

EXOTIC MEDICINAL PLANTS FROM WEST VIDARBHA REGION OF MAHARASHTRA - I

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Introduction

Vidarbha region comprises of 11 districts of which West Vidarbha region comprises of Akola, Amravati, Buldhana, Washim and Yeotamal districts. In this region, forest is Dry deciduous type and the soil is mostly classified as black cotton, brown, loamy soil. The rainfall ranges between 540 mm to 860 mm, where considerable variation occurs in topology, geology, climate and rainfall. Permanent water facilities for irrigation are not available. Most of the land is barren and about 70% is under cultivation as non-irrigated. In a few parts of this region dams and canals have been constructed as perennial water sources. In the last few years, many plants have been introduced through cultivation, social forestry and gardening. Now they are naturalised along roadsides, in forests and also as weeds occurring regularly in cultivated fields. The following is a list of about 63 exotic plants, which are useful in medicines.

Material and Methods

Exotics were collected from cultivated fields, forest regions and barren land along roadsides or where they grow in various localities in different seasons.

The collected material was either with flowers or fruits. Details of locality, collection number and vernacular names have been given. After drying, herbarium sheets are prepared and identified by using standard floras. These are deposited in Herbarium of Department of Botany, Shri Shivaji College of Arts, Commerce and Science, Akola (Maharashtra).

Afro - Asian

Blumea obliqua var. *aurita* (L.f.)

Vern. : Naik Gangawati

Locality : P.K.V. Campus.

Collection No. : Rothe 14.

Medicinal Use : The leaf and root powder (about 30 g) is taken thrice a day for one week against snakebite.

Cymbopogon martinii (Roxb.) Wats.

Vern. : Rosha gawat, Tikhadi var. motiya - Palmarosa Oil.

Locality : P.K.V. Campus, Rothe 21.

var. Sophia - Ginger grass oil.

Locality : P.K.V. Campus.

Collection No. : Rothe 87.

Medicinal Use : Leaves used in medicine as diuretic, antipyretic and stimulant. Oil is applied in rheumatic arthritis, against baldness, to promote growth of hair, also used as anti-dandruff. Decoction used to cure cough and cold.

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***Jatropha glandulifera* Roxb.**

Vern. : Chandrajyoti, Mogali erandi.

Locality : Mahan dam.

Collection No. : Rothe 58.

Medicinal Use : Seeds yield oil, which is a stimulant and is applied in cases of chronic rheumatism and paralytic affections.

***Merremia emarginata* (Burm.f.) Hall.**

Vern. : Undir Kana

Locality : Paturghat.

Collection No. : Rothe 62.

Medicinal Use : The plant is used in rheumatism, leaf juice against corn, dysentery, skin diseases, earache and muscular pain.

***Vigna trilobata* (L.) Verdc.**

Vern. : Moogi

Locality : Mahan dam.

Collection No. : Rothe 82.

Medicinal Use : Leaves are anti-pyretic, cool and giving strength, crushed leaves are used to cure conjunctivitis.

Austro-Asian***Indigofera linnaea* Ali**

Vern. : Bhuiguli

Locality : Kasamar.

Collection No. : Rothe 53.

Medicinal Use : Decoction used in medicine as a blood purifier and diuretic.

***Indigofera trifoliata* L.**

Vern. : Neel

Locality : Dhotarkheda.

Collection No. : Rothe 56.

Medicinal Use : Seeds are used in rheumatism and leucorrhoea.

***Salvia plebeia* R. Br.**

Vern. : Sabja, Kamarkas

Locality : Gandhigram.

Collection No. : Rothe 68.

Medicinal Use : Seeds are used in gonorrhoea, menorrhagia and diarrhoea, also given in leucorrhoea and haemorrhoids.

Cosmopolitan***Bacopa monnieri* (L.) Pennell.**

Vern. : Brahmi

Locality : Badnera camp.

Collection No. : Rothe 17.

Medicinal Use : The powdered leaves (about 5 g) with 2-3 black peppers are given in a single dose in bone fracture. It is used as a nerve tonic and diuretic. Also as a good remedy against bronchitis, rheumatism, epilepsy, insanity and constipation.

***Chenopodium album* L.**

Vern. : Chandan batwa

Locality : Akot.

