dosage

Application of 2 gm of bark powder to the base of the gums or rinsing with warm water two times a day is recommended in infection of dental and gums. 2 gm of bark powder or leaves powder is orally taken three times a day for diabetes mellitus patients. 4 gm of bark powder or 30 ml of bark decoction is mixed with two times of sugar and taken three times a day for heart diseases.

Adverse effect

None reported.

Chemical constituents

Quercitol ursolic glucose, triterpene alcohol, quercetin, dihydroquercetin, β -sitosterol glucoside, traxerone, taraxerol, betulinic acid, α -spinasterol, hentriacontone, β -corotene, lupeol, steroidal saponin, oleic, linoleic, palmitic, stearic, behenic, pentacyclic triterpene acid.

ပျဉ်းတော်သိမ်
Murraya koenigii Spreng.



***Murraya koenigii* Spreng.**

Rutaceae

Myanmar name : Pyindaw thein (ပျဉ်းတော်သိမ်)

English name : Curry leaf

Description

Shrubs or small deciduous tree, smelling. Leaves alternate, imparipinnate; leaflets small, sub-orbicular or lanceolate, tip notched, base oblique. Inflorescence terminal corymbs, peduncled; flowers white, sub-campanulate. Fruit berry, ovoid or sub-globose, reddish yellow when young, red to black when mature. seeds embedded in mucilage.

Distribution

Grows wild throughout Myanmar, used as curry leaf.

Part(s) used

Leaves

Indication

Bronchial asthma

Preparation & Dosage

Leaves powder is mixed with honey and then made pills having about 1 gm each. A dose of 1-2 pills is orally taken with warm water three times a day for asthma. For worm infestation take leaf decoction with honey. Root slurry is also use as external application.

Adverse effect

Vomiting.

Chemical constituents

Girinimbine, murrayanine, mahanimbine, koenimbine, koenigicine, mukoeic acid, mahanimbidine, scopolin, murrayazolidine, triacylglycerols, free fatty acids.

ပင်စိမ်းနက်(ကုလားပင်စိမ်း)
Ocimum sanctum L.



Ocimum sanctum L.

Labiatae

Myanmar name : Pin sein net (ပင်စိမ်းနက်)

Kala pin sein (တုလားပင်စိမ်း)

English name : Holy Basil, Monk's Basil, Rough Basil, Sacred Basil

Description

Annual herbs, erect stem and branches usually purplish, sub-quadrangular, clothed with soft spreading hairs. Leaves opposite and decussate, elliptic-oblong, serrate margin, pubescent on both sides, minutely gland dotted. Inflorescence terminal racemes; flowers purplish. Fruit nutlets, yellow with black margin.

Distribution

Found in tropical region. Widely grow in different parts of Myanmar.

Part(s) used

Leaves

Indications

Bronchial asthma, impotence

Preparation & Dosage

Leaves expressed juice in a dose of 2 gm with a little salt are taken three times a day for bronchial asthma. Leaf is fried with meat and taken as a meal for impotence.

Adverse effect

Vomiting, Abortion. Pregnant women and patients with hepatitis should not use this plant.

Chemical constituents

Eugenol, nerol(6.4), caryophyllene(7.5), terpinen-4-ol(0.4), caryophyllene, sesquiterpenes, terpenes, β -carotene.

Biological Activity

Antiulcerogenic activity, antiallergic activity.

ကြောင့်လျှာ

Oroxylum indicum Vent.



***Oroxylum indicum* Vent.**

Bignoniaceae

Myanmar name : Kyaung sha (ကျောင်းလျှာ)

English name : Indian Trumpet flower

Description

A small tree, bark thick, light brown in colour. Leaves bipinnate with opposite leaflets. Inflorescence raceme reaching 10 cm long; Flowers lurid-purple, corolla lobes fleshy with crisped margins. Fruit capsule, flat, straight and tapering to both ends. Seeds numerous, winged round except at the base.

Distribution

Naturalized or cultivated throughout Myanmar for its edible fruits.

Part(s) used

Bark, Fruit

Indications

Diabetes mellitus, indigestion, constipation, traumatic areas (as an anti-inflammatory), ear diseases.

Preparation & Dosage

Oral dose of 4 gm of bark powder with lemon juice three times a day is beneficial for diabetes mellitus control. Bark powder is made slurry with *Limonia acidissima* and such slurry is used as anti-inflammatory agent. Fresh fruit salad is beneficial for ear diseases.

Adverse effect

Vomiting. It should not be used for pregnant women and lactating mother.

Chemical constituents

Baicalein, chrysin, prunetin, myristic, palmitic, Palmitoleic, stearic, oleic and linoleic, ellagic acids.

တောင်ဆီးဖြူ

Phyllanthus niruri Linn.



