



Ethnobotanical survey of medicinal plants used by Risod Taluka, Washim District. (MS)

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ABSTRACT

Ethnobotany is the study of a region's plants and their practical uses through the traditional knowledge of a local culture and people investigating plants used by societies in various parts of the world. It involves the indigenous knowledge of plant classification, cultivation, and use as food, medicine and shelter. Although most of the early ethnobotanists studied plant used in cultures other than their own, the term ethnobotany does not necessarily mean the study of how other people use plants. It is also not restricted to the study of medicinal plants by indigenous cultures. India has a rich tradition of plant-based knowledge on healthcare. A large number of plants/plant extracts/decoctions or pastes are equally used by tribal and folklore traditions in India for treatment of cuts, wounds, and burns. The present review thus attempts to analyze the ethnobotanical knowledge base for treatment of cuts and wounds which includes a usage of plants, methods employed by tribal and folklore practices prevailing in India.

Key words: Ethnobotany, Medicinal plants, Traditional knowledge, Indigenous culture.

INTRODUCTION:

For thousands of years, medicinal plants have played an important role throughout the world in treating and preventing a variety of diseases. The present study was initiated with an aim to identify traditional healers who are practicing herbal medicine (Jain 1995). This includes all land classified as forest under any legal enactment dealing with forest or administered as forest, whether state owned or private and whether wooded or simply maintained as forest land. Within the forest area itself, there may be occasionally cultivated patches or grazing lands, but such area is shown under column 104 of the Village Directory as forest (Ayyanar et.al 2005). Therefore, the information based on records is in some cases at least, likely to be different when

compared with the actual field situation. The Washim Plateau spreads over Washim, Risod, Malegaon, Mangrulpir and Manora Tahsils. The area is a rolling upland country with an elevation of between 550 and 600 meters. This area gently slopes towards southeast and is relatively plain in nature. On the plateau the soils are shallow with murum substratum which vary considerably both in nature and depth. This plateau grows Kharif crops and specially the pulses. Wheat and other rabi crops are also grown. The Bembla Basin lies in the north-eastern part of the District in Karanja Tahsil. This area has the characteristics of the „Payanghat“ plain of Akola District. It slopes towards west and has an elevation varying between 350 and 400 meters. It is even in surface and has rich fertile soil known as black cotton soil. In which Cotton and Jowar are grown in abundance. Physiographic ally Washim District forms a part of Tapi – Purna valley, the micro level division of the Deccan Plateau. On the basis of relief, the district may be divided into four parts viz. 1) Ajanta Hills, 2) Paladi Hills, 3) Washim Plateau and 4) Bembla Basin. India has about 45,000 plant species; medicinal properties have been assigned to several thousand. About 2000 figure frequently in the literature; indigenous systems commonly employ 500. Despite early (4500-1500 BC) origins and a long history of usage, in the last two centuries Ayurveda has received little official support and hence less attention from good medical practitioners and researchers (Kumar et.al 2007).

MATERIAL AND METHODS:

Field study was carried out over a period of 6 years in Risod Taluka, District Washim. The ethnomedicinal information was collected through interviews among the traditional healers.

RESULT AND DISCUSSION:

The present study includes the survey of nearly all villages in surroundings of Risod Taluka during the year (May 2015 – May 2020). Several villages of the target area have been visited to find out resource persons, herbal practitioners and village heads. After establishing a better rapport with the villagers, herbal practitioners' information was gathered and documented. It revealed valuable information about the ethno medicine of the local people of this Dist. It is invaluable and having immense potential for the primary health care of the people in this area. The present study elicits the importance of local herbal practices and availability of medicinal plants in the area, which will help in self-sufficiency for their primary health care practices.

Prostrate herbs with perennial root stock; stems creeping with long stolons, rooting at nodes. Leaves simple in rosettes, orbicular reniform, crenate-dentate, rotund. Flowers purplish, in simple umbels. Sepals 5, triangular. Petals 5. Stamens 5. Ovary bilocular; ovule 1 per locule, pendulous; stylopodium depressed. Mericarps laterally flattened, vittae obscure.

Fl. & Frt. – September - February.

