REPORT ON MINOR RESEARCH PROJECT



Title of the Project-

"INVESTIGATION ON THE ETHNO MEDICINAL PLANTS OF GOREGAON TALUKA OF GONDIA DISTRICT (M. S.)"

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Introduction:

Gondia district of Maharashtra state is separated from Bhandara district on 1st May, 1999. There are Gondia, Tirora, Goregaon, Amgaon, Deori, Arjuni/Sadak and Arjuni/Morgaon as the taluka placeses. Gondia is situated at 20⁰. 45^t to 20⁰.31^t north latitude and 80 to 80⁰.30^t east longitudes. It is eastern part of Maharashtra known as Vidarbha.

Goregaon is taluka place in Gondia district. Total population is 1, 16,685 including the costs and tribes like gond, gowari, burad, koli etc. and others. Geographically it is located at north latitude 21^o 20.37 and 80^o12.12 east longitude. The general elevation above the sea level is 327.040 meter. Soils are red (56%), black (34%), sandy (05%) and others (05%).

The climate of Goregaon is tropical hot because it is away from sea. The average rainfall is 140 cm. Monsoon commence normally in second week of June and continue till first week of October. Temperature found above 46° C in May and June, normal range is 21° C to 36° C.

The natural vegetation of forest of Goregaon includes the most of the plant species of economical importance. It has timber yielding, gum and resin plants, food and fodder plants and plants having medicinal values. Some communities are the natives of the nearby area of the forest region. They collect the edible fruits, flowers and tubers. They also collect gum, resins, fodder, timber and sale in the nearby town to earn money.

Forest also has many plant species of medicinal importance which were regularly being used by the tribal peoples of the area to cure the human diseases and diseases of cow, bullocks, buffalos, goats and other pet animals. These medicinal plants used by tribal are called as ethno medicinal plants. Thus, it is essential to make peoples aware about the forest conservation and collect the indigenous knowledge they carried traditionally.

Ethno medicinal flora investigated from most of the northern, southern and central India by several workers like Jain, 1963; Bhatnagar, 1973; Rai, 1987; Bhalla *et al.*, 1992; Bajpai and Mitra, 1997 and Dubey, 2001. Similarly, Pradhan and Patil, 1960; Makde *et al.*, 1998; Rothe, 2000 and 2002 and Zingare *et al.*, 2008 investigated the ethnomedicinal plants from Sahyadri-satpura ranges and remote tribal area of Melghat, Nagzira Bhamragarh and Gadchiroli. But the study for this region is neglected, even though it has many ethno medicinal plants.

Hence this work was proposed to carry out through survey for the collection of ethno medicinal plants found in forest of Goregaon taluka and collected the knowledge from the tribal of the area. The collected ethno medicinal plants are preserved in the form of herbarium in the department of Botany, Jagat Arts, Commerce and Indiraben Hariharbhai Pate Science College, Goregaon Dist. Gondia.

Origin of the research problems:

The demand of the herbal medicine in the medicinal market is hike and lack of supply result in the search of new herbal resources. As the flora of forest of Goregaon taluka is having several ethno medicinal plants remain unexplored in previous works, need to be investigated. This thrust of knowing the indigenous ethno medicinal knowledge for the human benefit was the main reason behind this investigation.

Interdisciplinary relevance:

The study has relevance with the taxonomy as it deals with identification and characterization of plants and the pharmacology as the generated ethno medicinal information will be helpful to add information to the field.

Review of Research and Development in the Subject:

International and National status

An Indian forest has reach biodiversity with various flora and fauna. Unfortunately, we have lost about half of this during last few decades, due to unawareness of literacy and special about forest conservation and its valuable but destructing wealth. Still India has pretty thick ranges of forests from north-western Himalaya to Satpura-Sahyadri ranges to southern thick ranges of Kerala and Karnataka. Till date about 2, 29,539 are predicted medicinal plants in the Indian continent but more of them still did not characterized.

Several workers have investigated the floristic composition of India (Hooker;Cook, 1905;Jain and Tarafdar, 1970; Saxena, 1986; Bhalla and Khan, 1994; Kumar and Jain, 1998; Dubey, 2001; Rothe, 2002 and Zingare *et al.*, 2008) Still there are several plant species which do not found place in the above work, especially the plants having medicinal importance have not been investigated from the various core parts of India. These cores of India have a number of ethno botanical especially ethno medicinal plant species which were continuously being used by tribal of these areas. If this hidden plant wealth if explored, it will prove of much commercial importance. And that will be also helpful for the forest management programmes. It requires the organized effects and for that the preliminary investigation of the patches which are blessed with the forest of economic importance, is necessary.

Reportedly, such investigation were also found to prove beneficial in the forest management and commercial exploitation The development of various herbals industries in China, Japan, South Africa and Canada are few examples.

Thus, for further development of human being in the recent herbal era, it is essential to investigate and extract the knowledge from the tribal and exploit it for the further benefit.

Significance of the study:

The study will reveal the existing ethno medicinal flora of forest of Goregaon, which after comparison with the previous work; help to check out the further floristic development programmes of said forest. The exploitation of generated ethno medicinal knowledge will be great deal for the benefit of the society.

Objectives:

- 1. Collection of Ethno medicinal plants found in forest of Goregaon.
- 2. Investigation of ethno medicinal information from the trials of the areas.
- 3. Preparations of the herbarium from the collected ethno medicinal plant material.

Methodology:

The survey of the forest of Goregaon taluka has been conducted in different seasons to collect the ethno medicinal plants from the area. The care has been taken that the bulk area must be covered. The collected material has been preserved in the form of herbarium sheets.

The indigenous ethno medicinal knowledge has been collected by taking interviews of the Vaidu or Mukhiya of tribal community in the nearby localities.

Work plan:

First year:

- 1) The survey of the said area under investigation has been conducted in four phases for the collection of ethno medicinal plants.
- a) July to September
- b) October to December
- c) January to march
- d) April to June
- 2) The collected material has been preserved as herbarium sheets and stored.

Second year:

- 1) In the first half of the second year, several visits to the tribal localities has been conducted, where the personal interview of tribal has been held to investigate the ethno medicinal knowledge and local names of the collected plants.
- 2) In the second half, the generated data will be analyzed and final report is prepared.

Observations:

Total 56 plants are come in the knowledge in this investigation, which are being used as ethnomedicinal plants to cure many diseases.

Abrus precatorius L. (Fabaceae) L. N. Gunja.

Class : Dicotyledons
Subclass : Polypetalae
Series : Calyciflorae
Order : Rosales

A perennial twining herb. Leaves paripinnately compound, sweet to taste, leaflets small, oval to elliptic, in 10-15 pairs. Flowers small, pale purple, arranged in axillary racemes. Pods are 3-5 cm long, split open on maturity showing the bright, hard, globose scarlet seed with a prominent black eye spot. Seed are poisonous. There are two varieties one with white seeds and other with scarlet seeds with prominent black spot. Both varieties have similar medicinal properties.

Decoction of the plant is given to treat gonorrhea. Root paste of about 1-1.5 cm long root is given along with plantain to women who do not bear any child for securing conception. Root paste is mixed with that of *Santalum album* and applied on leucoderma. Root paste is applied on the bald areas to regain hair growth. Leaf juice is mixed with coconut oil and applied over the painful swelling of the body. Leaves are chewed and the juice is swallowed to treat sore throat and other throat infections. About 10 seeds are soaked in water overnight and the infusion is given during early morning from the third day to sixth day of menstruation period to prevent conception during that month. One seed is given along with banana to prevent conception for one about year. Seed paste is also applied on the hair loss areas due to lice infection to promote hair growth. Seed paste is applied for the treatment of ulcers and skin infections. Seeds are poisonous; three seeds in powder from is a mortal dose. Seed powder is used for killing animals. Seed powder taken to cure pneumonia and other bronchial diseases.