Collection No. : Rothe 19.

Medicinal Use : Leaves are rich in vitamin C and edible. It is mildly laxative. A tea of the leaves and plant is used to relieve stomach pain.

***Cynodon dactylon* (L.) Pers.**

Vern. : Harali, Durva.

Locality : P.K.V. Campus.

Collection No. : Rothe 30.

Medicinal Use : Decoction used in vesicle calculus, secondary syphilis, irritation of bladder, bleeding piles and dropsy. Roots are diuretic, also used in skin diseases. The crushed leaves are applied on itching and wounds. Leaf juice is used in dysentery. The fresh juice of the herb or its paste checks bleeding from the nose and fresh cuts and wounds, also used locally in gout and rheumatism

***Cyperus rotundus* L.**

Vern. : Nagarmotha

Locality : Kapsi dam.

Collection No. : Rothe 34

Medicinal Use : The bulbous roots are pungent, aromatic, acrid, diaphoretic, diuretic, astringent, anthelmintic, vulnerary, and stomachic. Twenty grains are given in gastric and intestinal disorders with ginger and honey. An infusion of the root is administered in diarrhoea, dysentery, ascites, vomiting, cholera and fevers. Roots are used in roundworms. A poultice of fresh roots is applied to the breasts of nursing mothers to promote the flow of milk.

***Oxalis corniculata* L.**

Vern. : Ambushi

Locality : Patur dam.

Collection No. : Rothe 65.

Medicinal Use : Plants possess astringent, vermifuge and antiseptic properties. Leaves have cooling and appetising properties. Leaf juice is used locally in removing of the warts and also known as useful in cataract of the eyes. Paste of top shoots with black pepper fruits is applied to boils, abscesses, wound and weeping eczema. Leaves and root are used to treat dysentery and diarrhoea.

***Portulaca oleracea* L.**

Vern. : Ghol

Locality : Vani.

Collection No. : Rothe 67.

Medicinal Use : Juice of stem applied in prickly heat and burning sensation.

Eurasian and African

***Lathyrus sativus* L.**

Vern. : Lakh

Locality : P.K.V. Campus.

Collection No. : Rothe 60.

Medicinal Use : Whole plant used as a stimulant and giving coolness. Overdoses result in disability for walking.

Eurasian

***Anagallis arvensis* L. subsp. *coerulea* Gren & Godr.**

Vern. : Indraneel.

Locality : Petra.

Collection No. : Rothe 2.

Medicinal Use : Plant is used in gout, cerebral affection, hydrophobia, leprosy, mania as a fish poison

***Melilotus alba* Desr.**

Vern. : Ranmetha.

Locality : Buldhana.

Collection No. : Rothe 61.

Medicinal Use : Useful in congestions and haemorrhages, neuralgia around and over right side of head and neck, dysmenorrhoea, pain in knee.

Mexican

***Argemone mexicana* L.**

Vern. : Vilayati, Piwala Dhotra.

Locality : Painganga river.

Collection No. : Rothe 1.

Medicinal Use : It causes deadly disease known as beryber. The yellow juice of the stem is used twice a day for one week for healing of wounds. It is also used in treatment of eye diseases. Seed oil used as an illuminant. Root is alternative and stimulant. Its decoction is given in gonorrhoea, blennorrhoea, gleet and skin diseases.

Paleotropical***Acalypha ciliata* Forsk.**

Vern. : Khokali.

Locality : Semadoh.

Collection No. : Rothe 8.

Medicinal Use : Decoction of plant is used in medicine as a vermifuge, against vomiting, skin diseases, arthritis, earache.

***Achyranthes aspera* L.**

Vern. : Aghada.

Locality : Van Prakalp.

Collection No. : Rothe 11.

Medicinal Use : It is much valued plant in indigenous medicine. Flowering spikes-paste-used for external application in poisonous insect bites. Seed power is used in the treatment of bleeding piles, also used as brain tonic. The decoction of plant is used as a remedy for boil, abscess in painful delivery and in abdominal tumors. Leaf juice is useful in stomach-ache, bowel complaints, piles and skin eruptions. Leaf paste is used to treat bites of poisonous insects, wasps and bee. Extracts of the roots used to treat menstrual disorder and dysentery. Root paste is said to be antifertility drug.

