

## Exotic medicinal plants from West Vidarbha region - V

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**Abstract:** Exotics are those plants which are migrated from one region to other region. They are also known as immigrants. Such a plants are now a days considered as a part of forest vegetation because they mixed with the natural floras. About 40% exotics are found in a indigenous floras, their exact time of arrival is different. Some of the plants are migrated from cultivated field or garden due to careless attention. These are considered as naturalized aliens. The present work deals with the report of 26 medicinally important exotics from Vidarbha region.

**Keywords:** Exotics, Medicinal plants, Immigrants

### INTRODUCTION

Vidarbha region comprises of 11 districts of which west Vidarbha region comprises of 5 districts namely, Akola, Amravati, Buldhana, Washim and Yeotmal. In this region, forest is dry deciduous type and the soil is mostly classified as black cotton soil, brown and loamy soil. The rainfall ranges between 540mm to 860 mm. In this region forest is dry deciduous type and the soil is mostly classified as black cotton soil, brown soil, loamy soil. The rain fall ranges between 540mm to 860mm, where considerable variation occurs in topology, geology, climate and rainfall. Permanent water facilities for irrigation are not available. Most of land is barren and about 70 % lands is under cultivation as non irrigated. In few parts of this region dams, canals are constructed as a perennial water source. In last few years many more plants are introduced through cultivation, social forestry and gardening. Now they get naturalized along road sides, in forest and also as a weed occurring regularly in cultivated fields. In this region forest is dry deciduous type and the soil is mostly classified as black cotton soil, brown soil, and loamy soil. The rain fall ranges between 540mm to 860mm, where considerable variation occurs in topology, geology, climate and rainfall. Permanent water facilities for irrigation are not available. Most of land is barren and about 70 % lands are under cultivation as non irrigated. In few parts of this region dams, canals are constructed as a perennial water source. In last few years many more plants are introduced through cultivation, social forestry and gardening. Now they get naturalized along road sides, in forest and also as a weed

occurring regularly in cultivated fields. Whereas the considerable variation occurs in topology, geology, climate and rainfall. In the last few years, many plants have been introduced through cultivation, social forestry and gardening. Now they are naturalized along roadsides in forest and also as a weed occurring regularly in cultivated fields.

### MATERIAL AND METHODS

An extensive plant exploration was conducted during 2005-2008 for the study of exotic medicinal plants from the West Vidarbha region. Several medicine men and the Vaidos were contacted with the help of discussion and oral interviews with them collected the data on medicinal uses. Also the literature available on the same plants compared with the latest information. It is found that most of the exotics are now used by them instead of indigenous plants probably they may have better results or their easy availability in the region. These plants material after drying and processing with mercuric chloride, herbarium sheets have been prepared and are identified by using Floras like, Flora of Maharashtra by Almeida M. R. (1996-2009), Cooke, T. (1901-1908), Flora of Bombay Presidency Vol. I, II, III, Flora of Marathwada by V. N. Naik and the medicinal value is compared with earlier available literature Bhattacharjee, S.K. (2001), Dastur, J.F. (1962), Naik V.N. (1998) Sabnis, S.D. and S.J. Bedi (1983). All these plants are enumerated in the following ways.

### OBSERVATION AND RESULTS

#### Pantropical

##### 1) *Dioscorea oppositifolia* L.

**Locality:** Kasmar, Rothe 1248

**Uses:** Roots used in prolonged diarrhoea, cough and seminal emission leucorrhoea.

##### 2) *Euphorbia hirta* L.

**Locality:** Akola, Rothe 975

**Uses:** Dried mature plant used as drug, in asthma, bronchitis, cough, bowel complaints and removing worms in childrens. Promotes lactation in women also for gonorrhea

Received: April 05, 2011; Revised July 10, 2011; Accepted July 15, 2011.

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and urogenitary complaints roots stop, vomiting. Juice applied in warts.

**3) *Najas minor* Hooke.**

**Locality:** Kapsi dam, Rothe, 84.

**Uses:** Plant is used in packing of fish baskets.

**4) *Vallisneria spiralis* L.**

**Locality:** Kapsi dam, Rothe, 63.

**Uses:** Leaves are rich source of Phosphorus, calcium and Iron is edible. The [plant is used in Leucorrhoea and is stomachic.

**Paleotropical**

**5) *Abelmoschus moschatus* Medik.**

**Locality:** P.D.K.V., Akola, Rothe 976.

**Uses:** Seeds used as an inhalation in hoarseness and dryness of the throat to cure scabies. Decoction in nervous disorders.

**6) *Datura strumarium* L.**

**Locality:** Nagarjun, Akola, Rothe 977.

**Uses:** Seeds are poisonous; leaves contain belladonna or hyocymus useful for asthma, symptoms of Parkinsonism.

**7) *Monochoria vaginalis* Presl.**

**Locality:** Patur, Rothe, 89.

**Uses:** Entire plant used as a vegetable. Leavns are used for cough, roots for stomach and liver complaint, Asthma and toothache. The rootstock and leaves are aromatic, alternant diuretic and tonic. They are useful in burning sensation, dyspepsia, strangury, hemorrhages.

**8) *Polygonum barbatum* L.**

**Locality:** Mahan dam, Rothe, 831.

**Uses:** Leaf paste is applied externally to heal wounds of animals.

**Tropical America**

**9) *Ceratophyllum demersum* L.**

**Locality:** Patur, Rothe, 68.

**Uses:** Usually floats in mats just below the surface of water. These mats provide a valuable protection for fish fry but also provide protection for bilharzias, carrying snails and malaria or filarial carrying mosquito larvae.