***Phyllanthus niruri* Linn.**

Euphorbiaceae

Myanmar name : Taung zee phyu (တောင်ဆီးဖြူ)

English name : Not known

Description

An annual herb. Stem branched at the base, angular, leaf bearing branchlets slender. Leaves numerous, elliptic-oblong or obovate-oblong, apex rounded obtuse or acute, base rounded. Inflorescence solitary, axillary; flowers minute, yellowish or greenish, shortly pedicelled, male 1-3, female solitary. Fruit capsule, globose, depressed, smooth, scarcely lobed. Seeds trigonous, pale brown.

Distribution

Grows wild on roadsides in various parts of Myanmar.

Part(s) used

Whole plant

Indications

Hepatitis, hepatoprotective effect, diabetes mellitus, hypertension.

Preparation & Dosage

40 gm of fresh whole plant and 160 gm of sugar are boiled in 160 ml of water until $\frac{1}{3}$ of decoction is obtained. 25 ml of such preparation is orally taken three times a day for hepatitis. Mix 2:1 ratio of whole plant expressed juice and onion juice and taking about 5 ml three times a day is good remedy for hepatoprotective activity. The whole plant is boiled in water until $\frac{1}{3}$ of original volume is obtained. 25 ml of such decoction is taken three times a day for diabetes mellitus.

Adverse effect

It increases mucus production in the bronchi and should not be used by patients with bronchial asthma. It can also cause vomiting and should be used carefully in pregnant women and lactating mother.

Chemical constituents

Flavone glycoside, triterpenoid, lignan, alkaloids.

မြေဆိုးဖြူ

Phyllanthus urinaria Linn.



Phyllanthus urinaria Linn.

Euphorbiaceae

Myanmar name : Mye zee phyu (မြေဆိုးဖျူ)

English name : Not known.

Description

An annual herb. Stem erect, slightly branched, stem and branchlets angled, leaf-bearing branchlets flattened or slightly winged. Leaves simple, sessile, linear oblong, tip rounded, stipule peltate. Inflorescence solitary, axillary; flowers minute, male flowers smaller than female flowers. Fruit capsule globose scarcely lobed.

Distribution

Grows wild on roadsides in various parts of Myanmar.

Part(s) used

Whole plant

Indications

Mercury poison, hypertension, diabetes mellitus, dysuria.

Preparation & Dosage

The decoction of whole plant is orally taken with honey about 10 ml, two times a day for mercury poison. For diabetes mellitus and dysuria, in a dose of 25 ml of decoction three times a day.

Adverse effect

Vomiting and it should be carefully used in pregnant women and lactating mother.

Chemical constituents

Ascorbic acids, lupeol, α -amyrin, ellagic acid, gallic acid.

အကြောပေါင်းတစ်ထောင်
Plantago major Linn.



***Plantago major* Linn.**

Plantaginaceae

Myanmar name : Ah-gyaw-paung-ta-htaung (အကြောပေါင်းတစ်ထောင်)

English name : Common plantain, Greater plantain, Way Bread

Description

Scape bearing perennial herbs with an erect rootstock. Leaves alternate, radical, ovate-oblong, obtuse, sub entire, glabrous, base tapering, decurrent into the petiole, 3-7 nerved margin entire or distantly toothed, long petiole, tightly claping each other at the base. Inflorescence scapose, spike very long and slender; flowers crowded. Fruit capsule, oblong-ovoid, Seeds minute, numerous, black in colour, slightly compressed.

Distribution

Throughout Myanmar, especially found in hilly region, northern parts of Myanmar.

Part(s) used

Whole plant, Root.

Indications

Hypertension, arthritis

Preparation & Dosage

Orally take the whole plant powder 2 gm with honey at bed time or the fresh whole plant 40 gm in 160 ml of water are boiled until $\frac{1}{3}$ of original volume is obtained. Orally take 25 ml of this decoction at bed time. For arthritis 4 gm of root powder is mixed with 4 gm of honey and taken with boiling water three times a day.

Adverse effect

Increase mucus production in the bronchi.

Chemical constituents

Baicalein, baicalin, scutellarein, luteolin, chlorogenic acids, octadecenoic, Plantamajoside, oleanolic acid, oceteoside, luteolin, campesterol, stigmasterol, Plantarenalosite, ixoroside, asperuloside, melampyroside, aucubin.

Biological Activity

Antibacterial activity, anti-inflammatory activity, wound-healing activity, liver protective activity, antidote for fatal mushroom poisoning caused by *Amanita phalloides*.

ကနဲချုပ်နီ

Plumbago rosea Linn.



***Plumbago rosea* Linn.**

Plumbaginaceae

Myanmar name: Kant gyoke ni (ကန့်ချုပ်နီ)

English name : Fire plant, Official lead wort, Rosy-flowered Lead wort.