***Cleome viscosa* L.**

Vern. : Piwali tilwan.

Locality : Ambabarva.

Collection No. : Rothe 22.

Medicinal Use : Leaves and seeds are used in medicine against digestive disorders, as a stimulant, worm, earache, dysentery, fever and headache. Seeds are carminative, astringent, rubefacient and vasicator like mustard seed. Pultice of seed is applied to chronic painful joints and

to biols. A watery paste of seed with a little asafoetida is useful for killing head lice, an infusion of seed is used for washing wounds and sores.

***Corchorus fascicularis* Lam.**

Vern. : Haran Khuri.

Locality : Kasamar.

Collection No. : Rothe 36.

Medicinal Use : The whole plant is mucilaginous and is used medicinally against gonorrhoea. Decoction is demulcent, emollient and stagnant giving strength.

***Corchorus trilocularis* L.**

Vern. : Kadu chinch

Locality : Januna dam.

Collection No. : Rothe 29.

Medicinal Use : Leaves and seeds are used in medicine specially to cure fever.

***Datura innoxia* Mill**

Vern. : Dhotra.

Locality : Chandur.

Collection No. : Rothe 41.

Medicinal Use : Alkaloid of pharmaceutical importance extracted from the seed is hyoscine. Hyosciamine hydro bromide is used as a pre-anaesthetic medicine in surgery in childbirth, in ophthalmology and prevention of motion sickness. This exogenous plant is used as strongly intoxicant, narcotic, aphrodisiac, toxic, antispasmodic, anodyne. Dried leaves and stems are smoked as an antispasmodic in asthma, whooping cough, bronchitis, poultice of leaves with curdled milk is given in gonorrhoea.

***Heliotropium ovalifolium* Forsk.**

Vern. : Bhurundi.

Locality : Van prakalap.

Collection No. : Rothe 50.
Medicinal Use : Applied externally to boils and swellings.

Indigofera linifolia Retz.

Vern. : Pandarphalli
Locality : Umari.
Collection No. : Rothe 52.
Medicinal Use : Plant is given in febrile eruptions and used in amenorrhoea.

Ipomoea pestigridis L.

Locality : Khatkali.
Collection No. : Rothe 54.
Medicinal Use : The root is used in medicine.

Kyllinga bulbosa Beau.

Locality : Shahanur.
Collection No. : Rothe 59.
Medicinal Use : Roots are aromatic and bitter used in diabetes and fever, also to cure skin diseases. An aromatic oil extracted from root is used in liver disorders.

Physalis angulata L.

Vern. : Kapal phodi, Popti
Locality : Popatkhedra,
Collection No. : Rothe 66.
Medicinal Use : The juice of leaves is used in earache. Fruits are diuretic. Roots used in asthma.

Spermacoce articularis L.f.

Vern. : Madan ghanti.
Locality : Bhimkund, Chikhaldara.
Collection No. : Rothe 71.
Medicinal Use : Roots are nutritive and stimulant. Decoction of root used as a blood purifier also to cure dysentery. Seeds are used in fever.

Solanum virginianum L.

Vern. : Bhuringni.

Locality : Vangeshwar.

Collection No. : Rothe 74.

Medicinal Use : The leaves are applied locally to relieve pain, their juice given in rheumatism, asthma, cough. Vapours of burning seeds used against toothache. Roots are used to cure urine stone, urinary complaints. Roots are valuable as expectorant, febrifuge and anodyne, given in dropsy, catarrhal fever, pain in chest and enlargement of liver and spleen. They have given as a confection or decoction.

Pantropical

Abrus precatorius L.

Vern. : Gunj.
Locality : Kapsi dam.
Collection No. : Rothe 5.
Medicinal Use : The decoction of leaves and roots is used for cough and cold. Seeds are used as abortifacient. Leaf juice mixed with oil is applied on painful swellings.

Ageratum conyzoides L.

Vern. : Osadi
Locality : Mariyampur.
Collection No. : Rothe 7.
Medicinal Use : They are used intravaginally for uterine disorder. Leaves of these plants are used to treat sores, fever and cuts, an infusion is given as a tonic in diarrhoea and flatulent colic. Juice of the herb is used in prolapse of anus. leaves are given with water as an emetic. A hot poultice of leaves and stem is applied to leprous sores and other skin diseases.