Abutilon indicum L. (Malvaceae) L. N. Atibala

Class : Dicotyledons
Subclass : Polypetalae
Series : Thalamiflorae
Order : Malvales

Erect shrub, stems pubescent, Leaves simple, alternate, cordate, hairy above and glaucas below, margin serrate, apex acute Flowers yellow, solitary, axillary on jointed peduncles, stamens numerous and monoadalphus, Fruits capsule, hairy, black when mature. Seeds small, kidney shaped and black.

Leaf extract is used as diuretic and demulcent. Boiled leaves are given to treat bleeding piles. Leaf juice is applied on forehead to treat migraine. Leaf juice is mixed with turmeric powder and applied to treat wounds. Leaf is roasted in ghee and taken in along with the food to treat leucorrhoea. Leaf paste is mixed with curd and given to treat piles, ulcer, blood motions, jaundice and leucorrhoea. Root paste is applied on the breast to increase lactation. Root powder is given as a nerve tonic. Root paste is given to treat diarrhea. Flower juice is mixed with palm sugar and given to control blood vomiting. Seed oil is used to treat scabies. Decoction obtained from the powder is used as laxative. Seed paste is given as aphrodisiac.

Achyranthus aspera L. (Amaranthaceae) L. N. Apamarg

Class : Dicotyledons
Subclass : Monoclamydeae
Series : Curvembryeae

Erect annual or perennial herb. Stem angular, ribbed, pinkish. Leaves simple, opposite, pubscent, obovate, orbicular or elliptic, petiole short and tomentose. Flowers small, greenish white, sessile on terminal or axillary spikes, bracteoles spinous, calyx 5, corolla absent, stamens 5 alternating with staminodes. Fruit small, ovoid, slightly spiny, single seeded, falls off with perianth lobes and bracteoles.

Whole plant juice is given for 2-3 times daily to treat fever; it is also used as diuretic. Whole plant decoction along with roots is given treat menorrhagia, diarrhea, and stomach pain and bowel complaints. Decoction of both leaves and roots is used as gargle to treat toothache. The leaf paste is applied to treat insect bite, scorpion sting. Skin eruption, cuts, skin infections and wounds. Leaf juice is introduced into the ear to treat earache. Leaves are boiled along with milk and given daily to treat antidote for snake bite. A spoonful of root paste mixed with honey and given 2-3 times daily for about 15 days to treat rabies. Seed paste is given to treat rabies.

Andrographi s paniculata (Burm.f.) Wall. (Acanthaceae) L. N. Bhuineem.

Class : Diotyledons Subclass : Gamopetalae Series : Bicarpellatae Order : Personales

An errect herb with quadriangular stem. Leaves simple, opposite, glabrous, bitter to taste, lanceolate, acuminate at both ends. Flowers white with pink ting in axillary or terminalpanical. Corolla blipped. Fruit capsule, linear to oblong, compressed. Seeds rugose, brown, pitted.

Whole plant as used to treat all kinds of fever, cough, edema thirst, skin disease, ulcer and worms. Leaf paste is given to care for jaundice and liver disorders; it is given to care for diarrhea. Fresh leaf paste is applied to treat itches. Root paste is given against general weakness. Leaves are also used as antidote for snake bite.

Adhtoda vasica Nees (Acanthaceae)L.N.Adusa

Class : Dicotyledons
Subclass : Gamopetalae
Series : Bicarpellatae
Order : Personales

A common dense evergreen perennial shrub. Leaves simple, opposite, short stalked, large, elliptic to lanceolate, 5-30 cm long, light green above, and pale below. Flowers white with large bracts, in short dense axillary spikes, flowers bilipped and corolla purple streaked.

Leaf juice is given along with honey to treat cough, colds, wheezing, asthma, chronic bronchitis, rheumatism, whooping cough and fevers. The bitter juice and decoction is given internally to treat diabetes, itch pustules, glandular tumor and scabies. Leaves are smoked as cigarette to treat asthma.

Aegle marmelose (L.)Correa. (Rutaceae)L.N. Bel

Class : Dicotyledons
Subclass : polypetalae
Series : Disciflorae
Order : Geraniales

Medium sized deciduous tree. Branches armed with spines. Leaves alternate, trifoliate, leaflets ovate to lanceolate, lateral leaves are sessile, terminal leaf petioles long. Flowers greenish white, sweet scented, polygamous in short axillary panicales, calyx4-5, petals 4-5, stamens numerous, ovary many celled. Fruit berry, globous with smooth and woody epicarp. Seed numerous embedded with in fleshy pulp.

Fruit juice is used to treat abdominal pain and acute dysentery. Fruit pulp is given to treat bleeding, piles, ulcer and digestive problems. Unripe fruit are baked for 6 hours and given as strong astringent and to treat dysentery. Tender leaves are eaten to treat jaundice. 2-3 spoonful of leaf juice is given daily to treat leucoderma. Leaf paste is applied externally on piles and the juice is taken internally to treat bleeding piles. Leaf paste is given to treat menorrhagia. Leaf paste is mixed with *Cynodondactylon* and *Ecliptaprostrata* leaf paste and given to treat constipation. Root bark decoction given to treat high blood pressure, vomiting and diarrhea. Root and stem decoction are given to treat fever. The decoction obtained from the bark, flower, leaf, root and stem is used for the treatment of dehydration and urinary problems.

Amaranthus spinosus L.(Amaranthaceae) L.N. Katebhaji

Class : Dicotyledons
Subclass : Monochlamydeae
Series : Curvembreae

An erectspinous annual or perennial herb. Spines are hard and straight. Leaves are simple, alternate, lanceolate, 3.5-10 cm long, 2-5 cm broad, base connate, petiole slender. Flowers are in axillary and terminal spikes. Seeds minute, black and shiny.

Whole plant juice is given to treat irregular menstruation and also used as lactogogue. Leaves are used as refrigerant, diuretic and purgative. Leaf decoction is given to treat kidney troubles. Leaf paste and root paste is applied over the wounds and boil to suppurate. Root decoction is given to treat menorrhagia.

Amorphophalus companulatus (Roxb.)Blume ex Decne (Aracaceae) L. N. Sooran

Class : Monocotyledons

Series : Nudiflorae

A common herb.Corms depressed, globose or hemispherical, dark brown outside and pale brown or white inside.Leavessolitory, tripartite, 1-3 feet in diameter. Petiole long, stout, warted, dark green and mottled with pale blotches. Inflorescence spathe, bell shaped spadix sessile. Flowers unisexual in apadix inflorescence, male flowers pale yellow, densely crowded, female inflorescence cylindrical. Fruit berry, clustered, obvoid, red, 2-3 seeded.

Corms are boiled and given to treat piles, rhumatism, liver and spleen enlargement, dysentry and stomach disorders; it is used as aperient, expectorant, anthelmintic and carminative. Corm paste is boiled in mustard oil, cooled and dropped in to the ear to treat ear ache. Corm paste is applied to treat rheumatic pain. Dried corm powder is given to treat abdominal tumors. Leaf juice is used as antiseptic to clean wounds.

Annona sqamosa L.(Annonaceae)L. N. Seetaphal

Class : Dicotyledons
Subclass : Polypetalae
Series : Thalamifflorae

Order : Ranales

A small and hardy tree reaches a height of about 7 meters. Leaves simple, alternate, acromate, oblong to lanceolate, glaucasbeneath. Flowers greenish, either single or clustered at axis of leaves on long pedical. Petals are thick and fleshy. Stamen and carpels numerous, spirally arranged on a cone like elongated thalamus. Fruits aggregated, ash coated with projecting ovoidareoles. In between areoles the color is pale yellowish or pinkish. Seeds numerous, oblong and black.