Description

Undershrubs, stem herbaceous, erect, terete. Leaves simple, slightly obtuse to the tip, elliptic tapering to the base. Inflorescence terminal and axillary lax spikes, rachis glabrous; flowers red with short cylindrical calyx and slender corolla tube, corolla limb wide and ovate, base of style hairy. Fruit capsule. Seeds cylindrical.

Distribution

Indigestion, diabetes mellitus, mucolytic action.

Part(s) used

Root, Stem

Indication

Indigestion, diabetes mellitus, mucolytic action.

Preparation & Dosage

Prepare pills having 0.2-0.3 gm by mixing root and stem powder together with honey. Take 2 pills three times a day for indigestion. For diabetes mellitus, take 4 gm of powder with lime juice or water, three times a day. 2 gm of powder with the same proportion of honey and lime juice are orally taken three times a day for mucolytic action.

Adverse effect

Blurred vision, Abortion, Skin burn, Stomach ulcer. This plant should not be used for pregnant women and patients with hepatitis.

Chemical constituents

Plumbagin, stigmasterol, campesterol, plumbaginol.

တရုတ်စကားအဖြူ
Plumeria alba Linn.



***Plumeria alba* Linn.**

Apocynaceae

Myanmar name : Ta yoke saga ah phyu (တရုတ်စကားအဖြူ)

English name : Temple tree, Pagoda tree

Description

Tree with erect stems and fleshy branched, milky latex present, glabrous, scaled with scars of fallen leaves. Leaves alternate, crowded in terminal cluster, thick, lanceolate, attenuate at both ends. Inflorescence terminal cyme; flowers white or creamish white, centre yellow, fragrant; calyx very small, corolla 5-lobed. Fruit divaricate cylindrical follicles, brownish-black. Seeds oblong, thinly winged.

Distribution

Widely grow and also cultivated as ornamental in garden or parks.

Part(s) used

Barks

Indications

Arthritis (It relieves pain and inflammation.)

Preparation & Dosage

Mix 4 gm of bark powder and 2 gm of betle leaves powder. 4 gm of this mixture is orally taken with warm water three times a day or bark and jaggery are boiled in water until $\frac{1}{3}$ of original volume is obtained. 25 ml of such decoction is taken three times a day.

Adverse effect

Nausea, Vomiting, Laxative effect.

Chemical constituents

Amyrin acetates, plumieride, scopoletin, Plumieride, rutin, hyperoside.

Biological Activity

Antibacterial activity

ယင်းပြားဖြူ

Premna amplexens Wall.



***Premna amplexans* Wall.**

Verbenaceae

Myanmar name : Yin bya byu (ယင်းပြားပြား)

English name : Not known

Description

Small tree or under shrub. Leaves opposite, arranged with each pair at right angles to the pair above margin saw-like toothed, whitened beneath, without petiole. Inflorescence corymbs. Fruit small drupe with one seed.

Distribution

Occurs wild or cultivated for its medicinal uses.

Part(s) used

Root, Whole plant

Indication

Tingling and numbness during the first three months of post-natal period.

Preparation & Dosage

Root powder (1g) is taken orally with water three times a day or 2 gm of the whole plant is boiled in 75 ml of water until $\frac{1}{3}$ of original volume is left. 25 ml of such decoction is taken with 2 gm of roasted salt three times a day. Apply the root slurry three times a day.

Adverse effect

Hepatitis. It should not be used in pregnant women and patients with hepatitis.

တောင်တန့်ကြီး
Premna integrifolia Linn.



***Premna integrifolia* Linn.**

Verbenaceae

Myanmar name : Taung tan gyi (တောင်တန်ကြီး)

English name : Not known

Description

Tree with unarmed branchlets, often spinous on trunk and branches. Leaves opposite, obovate, entire, petiolate. Inflorescence corymbs; flowers greenish white, corolla throat hairy. Fruit drupe, globose. Seeds 3-4.

Distribution

Grows naturalized in the tropical forest of Myanmar.

Part(s) used

Heart wood

Indications

Indigestion, to relieve tingling and numbness.

Preparation & Dosage

2 gm of powder is orally taken three times a day with betel leaves decoction or warm water for specific indications. 160 gm of woody pieces are immersed in 500 ml of alcohol. Apply such liquid is also beneficial for tingling and numbness. Myanmar women use this woody pieces by rubbing with water on smooth plain stone and made slurry for external application.

Adverse effect

None reported.

Chemical constituents

betulin, pumnazole, verbascoside, aphelandrine, luteolin.

Biological Activity

Anti-inflammatory activity, antibacterial activity.

မာလကာ

Psidium guajava Linn.