Uses – Root - Dandruff. Whole plant- memory booster, polyuria, fever, epilepsy, rejuvenator.

37. *Ixora coccinia* L.

Family - Rubiaceae

Vernacular name - Jungle Geranium.

Morphology -

Shrubs. Leaves elliptic-ovate, oblong, and coriaceous. Flowers deep red, in corymbs. Calyx truncate, 4 toothed. Corolla salver form, lobes 4, twisted to left. Stamens 4; anthers acuminate. Ovary bilocular; ovule 1 per locule, on peltate placentae. Berries globose.

Fl. & Frt. - Throughout the year.

Uses – Root - sedative, diarrhoea, dysentery, stomachic, leucorrhoea. Flowers-ulcers, venereal diseases.

38. *Lactuca runcinata* DC.

Family - Asteraceae

Vernacular name -

Morphology -

Erect, glabrescent herbs. Leaves usually radical, oblong, dissected, spinulose. Heads yellow, homogamous, disciform, ligulate, in terminal branches. Pappus seriate, minutely sentose. Corolla tubular, 5-toothed. Stamens 5, subexserted, anthers ditheous, syngeneous. Ovary obovoid, unilocular; ovule one, basal; style 2-fid; stigma recurved. Achenes black, fusiform.

Fl. & Frt. – July - March.

Uses - Leaf - Branchitis, asthma, diuretic, tonic, liver disorders.

39. *Plumbago zeylanica* L.

Family - Plumbaginaceae

Vernacular name - Lead wart - white flower.

Morphology -

Erect, subshrub or diffuse undershrubs. Leaves elliptic-ovate, entire, acute, base truncate, glabrous. Flowers white, in terminal, simple, panicle spikes. Calyx tube fully covered with stalked glands. Corolla tubular, long, slender, lobes 5, imbricate. Stamens 5, free; anther oblong, dorsifixed. Ovary 5-gonous, unilocular; ovule one, basal; stigma 5-forked. Capsules oblong, grooved, glandular; seeds solitary, dark brown, cylindric, flat.

Fl. & Frt. – November-April.

Uses – Root - Abortifacient, skin diseases, rheumatism, dyspepsia, anaesthesia, sudorific, digestive, piles, diarrhoea, dysentery, ring worm. Leaf - scabies, ulcers, psoriasis.

40. *Cascabela thevetia* (L.) Lipp.

Family - Apocynaceae

Vernacular name - yellow oleander.

Morphology -

Densely leafy, evergreen, shrubs or small trees. Leaves alternate, sessile, linear, margin revolute, tapering at both ends, dark green and shining above, 1-nerved and pinnately veined. Flowers large, yellow, in terminal peduncled cymes. Calyx with many glands inside at base. Corolla funnel form with cylindrical tube and campanulate limb with 5 hairy scales at throat. Stamens 5, borne at throat with the scales. Ovary bicarpellary, bilocular; ovules 2 per locule, marginal; style filiform with 2 lobed stigma. Drupes compressed - triangular, fleshy, red, turning black.

Fl. & Frt. – Most part of the year.

Uses - Leaf and Stem - cancer. Fruit - poisonous.

41. *Catharanthus roseus* (L.) G. Don.

Family - Apocynaceae

Vernacular name - Red periwinkle.

Morphology -

Perennial herbs or undershrubs. Leaves elliptic-obovate to oblong, entire, obtuse, apiculate, base cuneate or acute, glabrous to puberulous, lateral nerves 10-12 pairs. Flowers rose or white, solitary or paired in the axils. Sepals 5, subequal, acuminate. Petals 5, united, tubular, ovate-triangular, apiculate. Stamens 5, epipetalous.

Ovary bicarpellary subapocarpus, bilocular; ovules numerous per locule, marginal. Follicle's pubescent; seeds black.

Fl. & Frt. - Throughout the year.

Uses - Root - Insomnia, cancer, diabetes, stomachic, menorrhagia, blood pressure, cardio tonic, and tranquiliser, sedative. Leaf-menorrhagia, wasp stings, dysmenorrhoea, diabetes.

42. *Plumeria alba* L.