Leaves, bark, root and seeds are used in medicines. Leaves are made into paste and applied on the hair to kill lice; it is applied on boils and abscess to suppurate. Bark juice is given for snake bite. Dried root powder is given for inducing abortion. Fruit is used as astringent, coolant and febrifuge. Fruit is given to treat diarrhea and vomiting. Seeds and unripe fruits have insecticidal property. Seed paste is applied over the head to kill lice. Powdered seeds are boiled with coconut oil, cooled and used as hair tonic.

Argemone mexicana L.(Papaveraceae) L.N. Bharband/Utatai

Class : Dicotyledons
Subclass : Polypetalae
Series : Thalamifflorae
Order : Parietales

A prickly herb with yellow coloured latex. Stem armed with prickles. Leaves simple, alternate, sessile, margin lobed and spinous, surface dotted white spots, upper and lower surface are covered with many small prickles. Flowers are yellow, solitory on erect peduncles, calyx 3 and corola 6, arranged in two whorls, stamens numerous, free, ovary wall

covered with prickles. Fruit are capsule, elliptic or oblong, six valved and prickly. Seeds are small, numerous, round, black with a slightly compressed scar on one side.

Leaf paste is applied on boils and abscess to suppurate. Latex is applied to treat eczema, psoriasis and other skin infections. Latex is applied on the eyes to control white patches I the eyes. Small doses of latex are given internally to treat dropsy and jaundice. Oil extracted from seeds is applied to treat scabies, ulcers, skin eruptions and headache. Seeds are poisonous and small amount of seeds decoction is given to treat dysentery.

Asparagus racemosus Willd.(Liliaceae) Satawar

Class : Monocotyledons Series : Coronarieae

Tall graceful climber commonly cultivated in the gardens for its beautiful foliage, roots tuberous, stem thorny. Leaves reduced to minute spines subtending leaf like cladodes which are falcate, bright green, slightly compressed, borne in axillary clusters of 2-6. Flowers are small, white and fragrant, in nracemes. Fruit berry, small, trilobed and one seeded.

Juice obtained from the tubers after removing the outer skin is given as lactagogue; it is given before delivery to relieve pain. Crushed tubers are boiled with milk and given to the women having habitual abortions to stabilize the foetus. Tuberous root juice is given along with suger to treat menorrhagia. Infusion of the roots is given to treat initial stages of small pox. Tuberous root powder is give to increase vigour and strength. A spoonfull of tuberous root powder is given to treat stomach ulcers; it is also used as aphrodisiac. Tuberous root powder is mixed with rice grain and given to treat diarrhoea. Tuberous root bark decoction is given as aphrodisiac.

Asclepias curassavica L.(Asclepiadaceae) Haldikunku.

Class : Dicotyledons
Subclass : Gamopetalae
Series : Bicarpellatae
Order : Gentianales

An erect laticiferous perennial herb grows to a height of about 1 to 1.05 meters in roadside and wasteland. Stem is branched from the base. Leaves are simple, opposite, lanceolate, acute at the base, acuminate at the apex, glabrous, petiole short. Flowers are orange-crimson red with corona in umbels. Seeds have thick margin with a coma.

The plant is used to treat epilepsy, cough, leprosy and mental disorder; it is used as tonic and a rejuvenator. Whole plant is used as emetic, styptic (stop bleeding) and purgative. Juice of the leaves is given to treat dysentery and gonorrhea and also to expel intestinal worms. Leaf decoction is given to treat cancer. Flower paste is used over the headache. Root decoction is used as emetic, cathartic and astringent. It is also given to treat gonorrhea and piles. Latex is applied to treat warts and corns.

Astercantha longifolia (L.) Nees. (Acanthaceae) Katekolsa.

Class : Dicotyledons
Subclass : Gamopetalae
Series : Bicarpellatae
Order : Personales

A tall thorny, hispid herb found in wet places. Mostly found in rice fields and margins of the streams. Stem sub quadrangular, spiny, Leaves simple, linear to oblong,

opposite, or in pseudo whorls. Flowers auxiliary, light blue, whorled and blipped. Fruits are capsule.

Plant decoction is given to treat dropsy, gout jaundice, rheumatism, cough and urinary tract infections. Leaf decoction is used to treat scanty micturition. Leaves are chewed to revive taste on tongue. Seed and root decoction is used as aphrodisiac, diuretic; it is given to treat leucorrhoea and other menstrual disorders. Seed paste is used to treat spermatorrhoea and gonorrhea. Root decoction is given to treat jaundice and as diuretic.

Azadirachta indica A. Juss. (Meliaceae) Kadunim

Class : Dicotyledons
Subclass : Polypetalae
Series : Disciflorae
Order : Geraniales

A medium sized evergreen tree, Leaves alternate, imparipinnately compound, leaflates3-5cm long, 2-3 cm wide, lanceolate, acuminate, glabrous, unequal at the base, margins serrate, Flowers white small in axillary loose panicales, honey scented, sepals -5, petals-5, stamens-10 and monoadalphous. Fruits are drupe, ellipsoid, single seeded, fleshy, green turns yellow on ripening. Seed ishard and ellipsoids.

Whole plant is medicinal. The flowers are used as stimulant and also used an excellent tonic for rejuvenation. Flower decoction is given to treat bile disorders. Oil extracted from seeds is used as tonic, anthelmintic and stomachic. Seed oil is applied to treat scabies, leprosy and also applied on head to promote hair growth. Bark decoction is used to rinse the mouth to control tooth ache. Stem bark extract is given as contraceptive. Bark decoction is given to control irregular menstruation. Leaf paste is applied to treat wounds, skin infections, dandruff and loss of hairs. Leaf extract is given to treat fever. Tender twigs are used as tooth brush.

Bambusa arundinacea (Retz.) Roxb.(Poaceac) L.N.Bamboo

Class : monocotyledons Series : Glumaceae

A large shrub with short stout and knotty rhizome and erect, thick tall and dense clums. Clums hallow, green when young turns yellow on repiing with prominent nodes and long internodes. Leaves are simples, alternates linear to lanceolate, 6-12 cm long, about 1 cm wide. Flowers are in large panical, spikelets clusters as heads, about 2 cm long, less than 0.5 cm wide. Fruit are caryopsisare, small, 0.5-0.8 cm long, oblong and grooved on one side.

A leaf infusion is given along with milk to treat fever, gonorrhea, asthma and bronchial diseases. Young shoot paste is used as antiseptic; it is given to treat diabetes. Leaf paste is given as emmenagogue, astringent and febrifuge. Burnt roots are applied to treat ring worm diseases of skin, bleeding gum and rheumatic swelling.

Bauhinia purpuria L. (Caesalpiniaceae) L.N.Koilari

Class : Dicotyledons
Subclass : Polypetalae
Series : Calyciflorae
Order Rosales

A medium sized tree. Leaves simple, shallowly chordate or rounded and bilobed. Leaves are of hoop shaped with two leaflets. Flowers purple in terminal and auxiliary few flowered corymbs. Fruit pod, dehiscent, hard and flat. Seeds numerous and flat.

Leaf juice is given to control diabetes, stems and bark juice applied to the patients with skin problems and goiter; it is given to dysentery and diarrhea. Paste obtained from the root bark is applied over boils to suppurate and reduce swellings. Decoction obtained from the root is given to controls rheumatism. Paste obtained from stem bark is used for healing bone fracture. Flowers are fried in ghee and given to treat dysentery.