***Psidium guajava* Linn.**

Myrtaceae

Myanmar name : Ma la ka (မာလာကာ)

English name : Guava tree

Description

An evergreen tree; stem quite smooth. Leaves opposite, oblong or elliptic-oblong, margin entire, glabrous above, prominent-nerved and pubescent beneath. Inflorescence axillary, peduncles one to few flowered; flowers large white. Fruit berry, globose or pyriform, edible. Seeds numerous, small.

Distribution

Grows wild or cultivated throughout Myanmar as a fruit tree.

Part(s) used

Bark, Leaves, Fruit.

Indications

Malabsorption syndrome, productive cough, gingivitis, dizziness due to over sweating, bleeding manifestations.

Preparation & Dosage

40 gm of bark in 160 ml of water is boiled until $\frac{1}{3}$ of original volume is obtained. For malabsorption syndrome, 10 ml of above preparation is orally taken with a little amount of sugar once hourly. Ripe fruit with sugar is beneficial in productive cough, bleeding manifestation and sperm depletion. The bark decoction is used as mouthwash for gingivitis. Crush and inhale the leaf to relieve dizziness due to over sweating.

Adverse effect

Constipation.

Chemical constituents

Saponin, leaf essential oil, contained myrcene, d1-limonene, caryophyllene, caryophyllene oxide, eugenol and 1, 8-Cineole, α -pinene, β -pinene, limonene, menthol, α -terpenyl, isopropyl alcohol from volatile oil of leaves, glycosides, limonene, caryophyllene quercetin, α -pinene (37.8), 1-8-cineole (18.9%), leaf essential oil, lauric, myristic acids, β -caryophyllene, tannins, flavonoids, ellagic acid, sesquiterpene, galactose, anabinose, uronic acid, β -sitosterol, tannin, oleanolic acid.

Biological Activity

Hypoglycaemic activity

ဘုမ္မရာဇာ

Rauvolfia serpentina Linn.



***Rauvolfia serpentina* Linn.**

Apocynaceae

Myanmar name : Bon ma ya za (ဘုမ္မရာဇာ)

English name : Serpentine, Serpent Wood

Description

An erect, small shrub with lenticellate stems, pale-coloured. Leaves whorl, elliptic-lanceolate, acuminate. Inflorescence cymes in terminal or lateral with long peduncle; flowers white or pink. Pedicels and calyces red. Corolla inflated near the middle. Fruit a drupe, indehiscent, dark purple.

Distribution

Occurs wild or cultivated for its medicinal value.

Part(s) used

Root

Indications

Hypertension, helminthic infection.

Preparation & Dosage

2 gm of root powder itself or together with honey or lemon juice with warm water is taken three times a day for hypertension. 2 gm of root powder with honey is taken at bed time for helminthic inflection.

Adverse effect

Blurred vision, Palpitation, Abortion, Sneezing, Hot flush. This plant should not be taken by pregnant women, anaemia patients and patients with hepatitis.

Chemical constituents

Reserpine, yohimbine, reserpine, ajmaline, serpentine, serpentinine, serpajmaline, resajmaline, rescinnamine, ajmalexine, reserpine, yohimbine, ajmaline, sarpagine, serpine, yohimbine, alstonine, serpentine.

Biological Activity

- Anticonvulsant activity
- Antihypertensive activity
- Antispasmodic activity
- Sedative effect

ဒန္တသုခ

Scoparia dulcis Linn.



***Scoparia dulcis* Linn.**

Scrophulariaceae

Myanmar name : Danta thu kha (ဒန္တထုခ)

English name : Sweet broom

Description

A branching annual erect herb. Leaves opposite or whorled, small, elliptic, tapering at the base, margin serrate. Flowers minute, greenish white, whorled. Fruit capsule, subglobose, minute.

Distribution

Found as a weed in waste places, along the roadsides and pasture land.

Part(s) used

Whole plant

Indications

Cirrhosis of liver, tooth ache, herpes infection.

Preparation & Dosage

40 gm of fresh whole plant is boiled with 160 ml of water until $\frac{1}{3}$ of original volume is obtained. Taking 25 ml of this decoction with one teaspoonful of sugar two times a day is good for the treatment of liver cirrhosis. The whole plant powder is directly applied base of the teeth three times a day or whole plant decoction is kept in mouth every three hours to treat toothache. Leaf expressed juice is applied three times a day for herpes infection.

Adverse effect

Vomiting

Chemical constituents

Glutinol flavonoids, tetrocyclic diterpene-scopadulin, diterpenes – scoparinol and dulcinol, scoparic acids, scopadulcic acid, triterpene, mannitol, diterpenoid – scoparic acids, scopadulcic acids.

Biological Activity

Analgesic activity, anti-inflammatory activity, virucidal activity.

နွမ်း

Sesamum indicum DC.



Sesamum indicum DC.