Amaranthus spinosus L.

Vern. : Katemath

Locality : Narnala fort.

Collection No. : Rothe 9.

Medicinal Use : The root is diuretic and also used in colic pain and leucorrhoea.

***Amaranthus viridis* L.**

Vern. : Math.

Locality : Badnera.

Collection No. : Rothe 3.

Medicinal Use : Leaves used as a diuretic, nutritive, digestive. Roots are used in medicine.

***Biophytum sensitivum* (L.) DC.**

Vern. : Lajalu.

Locality : Painganga river.

Collection No. : Rothe 18.

Medicinal Use : Whole plant useful in chest complaints and stomachache. Seeds are applied to wounds. Leaves paste used against piles. Root powder mixed with honey used against whooping cough. Decoction of root used to cure urinary complaint, gonorrhoea.

***Boerhaavia diffusa* L.**

Vern. : Punaranava.

Locality : Mahapur.

Collection No. : Rothe 13.

Medicinal Use : It is diuretic and laxative. It is also used to treat asthma, dropsy, jaundice, intestinal inflammation and gonorrhoea. Root powder is used in eye diseases. The plant juice is antidote to rat poisoning. Leaf juice with honey is applied to eyes in chronic ophthalmia.

***Cardiospermum helicacabum* L.**

Vern. : Kapal phuti.

Locality : Chikhalgao.

Collection No. : Rothe 23.

Medicinal Use : Plant rubbed up with water is applied in rheumatism and stiffness

of limbs. Leaf juice is used as cure for earache. Roots are diuretic and diaphoretic. Leaves are administered for pulmonic complaints and mixed with castor oil are given internally in lumbago and rheumatism. The whole plant steeped in milk is applied to reduce swelling. The leaves mixed with jaggery and boiled in oil are specific for eye sore.

***Cassia obtusifolia* L.**

Vern. : Tarota.

Locality : Wadegaon.

Collection No. : Paddakhe 33.

Medicinal Use : The leaves and seeds are used for skin diseases bronchitis, half headache, ringworm and itch. The leaves are purgative with disagreeable smell, taken internally or applied externally to cure itching and other cutaneous diseases both to men and animals. Leaves and roots are laxative. Roots are used for tuberculous glands, ringworm and skin diseases. Seeds and roots are reported to possess antimicrobial activity.

***Cassia occidentalis* L.**

Vern. : Kaswinda, Ran-takla

Locality : Wadegaon,

Collection No. : Paddakhe 20.

Medicinal Use : The plant root is used for skin diseases. Leaves roots and seeds are known to be purgative and are also useful in cough.

***Cassia tora* L.**

Vern. : Tarota.

Locality : Akola town.

Collection No. : Paddakhe 32.

Medicinal Use : Leaves externally used as germicide and anti-parasitic in ringworm. The crushed seeds about 5

gm are taken with water in cough. Decoction of leaves is a mild laxative. Poultice of leaves is applied to boils, gout, sciatica and pains in joints. Seeds are tonic and stomachic, but they are particularly used externally in skin diseases.

***Celosia argentea* L.**

Vern. : Kurdu.

Locality : Malkapur.

Collection No. : Paddakhe 24.

Medicinal Use : Useful against dysentery and diarrhoea. Root juice useful to dissolve urine stone. Seeds are used in urinary disorder.

***Cleome gynandra* L.**

Vern. : Pandhari tilwan.

Locality : Kulkhed.

Collection No. : Paddakhe 28.

Medicinal Use : Seeds employed internally for expelling round worms. Seeds are antispasmodic, sudorific. Anthelmintic and carminative. Leaves are rubefacient and vesicant. Their paste is applied in rheumatism, neuralgia, headache and stiff neck, if applied too long it causes blisters. Their warm juice is a popular remedy for ear diseases.

***Carchorus capsularis* L.**

Vern. : Pat, Titapat.

Locality : Karanja lad.

Collection No. : Rothe 37.