Biophytum sensitivum Hook & Edgene. (Oxalidaceae) L.N.Lajwanti

Class : Dicotyledons
Subclass : Polypetalae
Series : Disciflorae
Order : Geraniales

Small erect perennial herb with a single sturdy stem. Leaves radiate in all directions like the ribs of an umbrella from top of the stem. Leaves sensitive to touch, 8-12 cm long paripinnate, leaflets 8-15 pairs, glabrous above, pale below. Flowers small, yellow or red on long peduncled umbels. Petals-5, salver shaped, fruit small, ellipsoid, loculicida capsul.

Leaves are powdered and fried in coconut oil and applied on cuts and wounds. Leaf decoction is used as diuretic and astringent. Leaf paste is applied to treat chronic skin diseases, cuts and wounds. Leaf paste is given to induce sterility in man. Ash of leaves is used to treat stomach disorders. Root decoction is given to treat fever and gonorrhea.

Boerhavia diffusa L.(Nyctaginaceae)) L.N.Khaparkhuti

Class : Dicotyledons
Subclass : Monochlamydeae
Series : Curvembryeae

A diffusely branched, glabrous, prostrate perennial herb with stout fusiform root. Leaves simple, apposite, in unequal pairs, thick, ovate or oblong, vary in size, nearly subarbicular, 2-4cm in dimeter, glabrous above and pale below. Flowers small, pink or white, in axillary or terminal umbellate cluster or in terminal panical. Fruit achene, ovate or oblong, 5-ribbed, viscid, glandular, one seeded.

Plant juice is given to treat urinary tract infections, muscular pain, cough and cold. Leaf paste is applied over the cuts and wounds. Leaf decoction is given to treat asthma, jaundice, spleen enlargement, abdominal pain and scanty and painful urination. Dried leaf powder is smoked to control asthma. Root paste is given as an antidote for snake bite. Root decoction is used as diuretic, laxative, expectorant; it is given to treat asthma, scanty urine, ulcer, diarrhea and jaundice.

Butea monosperma (Lam) Taub. (Papilionaceae) L.N. Palas

Class : Dicotyledons
Subclass : Polypetalae
Series : Calyciflorae
Order : Rosales

Deciduous tree with twisted trunk commonly known as flame of the forest. Leaves trifoliatly compound petioles long, leaflets obovate, coriaceous, glabrous above and densely hairy below. Flowers flame colored and showy in dense compound raceme, petals thick. Fruit

pod, indehiscent, pendulous, 10-15cm long contain one seed at the apex. Seeds hard, reniform and laterally compressed.

Bark decoction is given to treat fever, hemorrhage and menstrual disorder. Stem bark paste is bound over the fractured bones and sprain. Red colored juice exuded from the incised stem is applied to treat ring worm diseases, boil, wounds and ulcers. Small bites of gum obtained from the plants are mixed with the paste of long pepper and given to treat diarrhoea. Gum is given to prevent conceptions; it is also used as astringent. Flower paste is given to treat diarrhea; it is also applied externally to treat swelling and hanging of testicles. Seed paste is given to expel intestinal worms. Seeds paste is applied to treat ring worm of the skin.

Calotropis procera (Ait.) R.Br. (Ascelepiadaceae) L.N. Ruee

Class : Dicotyledons
Subclass : Gamopetalae
Series : Bicarpellatae
Order : Gentianales

A tall, erect, greyish, succulent, laticiferous shrub. Stem covered with soft white cottony wool. Leaves simple, opposite and decussate, thick, coriaceous, sub-sessile, oblong, pale, green above and white orangey below. Flowers white in lateral or terminal panicals of umbellate cymes. Fruit large inflated follicles. Seeds flat many, attached to silky hairs.

Root decoction along with pepper is given to treat leucorrhoea. Dried root powder is mixed with gingelly oil and applied over the leprotic wounds. Root bark is used to treat skin disease and also used to expel intestinal worms. Leaf is heated over the hot brick and bound over the swellings. Leaf juice is mixed with honey and given to expel intestinal worms. Latex is applied on the scorpion sting. Flower paste along with equal amount of pepper and clove is given to treat gasping. Dried flowers are given to male for antifertility.

Cassia fistulaL.(Caesalpiniaceae) L.N.Bahava

Class : Dicotyledons
Subclass : Polypetalae
Series : Calyciflorae
Order : Rosales

A medium sized deciduous tree grown in the garden for its ornamental flowers. Bark smooth, pale gray. Wood hard, redish brown. Branches few, spreading, leaves paripinnatly compound. Leaflets 6-8 pairs, ovate, 5-10 cm long, 3-6 cm wide, glossy green above, pale below, deciduous. Flowers golden yellow, showy, in long drooping axillary racemes. Pods cylindrical, 30-45 cm long, green and flexible when young, become black and rigid on maturity. Dry pods hang on the tree for about a year. Seeds flat, hard, small, light brown, embedded in black pulp.

Bark decoction is given to treat dysentery, jaundice, skin inflammation and leucoderma. Leaf paste is applied to treat skin diseases. Flower decoction is given to treat stomach problems. Sweet fruit pulp around the seed is used as laxative and also used to treat liver disorders. Seed powder is used to treat jaundice and diabetes.

Cassia tora L. (Caesalpiniaceae) L.N.Tarota

Class : Dicotyledons
Subclass : Polypetalae
Series : Calyciflorae
Order : Rosales

A annual herb. Leaves paripinnatly compound, leaflet in three pairs, ovate to oblong, with glands in the last two pairs, showing sleeping movements. Flowers are yellow, arranged in pairs on very short axillary raceme. Fruits stout pods, 15-20 cm long. Seeds green, numerous.

Leaf paste is applied to treat ringworm disease, wounds and other skin infections. Leaf paste is applied as plaster to treat bone fracture. Equal amount of leaf and seed paste is given to treat jaundice. Root paste is applied to treat skin diseases.

Cleome viscose L.(Cleomaceae) L.N.Piwalatilwan

Class : Dicotyledons
Subclass : Polypetalae
Series : Thalamiflorae
Order : Parietales

An erect annual herb, a common weed found in neglected fields. Stem round and villous. Leaves 3-5 foliate, leflate elliptic, middle one longer than others. Flowers yellow in axillary raceme, long pedicilled. Sepals-4, free, petals-4, free refluxed. Stamens numerous, ovary sessile, fruit capsule, pubescent and straite.

Leaf paste is applied over boils to suppurate and reduce swelling. Leaf juice is used to treat deafness. Seed decoction is given to control gastric problems and also used to expel intestinal worms. Seeds are anthelmintic and carminative. Leaf juice is dropped inside the ear ache. Leaf is boiled with ghee and applied to treat wounds.

Clitoria ternatea L. (Papilionaceae) V.N.Aparajeeta.

Class : Dicotyledons
Subclass : Polypetalae
Series : Calyciflorae
Order : Rosales

A climber with woody stem base, sraggies over bushes and trees.Leaves pinnately compound with 3-7 leaflets, oblong, terminal leaves larger than the others. Flowers blue or white, axillary, showy, with linear bluish marking. Centre yellowish white. Pods flat, linear, 6-8 cm long. Many seeded.

Equal amount of root paste is given along with *Phyllanthus amarus* and *Pedalium murex* paste to expel intestinal worms; it is given internally to treat cough diabetes, painful urination, uterine disorders and leucorrhoea. A spoonful of leaf extract is given to treat bronchitis. Root decoction is given to treat fever. Concentrated flower decoction is applied to treat venereal disease and wounds in the genital organs.