Pedalinaceae

Myanmar name : Hnan (နှံး)

English name : Sesame, Sesamum

Description

An annual erect herbs, glandular, foetid, pubescent. Leaves alternate, upper leaves are prominently veined, oblong or linear and lower leaves often lobed intermediate usually ovate beneath. Inflorescences solitary and axillary, few and fascicled; flowers whitish with purple, pubescent. Fruit capsule, erect, narrowly oblong, four angled, pale green. Seeds small, numerous, smooth, thick.

Distribution

Cultivated for oil in dry regions of Myanmar.

Part(s) used

Seeds

Indications

Polyuria, indigestion

Preparation & Dosage

Roasted seeds powder and bael leaves are cooked and taken as curry for polyuria. 4 gm of roasted seeds and 2 gm of jaggery are mixed and taken three times a day for indigestion.

Adverse effect

None reported.

Chemical constituents

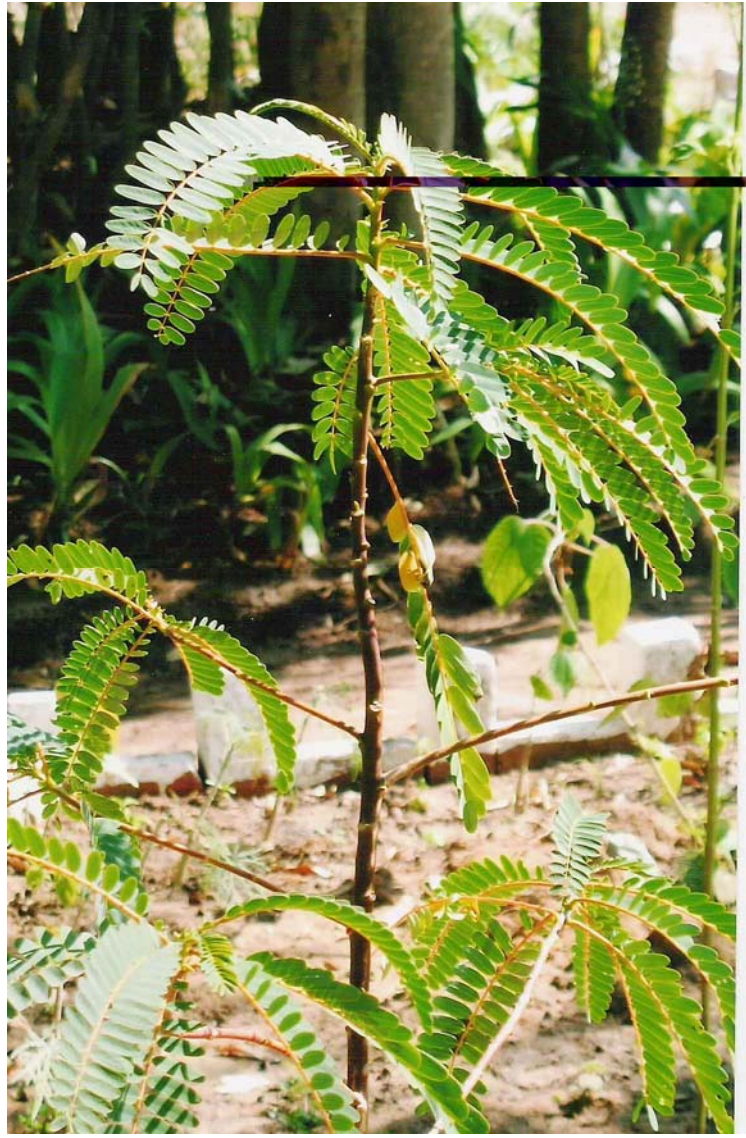
Triglycosides, lignanphenol – sesaminol, sesaminol glucosides, sesamolin and sesamin, triterpens, flavonoid glucoside, sesamol, γ -tocopherol.

Biological Activity

Anti-oxidative activity.

ပေါက်ပန်းဖြူ

Sesbania grandiflora Pers.



Sesbania grandiflora Pers.

Papilionaceae

Myanmar name : Pauk pan phyu (ပေါက်ပန်းဖြူ)

English name : Not known

Description

A tall slender tree. Leaves compound, paripinnate; leaflets linear-oblong. Inflorescence axillary racemes; flowers white. Fruit pods very long and narrow, dehiscent with distinct septa. Seeds numerous.

Distribution

Grows wild throughout Myanmar for its edible leaves, flowers and fruits.

Part(s) used

Leaves, flowers.

Indications

Leucorrhoea, diabetes mellitus.

Preparation & Dosage

40 gm of fresh leaves and flowers are boiled with 160 ml of water until $\frac{1}{3}$ of original volume is obtained. Take orally 25 ml of this preparation itself or with a little sugar three times a day for leucorrhoea. For diabetes mellitus patients, it is used without sugar. 25 ml of leaves decoction or expressed juice with sugar is useful for the treatment of dysuria.