Family - Apocynaceae

Vernacular name - Temple tree.

Morphology -

Trees; latex milky. Leaves alternate, linear-oblong to oblong-lanceolate, margins revolute, long acuminate, densely white-pubescent below, without definite marginal vein, lateral nerves parallel. Flowers white with yellow centre, fragrant, in terminal paniced cymes. Calyx small, 5-parted, glandular at tips. Corolla funnel-form, lobes obovate, as long as or longer than tube. Ovary half inferior. Follicles leathery; seeds winged at base.

Fl. & Frt. - April - July.

Uses - Root - Cathartic. Bark-purgative, emmenagogue, stimulant, venereal diseases, antiherpatic.

43. *Rauwolfia serpentina* (L.) Benth.

Family - Apocynaceae

Vernacular name - Serpentine.

Morphology -

Shrubs. Leaves in whorls of 3, thin, broadly oblanceolate, undulate, acute, acuminate, base attenuate, lateral nerves 8-12 pairs, and main nerves rather distant, oblique. Flowers white, in axillary corymbs; pedicels red. Calyx 5-lobed, lobes short. Corolla tube long and slender, narrow, dilated a little above the middle, lobes 5. Stamens 5. Drupes purplish - black, connate except at top; seed 1, ovoid.

Fl. & Frt. - August - February

Uses - **Root** - Nervous disorders, diabetes, hypertension, tranquilizer, psychosis, insomnia, labour pains, poisonous bites, intestinal problems, pains, anorexia, epilepsy, anthelmintic.

44. *Wrightia tinctoria* (Roxb.) R. Br.

Family - Apocynaceae

Vernacular name - Irovy wood.

Morphology -

Densely foliaceous, deciduous trees; branchlets glabrous. Leaves elliptic-oblong or oblong - lanceolate, entire, and acuminate, basetruncate, glabrous, sparsely pubescent below, secondary nerves 8-9 pairs. Flowers white, fragrant, in trichotomously branched terminal cymes. Calyx lobes 5, ovate, acute. Corolla lobes 5, oblong, puberulous within, acute, corona scales 2-3 series, filiform, fimbriate. Stamens 5; anthers tip bearded. Ovary bicarpellary subapocarpus, bilocular, ovules numerous per locule, intruded marginal placentation. Follicles cylindric, mericarps attached at the end, curved; seeds linear - oblong, beaked.

Fl. & Frt. - October-June.

Uses - Bark - Bilious problems, diabetes, flatulence, skin disorders, psoriasis. Latex - mouth ulcers, cough, cold, fevers. Seed-anthelmintic, aphrodisiac

45. *Calatropis gigantea* (L.) R. Br.

Family - Asclepiadaceae

Vernacular name - Madar.

Morphology -

Erect shrubs; branchlets white - tomentose; latex milky. Leaves subsessile, decussate, obovate - elliptic, entire, acute, base auriculate, white - tomentose beneath. Flowers white, in terminal umbellate cymes. Calyx lobes 5, ovate, valvate, ciliate, glandular. Corolla lobes 5, white, ovate, spreading, valvate. Pollinia pendulous, pollinial bags oblong, flattened, corona single, stamens laterally compressed, usually incurved, horny and 3-fid at apex, pubescent at back. Follicles in pairs, oblong, white, pubescent; seeds oblong to ovate, coma long, silky.

Fl. & Frt. - Throughout the year

Uses - Root - Poisonous bites, swollen joints, skin diseases, abdominal disorders. Milky latex - antiseptic. Leaf-antiperiodic. Flower-stomachic, diabetes, digestive diseases, asthma, catarrh. Latex - syphitis, cutaneous affections, leprosy.

CONCLUSION:

The people practice and cure almost all ailments or diseases or wounds very effectively with simple locally available plants without involving much financial commitment, in majority of the cases they treat freely. As a result of the present study, we can recommend the plants *Cleome viscosa* L., *Muntingia calabura* L. *Abrus precatorius* L. *Cascabela thevetia* (L.) Lipp. *Cordia dichotoma* Willd, *Wrightia tinctoria* (Roxb.) for further ethno-pharmacological studies for the discovery of potential new drugs.

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