Costus speciosus (Koenig.) J.E.S mith (Costaceae) L.N. Keukand

Class : Monocotyledons

Series : Epigynae

An erect, succulent, perennial herb with fleshy underground rhizome. Leaves simple, spirally arranged, elliptic to lanceolate, pointed, thick, silky beneath, leaf sheath enclosing the stem. Flowers white with yellow center, in thick cone like terminal spike, bract red lip with yellowish throat. Fruit capsole, red, trilobed. Seeds black, arilate, ariles white.

Rhizome paste is given along with curd to treat dysentery. Boiled rhizome is given to prevent conceptions; it is used as astringent, anthelmintic, abortifaecient, aphrodisiacs and tonic.

Cynodon dactylon (L.)Pers(Poaceae) L.N.Durva

Class : Monocotyledons

Series : Glumaceae

A perennial rhizomatous creeping herb. Flower bearing stem erect. Leaves small, smooth, distichous, fringed at edge. Inflorescence terminal fascicled spike, glumes rough, spreading, flowers alternate, purple, awn less.

Whole plant is used to treat biliousness, vomiting, burning, sensation, hallucination, fever, menorrhagia, leucorrhoea retention of urine, leprosy diuretic, styptic and other skin diseases.

Datura metal L.(Solanaceae) L.N. Dhotra

Class : Dicotyledons
Subclass : Gamopetalae
Series : Bicarpellatae
Order : Polemoniales

An erect annual herb grows up to a height of about one meter. Leaves are simple, alternate, ovate, acuminate and unequal at the base. Flowers are axillary, solitary, white or purple. Corolla are tubular, funnel shaped, 5-6 inches long. Fruit capsule, numerous, globular, covered with numerous spines, dehisces irregularly. Seeds minute, numerous, reniform and flattened.

Leaf juice is applied on the hair to prevent hair loss. Leaf juice is applied on the bald areas to promote hair growth. Dried leaves and seeds are smoked like cigarette to treat asthma. Warmed leaves coated with caster oil are applied over boils to suppurate and reduce swelling. Leaf extract is boiled wit coconut oil cooled and applied to treat wounds. Leaf paste is given to treat rabies. Juice of the plant mixed with cow's milk and given to treat gonorrhea. Root powder is mixed with honey and given to treat asthma.

Desmodium gangeticum DC. (Papilionaceae) L.N.Shalparni

Class : Dicotyledons
Subclass : Polypetalae
Series : Calyciflorae
Order : Rosales

Erect or sub erect. Diffusely branched under shrub. Stem irregularly angled. Leaves simple, alternate, stipulate, and ovate to oblong, 10-14 cm long, 8-10 cm wide. Flowers small, pink in terminal elongated raceme. Fruit compressed, moniliform, constricted, 6-8 seeded. Fruit pod covered with minute hairs. Seeds reniform and pale yellow.

Whole plant decoction is given to treat dysentery, digestive disorders, odema, diarrhea, fever and urinary tract infection. It is also used as anti inflammatory. Root decoction is given to treat intermittent fever and malaria.

Dioscorea bulbifera L. (Dioscoriaceae) L.N. Matarukanda.

Class : Monocotyledons

Series : Epigynae

Dioscorea bulbifera is a perennial vine with broad leaves and two types of storage organs. The plant forms bulbils in the leaf axils of the twining stems, and tubers beneath the ground. These tubers are like small, oblong potatoes, and they are edible and cultivated as a food crop, especially in West Africa. The tubers often have a bitter taste, which can be

removed by boiling. They can then be prepared in the same way as other yams, potatoes, and sweet potatoes. The air potato is one of the most widely-consumed yam species. It can grow up to 150 feet tall. Air potato can grow extremely quickly, roughly 8 inches per day, and eventually reach over 60 feet long. It typically climbs to the tops of trees and has a tendency to take over native plants. New plants develop from bulbils that form on the plant, and these bulbils serve as a means of dispersal. The aerial stems of air potato die back in winter, but respouriting occurs from bulbils and underground tubers. The primary means of spread and reproduction are via bulbils. The smallest bulbils make control of air potato difficult due to their ability to sprout at a very small stage. The vine produces small white flowers, however these are rarely seen when it grows in Florida.

Air potato has been used as a folk remedy to treat conjunctivitis, diarrhea and dysentery. Dried and powdered tubers are applied to treat ulcer, piles, syphilis and wounds.

Eclipta alba (L.) Hassk.(Asteraceae) L.N. Bhangara/Maka

: Dicotyledons Class Subclass : Gamopetalae : Inferae Series Order : Asterales

Bhringaraj is commonly used as a deobstruent to promote bile flow and to protect the liver parenchymal tissue in viral hepatitis and other conditions involving hepatic enlargement.

The fresh juice of the leaves is given in the treatment of edema, fevers, liver disorders, and rheumatic joint pains; it is also used to improve the appetite and to stimulate digestion. The juice is given with honey to treat upper respiratory congestion in children. A hair oil prepared from boiling the fresh leaves with either coconut or sesame oil renders the hair black and lustrous. It is popularly used to enhance the memory and has a reputation as an antiaging agent in Ayurveda. An herbal poultice is made with sesame oil and used over glandular swellings and various skin conditions. The leaf juice is also effective when applied externally to treat minor cuts, abrasions, and burns.

Emblica officinale Gaertn.(Euphorbiaceae) L.N. Aavala

Class Dicotyledons Monochlamydeae Subclass Series

Unisexuales

A small deciduous tree with rough grey or reddish Broun bark. Leaflets small, elliptic, pinnately arranged on the branches. Flowers unisexual, pale green, minut in axillary fascicles.Fruit drupe, fleshy, globular, six lobed. Pale green to yellow, indehiscent.

Fruit juice is given as liver tonic; it is given to trearanaemia, jaundice, cold and diabetes. Fruit juice is mixed with honey and given to stop bleeding from nose. Fruit juice is applied over the hair to prevent greying of the hair. Fruit powder is used as laxative. Seed paste is given on empty stomach to treat ulcer and bronchial disorders.

Euphorbia hirta L. (.(Euphorbiaceae) L.N. Dudhi

Class : Dicotyledons Subclass : Monochlamydeae : Unisexuales Series

A prostrate ascending annual herb. Stem and leaves are covered with minute haires, leaves simple, opposite, hairy sub-sessile, obliquely oblong or lanceolate, green or reddish in colour. Flowers in axillary globous sessile cymes.Fruit capsule, hairy. Seeds small, ovoid, acute angled.

Decoction obtained from the plant powder is given to treat kidney disorders and disease of urinogenital tract; it is also used as vermifuse. Leaf paste is given as lactagogue. Leaf paste is given to expel intestinal worms. Latex is applied to treat warts.

Evolvulus alisnoides L. (Convolvulaceae) L.N.Bechkusal/ Visnukrant

Class : Dicotyledons
Subclass : Gamopetalae
Series : Bicarpellatae
Order : Polemoniales

A prostrate, densely hispid perennial herb, found growing naturally in the plains, many branches arises from the woody root stocks. Leaves simple, alternate, broadly ovate, or oblique, cacute, 2 cm long about 1.0 cm wide hairy on both sides. Flowers blue, solitary, axillary, fruit globes, 4 valved capsules, Seeds glabrous.

Whole plant paste is applied to treat leucoderma. Plant decoction is given to treat anxiety, epilepsy, diarrhea, bronchitis, memory loss, fever, cough and cold. Plant powder is mixed with honey and given to treat bronchial disorders. Decoction obtained from dried plants s used to treat uterus disorders. Leaf paste is mixed with onion and given along with cow's milk to treat jaundice. Leaf paste is mixed with common salt and used as laxative.