Adverse effect

None reported.

Chemical constituents

Oleanolic acid, galactose, rhamnose, glucuronic acid, methyl oleanolate, kacamferol-3, -7-diglucoside, cyanidin.

Biological Activity

Hypotensive effects.

ခရမ်းကစော့(မြို့ပျက်ခရမ်း)
Solanum torvum Swartz.



Solanum torvum Swartz.

Solanaceae

Myanmar name : Khayan ka zaw (ခရမ်းကစော့)

Myobyet- khayan (မြို့ပျက်ခရမ်း)

English name : Not known

Description

A tomentose shrub with erect branches. Leaves alternate, simple, hairy above never prickly, only one prickle beneath near the base of midrib, ovate, lobes shallow. Inflorescence cyme often bifurcate and dense; flowers white, corolla lobes triangular. Fruit berry, green, yellow colour when ripe. Seeds many, smooth.

Distribution

Grows wild or cultivated for its fruit used as vegetables.

Part(s) used

Fruit

Indications

Generalized weakness, leucorrhoea, irregular menstruation.

Preparation & Dosage

Boiled fruit, dry in sun shine and powdered it. 4 gm of this preparation and 8 gm of sugar is orally taken two times a day for specified indications. 80 gm of root pieces are boiled in 400 ml of water until $\frac{1}{3}$ of original volume is obtained. 10 ml of such preparation is taken orally with a little sugar three or four times a day for irregular menstruation.

Adverse effect

None reported.

Chemical constituents

Steroid saponins, sitosterol, stigmasterol, glycoalkaloids.

အဆိပ်တစ်ရာ(အဆိပ်ဖြေ)
Stachytarpheta indica Vahl.



***Stachytarpheta indica* Vahl.**

Verbenaceae

Myanmar name : Aseik-taya (အဆိပ်တစ်ရာ), Aseik-phay (အဆိပ်ဖြေ)

English name : Aaron's Rod.

Description

Herbs with quadrangular branches. Leaves opposite, elliptic serrate nearly smooth. Inflorescence spike, nearly continuous; flowers purple or deep blue in colour sunk in the thickened rachis, bracts lanceolate as long as the calyx. Fruit one seeded drupe.

Distribution

Wild or cultivated in gardens or parks for ornament.

Part(s) used

Whole plant

Indications

Antidote for animal poison except snake poison.

Preparation & Dosage

Wash the lesion with warm water and apply the expressed juice directly on the specific area.

Adverse effect

None reported.

Chemical constituents

Aliphatic carboxylic acid.

ကျွန်:

Tectona grandis Linn.f.



***Tectona grandis* Linn.f.**

Verbenaceae

Myanmar name : Kyun (ကျွန်း)

English name : Teak

Description

A large deciduous tree, branchlets quadrangular, channelled, stellately tomentose. Leaves opposite, decussate, elliptic or obovate, acute or acuminate. Inflorescence cymose; flowers white, glabrous, shortly pedicellate. Fruit subglobose.

Distribution

Naturalized in the forest of Myanmar.

Part(s) used

Fruit, Stem.

Indications

Abscess, lung diseases, diabetes mellitus.

Preparation & Dosage

The fruit slurry is used as application for abscess. The same ratio of stem ash and calcium ash are mixed. 2 gm of such ash mixture is taken with warm water three times a day for lung diseases. For diabetes mellitus, leaves are boiled in water until $\frac{1}{3}$ of original volume is obtained. 25 ml of such preparation is taken three times a day.

Adverse effect

This plant should not be used by pregnant women.

Chemical constituents

Anthraquinone-2-carboxylic acid from heartwood, tectol and dehydrotectol, tectoquinone from essential oil, sitosterol diterpene, betulinic acid, lindeic acids, lupeol.

Biological Activity

Anti-ulcerogenic activity.

သစ်ဆိမ့်

Terminalia bellerica Roxb.



***Terminalia bellerica* Roxb.**

Combretaceae

Myanmar name : Thit-seint (ထစ်ဆိမ်)

English name : Belleric ,Belleric myrobalans

Description

Large deciduous trees with straight trunk, branches spread, bark dark grey. Leaves alternate, elliptic, coriaceous equally at both ends, petiole long. Inflorescence solitary and axillary, simple, spikes; flowers greenish-yellow. Fruit drupes, ovoid or ellipsoid, velvet, grey in colour, obscurely 5- angled when dried.

Distribution

Widely distributed in Myanmar. Now it is cultivated for valuable oil.

Part(s) used

Fruit.

