

Diversity of Medicinal Plants in Ajanta Forest, District Aurangabad (M.S.) India

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ABSTRACT

Maharashtra state flora abounds in medicinal plants which can be called as storehouse as it covers varied geographical area and phytogeographical area. There are a number of advantages of associated with using herbal medicines as oppose to pharmaceutical products. Medicinal plants have been identified and used throughout human history. In present investigation, some medicinal plants were collected from a various place which are abundant in forest area. The importance of collected medicinal plants are discussed in this investigation.

Keywords: Diversity, Ajanta Forest, Medicinal plants

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1. Introduction

Plant containing active chemical constituents (alkaloid, glycosides, saponins, essential oils, bitter principles, tannins and mucilages) in any of its part like root, stem, leaves, bark, fruit and seed, which produces a definite curing physiological response in the treatment of various ailments in humans and other animals, is regarded as medicinal plant. The present-day knowledge about medicine considered to be a gift of ancient men to the mankind. The herbal medicines are in great demand in both developed and developing countries in primary health care because of their great efficacy and little or no side effects (Narula *et al.*, 2000). Most of the plant species are used in preparation of drugs (Nautiyal *et al.*, 2002). The two most important waves in Indian system of medicine are charaksamhita and susurtasamhita. The charaksamhita provides description of the materia-medica in which 484 medicinal plants are mentioned whereas susurhitasamhita has an account of 573 plants of medicinal importance (Kumar and Srivastava, 2002).

According to Schippmann *et al.* (2002) more than 50000 species are used for medicinal purposes worldwide, of which almost 13% are flowering plants. Over 8000 plant species are used in traditional and modern medicine in India (Planning Commission 2000) and 90-95% collection of medicinal plants is from the wild, of which more than 70% collection involves destructive and unscientific extraction. The World Health Organisation (WHO) estimated that 80% of the populations rely on traditional medicines, mostly plant drugs, for their primary health care needs in developing countries. Conservation and sustainable use of medicinal plants are issues on which immediate focus is required in the context of conserving biodiversity (Kshirsagar *et al.*, 2012).

2. Material and Methods

The frequent visits to various places in Ajanta forest including Ajanta caves and some nearby villages. The traditional local healers sell herbal medicines. Data was collected on the sources and uses were recorded. Some of the plants are conserved in our college garden also.