Ficus benghalensis L. (Moraceae) L.N. Vad

Class : Dicotyledons
Subclass : Monochlamydeae
Series : Unisexuales

Large spreading deciduous tree with extensive prop roots which arises from he main trunk and branches. Leaves simple, alternste, elliptic toovate, coriaceous.Infloresenceaxillary. Flowers clustered in an inflorescence called hypanthodium. Fruit syconia, sessile, sub globose, red when ripe.

Infusion of young bud is given to treat diarrhea. Leaves are warmed and applied as poultice over the abscess, cuts and wounds. Latex is applied to treat cracks of the feet, ringworm disease of the skin and toothache. A teaspoonful of leaf ash is mixed with water and given to treat menorrhagia. Tender aerial roots are used for cleaning the teeth and toung. A spoonful of the root juice is given to control vomiting. Bark paste is given as an antidote for snake bite. Bark decoction is given to treat dysentery and diabetes. Rot bark paste is applied over the hair for good hair growth.

Gloriosa superba L. (Liliaceae) L.N.Kal-lavi/ Ulatchandal

Class : Monocotyledons

Series : Epigynae

A climbing annual herb with the help of leaflet climber, root tuberous, fleshy white, bifuriatly forked like the base of country plough or V shaped. Leaves initially apposite and then alternate, sub sessile, linear to lanceolate, tip if modified into tendrils, veins paralled. Flowers showy, solitary and axillary, crimson red to orange in colour red. Fruit capsule seeds numerous, round and black.

Tubers are used to treat gout, rheumatism colic, chronic ulcer and piles. Root tubers are poisonous; small amount of tubers are given as anathematic and stomachic. A small bit of

tuberous root along with black Pepper is made into paste and given for inducing abortion up to three months of pregnancy. Root paste applied externally to treat skin diseases, swelling of the joints and rheumatic pains. Leaf paste is applied on the hair to kill lice.

Holorrhena antidysentrica (Roxb. Ex. Fleming) Wall.(Apocynaceae)L.N.Kuda/ Kutaj

Class : Dicotyledons
Subclass : Gamopetalae
Series : Bicarpellatae
Order : Gentianales

A small deciduous laticiferous tree. Bark pale, yellow, recurved when dried. Leaves simple, opposite, oblong, 20-30 cm. long.Petiole short. Flowers white, fragrant in terminal dichasialcyme, fruit ash colored and white dotted.

Stem bark decoction is given to control skin disease. Bark paste is mixed with coconut oil applied externally to treat skin infections. Bark decoction is used as gargle to treat toothache. Root bark decoction is given to treat dysentery. A spoonful of seed powder is given on empty stomach for about seven days to expel intestinal worms; it is used to treat stomach pain.

Jatropa gossypifolia L. (Euphorbiaceae) L.N. Vilayati Erand

Class : Dicotyledons Subclass : Monochlamydeae

Series : Unisexuales

Small shrub with soft stem. Leaves simple, alternate, palmatly three to five lobed, redish when young, hairy and glandular. Flowers dark red, glandular in corymbose cyme. Fruit capsule, three lobed. Seeds grayish red with a caruncle.

Fresh latex is applied on cuts and wounds as antiseptic. Leaf paste is applied to treat eczema, inflammation and other skin diseases. Leaf decoction is given as purgative. Leaf juice is given to teat sores on tongue of babies. Root decoction is given to treat leprosy and as an antidote on snake bite. Bark decoction is used as an emmenagogue. Sed oil is given as purgative and emetic. Seed oil is applied over the body to get relief from body pain.

Lantana camara L., var. aculeate(L.) Mol. (Verbanaceae) L.N.Ghaneri

Class : Dicotyledons
Subclass : Gamopetalae
Series : Bicarpellatae
Order : Lamiales

A hairy or slightly prickly shrub. Stem hairy, with hooked prickles commonly found in all waste land and road sides. Leaves simple opposite, rugose, scabrous above, pubescent below, chordate-ovate, acuminate, margin crenate, Flowers axillary, dense, flat top shaped heads, whites, yellow, red etc. often changing from pink to red or orange. Fruit drupe, globose, 0.5 cm in diameter, green glossy when immature, bluish black on ripening.

Plant decoction is used to treat tetanus, rheumatism, malaria and stomach problems. Leaf paste is applied on measles, chicken pox, bois and ringworm disease of skins. Leaf decoction is given to cure malaria. Fresh root decoction is gargled to treat tooth pain.

Mimosa pudica L. (Mimosoideae) L.N.Lajwanti

Class : Dicotyledons
Subclass : Polypetalae
Series : Calyciflorae
Order : Rosales

A creping spinous perennial herb with sensitive leaves. Petiols long, leaf base pulvinous, leaves bipiennately compound, leaflets small, 10-20 pairs, oblong to elliptic, sensitive to touch, when touched the petioles fall and leaflets close, Flowers pink in globular heads, axillary. Fruit is clustered pod, flat, constricted, with many bristles and many seeded.

A spoonful of shade dried plant powder is given during early morning to control diabetes. Whole plant extract is mixed is mixed with honey and given to treat menorrhagia. Leaf paste is applied to stop blood flow and to heal fresh cuts and wound; it is applied to treat swelling of joints, sores and piles. Leaf paste is applied to skin eruption, boil and swellings; it is given to treat mouth ulcers, throat inflammation and diabetes. Root extract is given to treat kidney stones and other urinary tract infection

Nelumbium speciosum Willd. (Nelumbonaceae) L.N. Kamal

Class : Dicotyledons
Subclass : Polypetalae
Series : Thalamiflorae
Order : Ranales

An aquatic herb with free floating leaves and creeping underground rhizome in shallow water and ponds. Leaves peltate, petioles long, broad, and round orbicular and glaucous. Flowers large, fragrant, solitary, white or rose. Petals and stamens neumerous. Fruit torus top shaped, spongy, hollow, numerous seeds sunk on the upper side, seeds, ovate hard and black.

Rhizome is crushed and boiled along with milk and given to check routine abortions. Rhizome paste is applied on ringworm disease of skin. Dried stamens are given along with milk to treat women's infertility. Milky juices of the petiole and leaves are given to treat diarrhoea.

Ocimum sanctum L. (Lamiaceae) L.N.Tuisi

Class : Dicotyledons
Subclass : Gamopetalae
Series : Bicarpellatae
Order : Lamiales

A perennial pubescent herb grows to a height of about 3 feet. Stem quadrangular, leaves simple, opposite, elliptic, oblong, entire to serrate, pubescent gland dotted, 3-5 cm long, 1-2 cm wide. Inflorescence verticillaster. Flowers purple in whorls on terminal panicles, Fruit nutlets.

Leaf juice is given to treat bronchitis and gastric disorders. Few drops of leaf juice are dropped inside the year to treat ear ache. Leaf paste is applied to treat ringworm disease of skin. Seed decoction is given to treat piles gonorrhea. Root decoction is used to treat malaria.

Oxalis corniculata L. (Oxalidaceae) L.N. Amrulsak

Class : Dicotyledons
Subclass : Polypetalae
Series : Discifloreae
Order : Geraniales

A small diffuse procumbent herb. Stem creeping and root in at nodes. Leaves digitately trifoliate, leaflate entire, obovate. Flowers yellow, axillary and small in umbellate clusters. Fruits capsule, cylindrical, tomentose. Seeds numerous, small, ovoide, striate.

Fruit juice is used to treat abdominal pain and dysentery. Fruit pulp is given to treat bleeding piles, ulcer and digestive problems. Tender leaves are eaten to treat jaundice. 2-3 spoonful of leaf juice is given to treat leucoderma. Root bark decoction given to treat high blood pressure, vomiting and diarrhoea.