Indications

Diarrhoea, tooth-ache, wounds

Preparation & Dosage

Boil 40 gm of edible part of fruit in 160 ml of water until $\frac{1}{3}$ of original volume is left. This preparation is orally taken one teaspoonful three times a day for diarrhoea. Rinse the mouth with fruit decoction is good for tooth -ache. Boil 160 gm of fruit and 160 gm of sesame oil in (800) ml of water until the oil is left. Apply this oil to the wound. It possesses wound healing activity.

Adverse effect

Constipation. It may disturb regular menstruation in women if it is taken during the period.

Chemical constituents

Cardiac glycoside-bellercanin, β -sitosterol, gallic acid, ellagic acid, ethyl gallate, triterpene, pentacyclic, triterpene acids-bellericagenins.

Biological Activity

Purgative activity and hypotensive activity.

ဆင်တုန်းမနွယ်
Tinospora cordifolia Meirs.



***Tinospora cordifolia* Miers.**

Menispermaceae

Myanmar name : Hsindon ma nwe (ဆင်တုံးမနွယ်)

English name : Heart-leaved Moon seed

Description

A large climber, bark corky, pendulous fleshy roots arise from the branches, with tubercled. Leaves alternate, entire, membranous, cordate. Inflorescence racemes; males fascicled, females usually solitary; flowers yellow. Fruit drupe, yellow in colour when ripe.

Distribution

Widely distributed in various regions of Myanmar.

Part(s) used

Stem

Indications

Impotence, diabetes mellitus, hypertension, generalized weakness.

Preparation & Dosage

Remove the scale from stem, chop and fry with butter. This preparation is orally taken with 8 gm of honey two times a day for impotence. A dose 4 gm of stem powder itself or with lemon juice, three times a day can control diabetes mellitus. 4 gm of stem powder, 4 ml of lemon juice and 4 gm of honey are mixed and taken with warm water three times a day for hypertension. Small slices of stem are mixed with rice rinsing water. Take 25 ml of such preparation is good for generalized weakness.

Adverse effect

Nausea, Vomiting, Dizziness.

Chemical constituents

Diterpenoid furanolactone, phenolic lignon, clerodane diterpenoid, clerodanefuranoditerpene, asterol, fatty acid, diterpenoid from plant, funanoid diterpene, furanoid diterpene glucoside.

Biological Activity

Central nervous depressant and hypoglycaemic activities, anti-inflammatory, analgesic and antipyretic activities, immunosuppressive activity.

ဆူးလေ

Tribulus terrestris Linn.



***Tribulus terrestris* Linn.**

Zygophyllaceae

Myanmar name : Sule (ဆူးငလ))

English name : Small Caltrops

Description

A small herb spreading along the ground. Stem and branches having soft and distinct hairs, young parts silky-villose. Leaves opposite, pinnately arranged on branches. Inflorescence axillary or leaf-opposed, solitary, flowers yellow in colour, hairy. Fruit globose consisting usually 5 woody segments each with a pair of hard and sharp spines. Seeds several in each woody segments.

Distribution

Grows wild in grass land of Myanmar.

Part(s) used

Seeds, Fruit, Root.

Indications

Impotence, urinary disorder.

Preparation & Dosage

4 gm of seeds or fruit powder with honey is orally taken in a course of two times a day for impotence. Small pieces of root are boiled in water until $\frac{1}{3}$ of original volume is left. Taken 25 ml of such decoction is mixed with 2 gm of sugar three times a day for urinary disorders.

Adverse effect

None reported.

Chemical constituents

Diosgenin glycosides, campesterol, β -sitosterol, stigmasterol, saponin, Diosgenin, gitogenin, chlorogenin, kacmpferol, glucoside, steroidal glycoside, glycosides of kacmpferol, glycosides of quercetin, cinnamic acids.

Biological Activity

Diuretic activity.

ကပ်စေးနဲ့(ဝက်ချေးပနဲ့)
Urena lobata Linn.



***Urena lobata* Linn.**

Malvaceae

Myanmar name : Kat se ne (ကပ်စေးနံ့)၊ Wet chi pane (ဝက်ချေးပနံ့)၊

English name : Aramina Fibre, Cousin Mahoe,

Description

Erect shrub covered with hairs. Leaves alternate, hairy on both surface, rounded angled, 5-7 lobed, lobes obtuse, 5-7 nerves, prominent beneath petiole short. Inflorescence axillary and solitary; flowers pink in colour. Fruit carpel covered with blunt spines.

Distribution

Grows wild as weed in waste land throughout Myanmar.

Part(s) used

Root

Indications

Impotence, urinary disorder.

Preparation & Dosage

Mix 16 gm of root powder and 16 ml of milk, dry in the sun. Repeated this procedure about ten times. Mix such powder with honey and make pill having 0.25 gm. 4 pills 1 gm are orally taken with water, two times a day for impotence. Root is boiled in water until $\frac{1}{3}$ of original volume is left. Taken 25 ml of such decoction three times a day is to treat urinary disorders.