Table 1. List of collected medicinal plants and their uses respectively

Sr. No.	Genus & Species Vernacular Name	Common Name	Family	Parts Used	Medicinal Uses
1.	<i>Terminalia bellirica</i>	Behada	Combretaceae	Fruits	Used in popular Indian herbal rasayana treatment Triphala, control vomiting, remove vata and cures bronchitis, cures kapha, throat and respiratory problems etc.
2.	<i>Anona squamosa L.</i>	Sitafal	Annonaceae	Leaf, root, fruits and seeds	Suppurative, antispasmodic, antihelminthic, cathartic, Antiemetic, pectorant, antiphthitic, abortifacient etc.
3.	<i>Tribulus terrestris L.</i>	Gokharu	Zygophyllaceae	Root, Fruits, and Leaf etc.	Diuretic in painful micturition, aphrodisiac, antighnorrhoeic, antiasmatic, in skin and heart disease, haemastasis, stomachic etc.
4.	<i>Cleome viscosa L.</i>	Tilaparni/ Hulhul	Cleomaceae	Seed, Leaf and Bark.	Carminative, antihelmintic, antiseptic, externally as rubefacient etc.
5.	<i>Aegle marmelos L.</i>	Bel	Rutaceae	Fruit, pulp, root, bark, stem, leaf	stomachic, in piles, antighnorrhoeic, cardiotonic Laxative, tuberculosis, hepatitis, antidyenteric, emetic, antiinflammatory, expectorant in opti- Helminthic, jaundice, urinary troubles etc.
6.	<i>Azadirachta indica A.Juss.</i>	Neem	Meliaceae	Fruits, seed oil, gum, bark, stem and flower etc.	Antiperiodic, astringent, in skin trouble, anticeptic, ulcer, stmatic, antihelminthic purgative stimulant etc.
7.	<i>Tamarindus indica L.</i>	Chinch/ Imli	Fabaceae	Bark, Leaf, Ash, flowers, fruits and seed etc.	Antiparalytic, astringent, ulcers in ring worm, smallpox, bleeding piles, laxative, antiinflammatory, liver complaints, cough, useful in vaginal discharge etc.
8.	<i>Citrus medica L.</i>	Nimbu	Rutaceae	Fruit juice, root bud and flower etc.	Antihelminthic, purgative, antiemetic in urinary calculus, astringent, stimulant. etc.
9.	<i>Adhatoda zeylanica Medic.</i>	Adulsa	Acanthaceae	Leaf and root etc.	Uterotonic, abortifacient, antiseptic, in chronic bronchitis, expectorant, antidiarrhoeal etc.
10.	<i>Withania somnifera (L)</i>	Ashwagandha	Solanaceae	Leaf, root, seed and fruit etc.	Narcotic, abortifacient, antiinflammatory, tonic, in consumption, female disorders, ulcer, scabies, lesions, painful swellings, sore eyes, hypotonic etc.
11.	<i>Quisqualis indica L.</i>	Madhumalti	Combretaceae	Leaf and flower etc	Antihelmintic, febrifuge, antidiarrhoeal, carminative etc
12.	<i>Butea monosperma</i>	Palash	Fabaceae	Seeds, bark, gum, leaves, flower and roots	Tonic, antihelminthic, anti-inflammatory, antimicrobial, antidiabetic, antianalgesic, antitumor, night blindness treatment
13.	<i>Calotropis gigantea</i>	Rui	Apocynaceae	Leaves, flowers, latex	Pitta dosha, pain relievers, vomiting therapy, anti-inflammatory, purgative
14.	<i>Acacia pennata (L) Willd.</i>	Shembi	Mimosaceae	Bark, Leaf etc.	Antidote for snake poison, in bronchitis, scalding of urine etc.
15.	<i>Lantana camara</i>	Ghaneri	Verbenaceae	Leaves, dried roots, flower	Relief from headache, toothache, relief from indigestion, flu, colds, fever, to cure malaria, influenza, mumps etc.
16.	<i>Cassia fistula L.</i>	Bahava/ Amaltas	Fabaceae	Bark, Root	Antidysentery, Skin problems, Leprosy, Jaundice, anti-inflammatory
17.	<i>Tinospora cordifolia (Willd)</i>	Gulvel	Menispermaceae	Stem and Root	Stem use to cure Jaundice and Anemia, Roots in Leprosy
18.	<i>Helicteres isora L.</i>	Murud sheng	Sterculiaceae	Legume/Fruit	Dried fruit for intestinal disorders
	<i>Madhuca longifolia (Koen) Macor</i>	Mahuwa		Bark, Flower	Internal bark is externally applied on mammary gland for more milk. Flowers are appetizer, nutritive. The

19.			Sapotaceae		desi wine made up of flower, useful in Asthma and Cough.
20.	<i>Chlorophytum tuberosum</i> (Roxb).	Safed musali	Asparagaceae	Root, Tubers	Root powder is useful in anemia, weakness, rheumatism Tubers useful in infertility
21.	<i>Asparagus racemosus</i> (Willd).	Shatavari	Asparagaceae	Root, Leaves, Stem, Tubers	Roots are refrigerant, demulcent, diuretic, antispasmodic, dysenteric. Tubers used as tonic and for stomach disorders.
22.	<i>Aloe vera</i> (L.)	Korphad,	Asphodelaceae	Pulp of leaves	Useful for skin problems and wounds
23.	<i>Abrus precatorius</i> L.	Gunj	Fabaceae	Leaves, Stem, Roots	Useful for throat problems, cough, cold, skin diseases
24.	<i>Euphorbia tirucalli</i> L.	Sher, newali	Euphorbiaceae	Stem	Useful in gangrene
25.	<i>Caralluma adscendens</i> (Roxb).	Makad Shing	Apocynaceae	Stem	Useful for piles problem
26.	<i>Tenninadia arjuna</i> Heyne ex-Roth	Arjun Sadada	Combretaceae	Bark	Useful in heart problem
27.	<i>Terminalia chebula</i> Retz.	Harda, Hirda	Combretaceae	Fruit and Bark	Use in Triphala Churn, also for indigestion and diabetes
28.	<i>Celosia argentea</i> L.	Kurdu	Amaranthaceae	Roots	Useful for Kidney stone
29.	<i>Tirchersanthes ricipidata</i> Lour.	Kavandal	Cucurbitaceae	Seeds	Useful in Jaundice
30.	<i>Colocasia esculenta</i> L.	Alu, Chamkura	Araceae	Rhizome and Leaves	Useful for Tumor and tonsils

3. Result and Discussion

Traditional medicinal plants available in Ajanta forest can be used as major source of Ayurvedic drugs in curing a number of diseases. The herbal medicines for common man, they are time tested and considered safer than modern synthetic drugs. Hence many diseases can be effectively cured with medicinal plants. In present research records, local medicinally important plants collected and their medicinal information collected from traditional Vaidya, tribal peoples and available literature.

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