Peristrophe paniculata (Forrsk.) Brummitt. (Acanthaceae) L.N.Atrilal

Class : Dicotyledons
Subclass : Gamopetalae
Series : Bicarpellatae
Order : Personales

A small erect hispid herb grows with angled branches. Leaves simple, alternate, ovate to acuminate, hairy. Flowers pink blipped, in cyme Inflorescence, bracts hairy, glandular, Fruit capsule, linear hairy.

Leaf paste is given as an antidote for snake bite; it is given to treat digestive disorders and anthelmintic. Leaf paste is applied as antiseptic to treat wounds.

Phyllanthus niruri Auct.Non.L.(Ephorbiaceae)L.N. Bhuianwala

Class : Dicotyledons Subclass : Monochlamydeae

Series : Unisexuales

A small annual herb, 1-2 feet high, with numerous branchlets. Leaves distichous, elliptic to oblong, obtus glabrous, nearly sessile. Flowers very small, yellowish green, unisexual, minute beneath the branchlets, 1-3 staminate flowers and solitary pistillate flowers are born axillary on the underside of the branchlets. Fruits capsule, very small, globose, smooth, rarely lobed. Seeds longitudinally ribbed trigonous and pale brown.

Whole plant is made in to paste and given for the treatment of colic, diarrhea, dropsy, gonorrhea and other urogenital tract infections. Decoction obtained from the whole plant is given to treat painful and difficult urination. Root paste is given to treat jaundice. Root decoction is mixed with paste of long pepper and given to treat dysentery. Seed paste is applied to treat ring worm disease of the skin.

Physalis minima L.(Solanaceae) L.N. Kamuni

Class : Dicotyledons
Subclass : Gamopetalae
Series : Bicarpellatae
Order : Polemoniales

A small pubescent annual herbs grows to a height of about 1-2 feet. Leaves simple, alternate, ovate, margin serrate. Flowers yellow, solitary, axillary. Fruit berry, 1-1.5 cm in diameter, globular, green, many seeded, enclosed in a many ribbed, acrescent calyx.

Whole plant is used to treat antifertility, diabetes, dysurea and swelling of joints. Fruits are used as diuretic, purgative, and tonic. Fruits are roasted in coconut oil and given to treat spleen disorder.

Plumbago zeylanica L. (Plumbaginaceae) L. N. Chitrak

Class : Dicotyledons
Subclass : Gamopetalae
Series : Heteromerae
Order : Primulales

An erect or sub scandent herb. Leaves simple, alternate, elliptic, to ovate, base truncate, and apex acccuminate. Flowers white in terminal elongated racemose spike, tubular and covered with hairy glands. Corolla slender, tube long, lobes spreading. Fruit membranous capsule, glandular hairy, calyx persistant. Seed solitary.

Root paste is mixed with turmeric powder and given on empty stomach as an abortificient and antidote for snake bite. Root decoction is given to treat mental disorders, scabies and body pain. Root is cut into 3 cm and used for inducing abortion up to three month of pregnancy. Leaf paste is mixed with milk and applied to treat leprosy and other skin diseases.

Portulaca quadrifolia L. (Portulacaceae) L.N. Laghulona

Class : Dicotyledons
Subclass : Polypetaleae
Series : Thalamiflorae
Order : Caryophyllineae

Small diffuse annual succulent herb, Leaves simple, alternate, elliptic, ovate to lanceolate, fleshy, succulent, 3-6 mm long. Flowers yellow, terminal, solitary and sessile, Fruit capsule, conical, seeds numerous, minute and tuberculated.

Leaf paste is given to treat asthma, cough, urinary tract infection, inflammations, leucorrhea, piles, vomiting and ulcers. Leaf paste is applied as antiseptic to treat wounds.

Ricinus comunis L.(Euphorbiaceae) L.N. Erand

Class : Dicotyledons Subclass : Monochlamydeae

Series : Unisexuales

An erect perennial shrub, stem soft, green or red. Leaves simple, alternate, palmatly 5-11 lobed margin serrate, petiole long, hollow,. Flowers unisexual, in long terminal spike. Fruits capsule, covered with soft prickles, dehisce in to three 2 valved cocci.

Tender leaf paste is given along with coconut water to treat jaundice and hyper acidity; Leaves are warmed in hot brick and put on the stomach to control stomach pain. Oil obtained from seeds is used for stimulating the bowel action (cathartic).

Sida cordifolia L.(Malvaceae) L.N.Bala

Class : Dicotyledons
Subclass : Polypetaleae
Series : Thalamiflorae
Order : Malyales

Smalll erect sub shrub, 40-60 cm high, and stem pubescent with stellate haires. Leaves simple, alternate, cordate to obng, 2-4 cm long 1.5-3.5 cm wide, tomentoes, margin serrate. Flowers yellow, fruit capsul inclosed in calyx.

Leaf paste is used to treat cut and wounds. Leaf decoction is applied to treat dysentery and urinary tract infections.

Sida rhombifolia L.(Malvaceae) L.N.Mahabala

Class : Dicotyledons
Subclass : Polypetaleae
Series : Thalamiflorae
Order : Malvales

An erect annual perennial hairy herb or under shrub. Leaves simple, alternate, petiole short, rhomboid to obovate and slightly hairy above, margin serrate. Flowers Yelllow, fruit capsule enclosed with in persistant calyx.

The mucilage of the stem has demulcent and emollient properties and is given to treat skin diseases. Root are used to treat rheumatism and leucorrhoea. Stem bark paste is applied to treat pile.

Solanum nigrum L. (Solanaceae) L.N. Makoi

Class : Dicotyledons
Subclass : Gamopetalae
Series : Bicarpellatae
Order : Polemoniales

A small annual herb, Leaves simple, alternate, globose, ovate, and lobed. Flowers white, small in axillary umbelled like pendulous cyme. Fruit berries, globose, small, and green when young and turns bluish to yellow on ripening, fruits are edible.

Whole plant paste is used as emollient, diuretic and laxative. Plant infusion is given to stomach problem. Decoction of leaves and roots are given to treat fever and urinary disorders. Fruit decoction is given to treat rabies.

Solanum xanthocarpum Schred.& Wendi (Solanaceae) L.N. Kanthkarika

Class : Dicotyledons
Subclass : Gamopetalae
Series : Bicarpellatae
Order : Polemoniales

A perennial prickly diffuse herb.Leaves simple, alternate, deely lobedwithflower purple in axillary cyme. Fruit berries, globose, smooth, 2-2.5 cm in diameter, green turn yellow on ripening.

Whole plant decoction is given to treat gastric problems, urinary problems; it is also given to remove kidney and bladder stone. Fruit powder is given along with honey to treat

asthma, bronchial disorders and fever. Root paste is mixed with turmeric powder and applied to treat scabies and other skin diseases.

Tephrosia purpurea (L.) Pers. (Papalionacerae) L.N. Sharpunkh

Class : Dicotyledons
Subclass : Polypetalae
Series : Calyciflorae
Order : Rosales

An erect perennial herb.Leaves imparipinnately compound, petiole short, leaflets 9-15, small, obovate, glabrous above, obscurely silky beneath, stipules filiform, refluxed. Flower purple in terminal elongated axillary racemes. Fruit pods, constricted 6-10 seeded.

Whole plant is used as laxative, diuretic, anthelmintic: it is used to treat bronchitis, dropsy and kidney troubles. Leaf paste is applied to treat skin eruptions.