Adverse effect

It increases mucus production in bronchi.

Chemical constituents

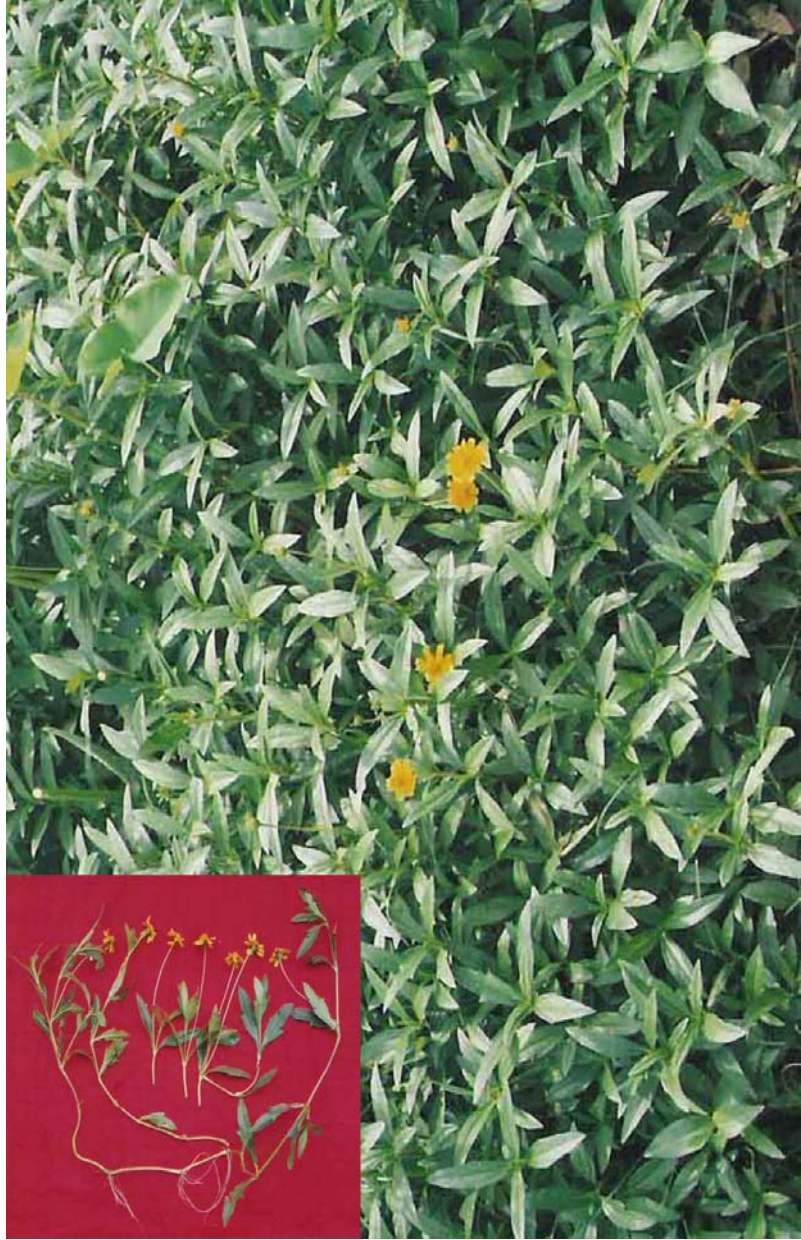
Mangiferin and quercetin isolated from aerial parts.

Biological Activity

Anti-inflammatory, choleric and cardiogenic activity.

နေကြာကလေး:

Wedelia calendulacea Less.



***Wedelia calendulacea* Less.**

Compositae

Myanmar name : Nay kyar galay (နေကြာကလေး)

English name : Not known

Description

Herb, procumbent. Leaves opposite, linear-oblong, tip acute, entire or sub-crenate scaberulous, one to three-nerved. Inflorescence heads on long slender axillary peduncles, outer involucre bracts large; flowers small, ray florets yellow. Fruit achenes.

Distribution

Widely grow in tropical and subtropical of Myanmar.

Part(s) used

Root, Flowers, Pollen.

Indications

Renal stone, Ischaemic heart disease (to relieve breathlessness).

Preparation & Dosage

The same amount of root and flowers are mixed and added two times amount of sugar. 4 gm of such mixture is orally taken with water three times a day for renal stone. A dose of 2 gm of pollen with warm water, three times a day is recommended for ischaemic heart diseases. 4 gm of the mixture of pollen and honey is relieved dizziness.

Adverse effect

Abortion. It should not be used by pregnant women.

Chemical constituents

Wedelolactone, benzofuran – norwedelic acid, norwedelolactone, bisdesmosidic saponin, ginsenoside.