Medicinal Use : The leaves are demulcent, bitter tonic, stomachic, laxative, carminative, antiperiodic, anthelmintic, astringent and intestinal antiseptic. The infusion of the leaves is a remedy in fever, bilious troubles, worms in children, dysentery, liver and digestive system disorder. A decoction of dried root and unripe

capsules is given in diarrhoea. The finely combed fibres are made into antiseptic surgical dressings.

***Corchorus olitorius* L.**

Vern. : Banpat.

Locality : Kurankhed.

Collection No. : Rothe 35.

Medicinal Use : Leaves and seeds are used in medicine. leaf powder mixed with hot water used against fever. Dried leaves along with curcuma powder given in amoebiasis. Leaf powder mixed with cold water used as appetizer, digestive and to increase the strength.

***Desmodium triflorum* (L.) DC**

Vern. : Ran Methi.

Locality : Mahan dam.

Collection No. : Rothe 42.

Medicinal Use : Leaves are used as remedy for diarrhoea, dysentery and convulsion. Fresh leaves are applied to wounds and abscesses.

***Eclipta alba* (L.) Hassk.**

Vern. : Bhrungraj.

Locality : Mahan dam.

Collection No. : Rothe 45.

Medicinal Use : Plant juice in combination with aromatic is administered for catarrh and jaundice. Oil prepared from plant is used as a hair tonic. leaves are tonic and alternative. They are given in cough, headache, alopecia, enlargement of liver and spleen. Fresh juice of leaves is rubbed into shaven scalp to promote growth of hairs, also for cleaning and healing sores.

***Elephantopus scaber* L.**

Vern. : Gojeebha, Hastipata

Locality : P.K.V. Campus.

Collection No. : Rothe 48.

Medicinal Use : Decoction used against dysentery, diarrhoea, urinary complaints and fever.

***Euphorbia hirta* L.**

Vern. : Dudhi.

Locality : Karanja.

Collection No. : Rothe 43.

Medicinal Use : The plants are used to treat colic troubles, dysentery, cough, asthma, worms and vomiting. It has vermifuge properties.

***Hedyotis corymbosa* (L.) Lamk.**

Vern. : Pitta papada.

Locality : Kapshi dam.

Collection No. : Rothe 49 and Gerunala, Rothe 88.

Medicinal Use : Decoction of plant is given in remittent fever with gastric irritation and nervous depression.

***Mucuna pruriens* (L.) DC**

Vern. : Khajkuyri

Locality : Vanoja.

Collection No. : Rothe 64.

Medicinal Use : Seeds and roots are effective nerve tonic. These are considered aphrodisiac and diuretic. These are also used to treat kidney trouble and dropsy.

***Sida cordifolia* L.**

Vern. : Bala.

Locality : Mahapur.

Collection No. : Rothe 75.

Medicinal Use : The seeds make general tonic for improving sexual strength. Decoction of roots is administered in fever and to clean injury. Bark of root used against injury. The juice of plant is given in rheumatism, gonorrhoea, spermatorrhoea, its infusion is given in febrile diseases. The leaves are

mucilaginous, their infusion is given as demulcent in fevers, and they are given as a vegetable to patient suffering from bleeding piles. The root bark is given with milk and sugar in leucorrhoea and chronic dysentery.

***Tephrosia purpurea* (L.) Pers.**

Vern. : Unhali.

Locality : Nimbi.

Collection No. : Rothe 80.

Medicinal Use : Decoction used against urinary trouble, poison, root juice used as a blood purifier, against stomach problem. Root is diaphoretic useful in dyspepsia, tympanites, bronchitis, asthma, inflammations, boils, pimples, disorder of liver and spleen and diarrhoea. A powder of root is given with water for about a month in hydrocele.

***Teramnus labialis* (L.f.) Spr.**

Vern. : Tipani, Ran-udid.

Locality : Chikhaldara.

Collection No. : Rothe 78.

Medicinal Use : Plant is used against rheumatism, tuberculosis and nervous affections.

***Tribulus terrestris* L.**

Vern. : Gokharu, Sarata

Locality : Ugwa.

Collection No. : Rothe 76.

Medicinal Use : The drug is diuretic, tonic, aphrodisiac. The decoction of leaves is useful as a gargle for mouth trouble, painful gums and inflammation. The leaves increase the menstrual flow, cure gonorrhoea. The fruits are useful in urinary complaints, painful micturition and impotence. Fruits are used to treat cough, scabies and anoxemia. Roots are stomachic, appetizer, diuretic and carminative.