**10) *Corchorus astaneus* L.**

**Locality:** Kasmar, Rothe 978.

**Uses:** Leaves used against stomach disorders.

**11) *Eriogeron asteroides* Roxb.**

**Locality:** Wagha, Rothe 979.

**Uses:** An astringent herb used as a diuretic for bladder problems to clear toxin in rheumatic conditions and to treat gonorrhea, also in dysentery and diarrhoea.

**12) *Hydrilla verticillata* Royle.**

**Locality:** Mahan, Rothe, 82.

**Uses:** Plants are used for refining sugar an in laboratory for experiment of photosynthesis

**13) *Parthenium hysterophorus* L.**

**Locality:** Akola, Rothe 980.

**Uses:** Parthenium have become noxious weeds for removed from their original holes, also responsible for death

for indigenous species. Young branches causing itching and their pollen grains causes allergy.

**Brazil**

**14) *Eichhornia crassipes* (Solms.) Mar.**

**Locality:** Morna, Rothe, 402.

**Uses:** Flowers used in skin diseases. Plant has ability to remove large amount of dissolved inorganic pollutants in water. Rootstock and leaves are cooling bitter sweet, aromatic alternant, diuretic, they are useful in burning sensation of the body, vitiated condition of Pitta, dipsia, cough and asthma.

**Temperate Region**

**15) *Potamogeton nodosus* Poir.**

**Locality:** P.KV Campus, Rothe, 987.

**Uses:** Leaves are used in the preparation of pain balm.

**China and India**

**16) *Nelumbo nucifera* Gartner.**

**Locality:** Rudrayani Devi, Rothe, 999.

**Uses:** Dried powdered rhizome used in cure of piles. The flowers are recommended as cardiac tonic, in treatment of liver diseases. Seeds are edible due to stored starch. Rhizome extract used in diabetes.

**17) *Nymphaea nouchalli* Burm. f**

**Locality:** Kapsi dam, Rothe, 870.

**Uses:** Roots used for checking conception on the date of menstruation. Whole plant is applied around the navel for inducing puberty in 10 year old girls. Rhizome used in dysentery.

**18) *Nymphaea lotus* auct.**

**Locality:** Kapsi dam, Rothe, 875.

**Uses:** Rhizome tender leaves and flower peduncles are used as vegetable. The powdered rhizome is given in dyspepsia, diarrhoea and piles. An infusion of rhizome and stem is considered emollient and diuretic. It is used for blennorrhagia and disease of urinary tract.

**Tropical Asia (Kashmir)**

**19) *Adhatoda zeylanica* Medic.**

**Locality:** Akola, Rothe 981.

**Uses:** Expectorant in cough, asthma and also in other pulmonary as catarrhal affections. Fresh leaf juice used in tuberculosis, diarrhoea and in bleeding gums; chronic bronchitis, rheumatism, as an antiseptic and insecticide twigs and leaves are used as green manure.

**20) *Trapa bispinosa* L.**

**Locality:** Mukundraj talav, Rothe, 890.

**Uses:** Fruits are sweet, constipating, haemostatic, diuretic, aphrodisiac; antipyretic, appetizer and tonic. Also useful in fever, leprosy, fatigue, inflammation fractures, bronchitis and general debility. Tubers are edible, sold in the local market.

**Australia**

**21) *Eucalyptus globulus* Labill.**

**Locality:** Akola, Rothe 982.

**Uses:** An oil is acrid, bitter, antiseptic, deodorant, stimulant, carminative, digestive, diuretic, chronic, cough, asthma, skin diseases, in perfumery; antimalarial grown in marshy places.

**Afro-Asian****22) *Citrullus colocynthis* (L.) Schrad.****Locality:** Akola, Rothe, 983.**Uses:** Roots are purgative on small doses used against jaundice. Fruits are bitter useful in tumors, leucoderma, ulcers, asthma, bronchitis, constipation, tubercular glands of neck and splenomegaly in higher doses they are purgative. Seeds powder along with coconut oil used in dyeing of hairs.**23) *Commelina forskalaei* Vahl.****Locality:** Akola, Rothe 984.**Uses:** A paste of whole plant used in treatment of fractured bones as a diuretic also to cure digestion and to treat eye irritation. Leaves as a vegetable by tribals.**24) *Croton bonplandianum* Baill.****Locality:** Akola, Rothe 985.**Uses:** Common herb on barren land. Seeds are purgative.**25) *Ludwigia perennis* L.****Locality:** Akola, Rothe 986.**Uses:** A whole plant except root is recommended as an antibacterial and diuretic in case of fever, cystitis, hemorrhagic, dysentery. Fresh plant used against snake bite and diseases scalp.**26) *Ocimum americanum* L.****Locality:** Akola, Rothe 989.**Uses:** Leaves are aromatic, acrid, and bitter used in appetizing, digestive, carminative, febrifuge, dyspepsia, dysentery, leprosy, parasitic affections, and vomiting, poisonous affections.**DISCUSSION**

Naturalists and conservationists know that the biodiversity in any area comprises native or indigenous species and also exotics species. Among indigenous species some occurs only in restricted areas like within a state or country and some also occurs outside that area called as endemic. In true sense traditional knowledge relates primarily to indigenous species. Knowledge about exotics is a later creation or addition to traditional knowledge. Researches now try to determine what components of traditional knowledge related to indigenous species and what percentage of exotics. Discovering uses of exotic species by native people can indicate paucity or depletion of indigenous species, for the particular or better properties in the exotics. The following is a list of about 26 exotics plants, which are useful in medicine.

**ACKNOWLEDGEMENT**

Authors express their sincere thanks to Dr. V. B. Wagh, principal, Shri Shivaji College of Arts, Commerce and Science, Akola, for providing necessary facilities and encouragement during completion of this manuscript.

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