Thevetia nerifolia Juss.ex.Stued.(Apocynaceae) L.N.Pilakanher

Class : Dicotyledons
Subclass : Gamopetalae
Series : Bicarpellatae
Order : Gentianales

A large evergreen shrub or small tree.Leaves simple, alternate, Linear to lanceolate, 10-15 cm long, shiny.Flowers bright yellow, funnel shapedin axillary or terminal cyme.Fruit drupe, triangular.Seeds very hard and bony.

Root paste is applied to treat tumours. Dilute latex is given to treat irregular menstruation. Seeds are poisons and are used as abortifacient.

Vernonia cineria L. (Asteraceae) L.N. Vanjeera

Class : Dicotyledons
Subclass : Gamopetalae
Series : Inferae
Order : Asterales

A small erect hispid herb.Leaves simple, alternate, variable in shape and size. Flowers pinkish violet, in terminal minute head sinrouinded or flat topped corymb. Fruits achenes, five angled and hairy.

Whole plant decoction is given to treat urinary tract infections. Leaf paste is used to treat eczema, herps, ring worm diseased of the skin and to stop bleeding from new cuts. Leaf juce is boiled with with gingellly oil, cooled and applied to treat elephantiasis.

Vitex negundo L. (Verbanaceae) L.N.Nirgundi

Class : Dicotyledons
Subclass : Gamopetalae
Series : Bicarpellatae
Order : Lamiales

Large aromatic shrub with quadriangular stem. Leaves 3-5 foliate. Flower bluish purple or white in terminal pyramidal panicle, fruit drupe, globose, black when ripe.

Leaf decoction is given to treat neuro skeletal and mascular disorders. Leaves boiled in water and used for taken bath to relieve body pain after delivery. Leaves are boiled in water and the vapour is inhaled to treat bronchial disorders. Flower juice is used to treat fever.

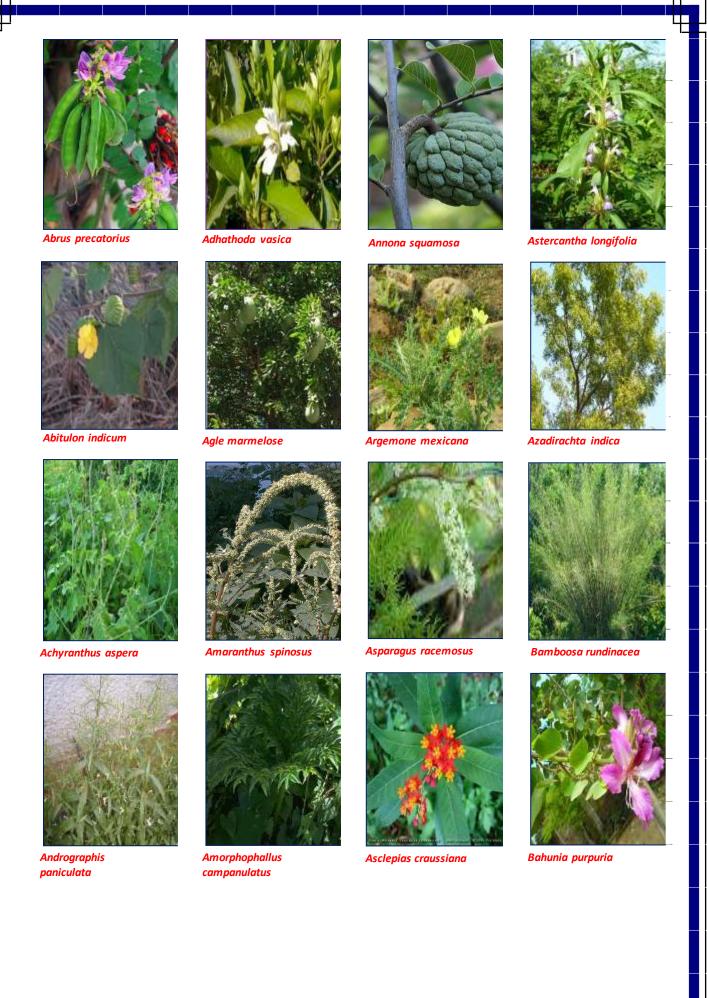
Summary:

Total 56 plants are come in the knowledge in this investigation, which are being used as ethnomedicinal plants to cure many diseases. These ethnomedicinal plants are classified on the basis of their habits 08 are trees like *Aegle mamelose*, *Annona squamosa*, *Azadirachta indica*, *Bauhinia purpurea*,etc, 10 are shrubs like *Adhatoda vasica*, *Bamboosa arundinacea*, *Calotropis procera*, etc, 34 are herbs like *Achyranthus aspera*, *Androgrsaphis paniculata*, *Amaranthus spinosus*, *Argemone mexicana* etc, and 04 are climbers like *Abrus precatorious*, *Asparagus racemosus*, *Clitoria ternatea*, etc. Among these 04 tubers yielding plants are especially useful as ethnomedicines.

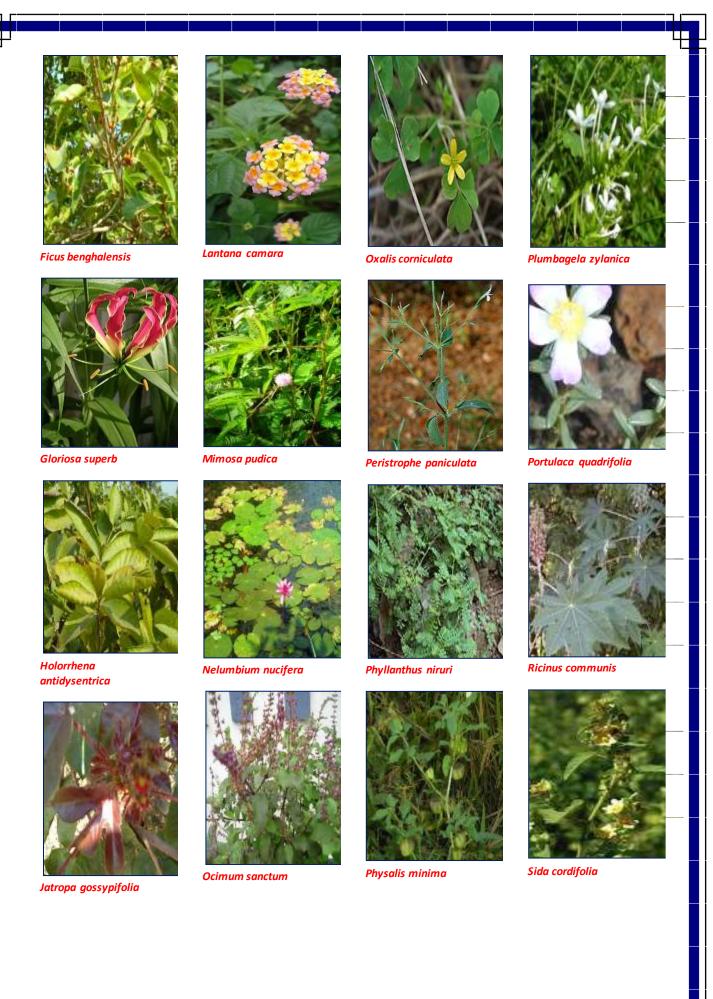
23 plants of this investigation are useful on skin therapy as well as 05 plants on malaria therapy are mainly observed. Plants of this investigation are also useful on many diseases like diebeties, dropsy, jaundice, leucoderma, dysentery, elephantiasis, bronchial disorders, kidney troubles, rheumatism etc.

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Sida rhombifolia



Thevetia nerifolea



Solanum nigram



Solanm xanthocarpum



Tephrosia purpurea