***Triumfetta rhomboidea* Jacq.**

Vern. : Chikti.

Locality : Popatkhedha.

Collection No. : Rothe, 81

Medicinal Use : Plant mucilage in the treatment of gonorrhoea.

***Vernonia cinerea* (L.) Less**

Vern. : Sahadevi.

Locality : Bordi.

Collection No. : Rothe 84.

Medicinal Use : Decoction used against fever and urinary complaints. Leaf paste and flowers used against ophthalmic diseases. Herb is alterative, bitter tonic, anthelmintic and diaphoretic. its infusion or decoction is given in febrile disease. Juice is administered in piles, dysentery. A poultice of leaves is locally applied for the extraction of guinea worms. The seeds are remedy for skin diseases like leucoderma and psoriasis.

South American

***Hyptis suaveolens* Poit.**

Vern. : Vilayati tulsi.

Locality : Semadoh.

Collection No. : Rothe 51.

Medicinal Use : Leaf juice applied externally to cure headache.

Temperate Region

***Potamogeton perfoliatus* L.**

Locality : Mukundraj.

Collection No. : Rothe 69.

Medicinal Use : Leaf paste used in preparation of pain balm.

***Veronica anagallis-aquatica* L.**

Locality : Katepurna.

Collection No. : Rothe 83.

Medicinal Use : As a blood purifier and in skin diseases.

Tropical American

***Sida cordata* (Burm. f.) Bors.**

Vern. : Bala.

Locality : Patur.

Collection No. : Rothe 73.

Medicinal Use : Leaves, flowers and young fruits are used in medicine. Decoction of leaves used in dysentery during conception. Flowers and young fruits mixed with sugar used in urinary disorders. Crushed leaves are used against injury.

***Tridax procumbens* L.**

Vern. : Dagadpala.

Locality : Agar.

Collection No. : Rothe 77.

Medicinal Use : Leaf juice used to cure injury and worms.

Mediterranean

***Cichorium intybus* L.**

Vern. : Kasani.

Locality : P.K.V. Campus.

Collection No. : Rothe 26.

Medicinal Use : Roots are roasted used in Europe as coffee substitute and adulterant. Root, leaves and seeds are used in medicine to cure stomach problem, jaundice, and heart disease.

Discussion

During the last few years, a number of exotic plants have been introduced by human agency, either as ornamentals, fruit or vegetables. Some however, found suitable climate and escaped from cultivated areas or gardens, ultimately fast naturalising in the new habitats and

occupied vast areas of cultivated fields, wastelands, along roadsides, railway lines, dams, canals by producing dense population.

The following plants formerly were under cultivation but are now naturalised in the region : *Vigna tritobata* (L.) Verdc., *Portulaca oleracea* L., *Lathyrus sativus* L., *Melilotus alba* Desr.

Most of the members of family Asteraceae are characterised by light weight achenes with pappus or comose tuft hair at apex so that they easily get dispersed by wind or come either along

with cultivar seeds. These are *Blumea obliqua* var. *aurita* (L.f.) Naik., *Ageratum conyzoides* L., *Eclipta alba* (L.) Hassk., *Elephantopus scaber* L., *Vernonia cinerea* (L.) Less., *Tridax procumbens* L., *Cichorium intybus* L.

The following have probably escaped from gardens due to less attention or through dispersal of seeds : *Jatropha glandulifera* Roxb., *Salvia plebeia* R. Br., *Oxalis corniculata* L.

It must be submitted that much remains to be known of these immigrants which have come to be naturalised from time to time and are used in medicine.

SUMMARY

Exotic medicinal plants from West Vidarbha region of Maharashtra are reported in this paper.

महाराष्ट्र के पश्चिमी विदर्भ क्षेत्र के परदेशीय औषध पादप

एस.पी. रोटे व वी.बी. पाड्करे

सारांश

इस अभिपत्र में महाराष्ट्र राज्य के पश्चिमी विदर्भ क्षेत्र के परदेशीय औषध पेड़-पौधों की रिपोर्ट का परिचय दिया गया है।

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