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## **ESTIMATION OF CURRENT STATUS OF FLORAL BIODIVERSITY AT M.J.B COLLEGE CAMPUS INDORE WITH SPECIAL REFERENCE TO MEDICINAL AND ORNAMENTAL PLANTS**

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### **Abstract**

The traditional knowledge started from Vedic Time (1000-5000B.C.) Our epics Ayurveda, Rigvade, Yagurveda were reported Plants used as a medicinal plant. These medicinal plants were used by Tribal people, villagers, Urban of India. The traditional knowledge of medicinal plants of Tribals are transferred from one generation to other generation. Plants have medicinal value too along with ornamental purpose. Indians have been using plants as medicines to treat many diseases like wounds healing, inflammation. The ancient science of Ayurveda and Yoga relied heavily on these plants to treat major conditions, from pain management to weight management and everything in between. The list of medicinal plants too long but some important which are present in our college campus are Alovera, Awala, Hadjod, Tulsi, Giloy, Neem Arjun, Bel, Ashwagandha. The large numbers of plant i.e. plant vegetations enormous in the college campus which shows the biodiversity of college campus.

**Keywords:** Biodiversity; Medicinal Plants; College Campus.

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### **1. Introduction**

Biodiversity is the degree of variation of life forms within a given ecosystem, biome, or on an entire planet. Biodiversity is not consistent across the Earth planet. India has been recognized as one of the 12-megadiversity countries of the world and it is estimated that these 12 countries possess 70% of the world total flowering plants (Mc Neely et al., 1990). Chowdhary and Murti (2002) have pointed out that approximately 17,500 species of angiosperms occur in India. This paper deals with the medicinal uses of more than twenty plants species which are mainly found in college

## 2. Methodology

Biodiversity survey of college campus was conducted throughout the year 2018-19. In this survey the information on the use of medicinal plants and ornamental purposes was gathered from time to time. The information was recorded in which include name of Family, Botanical name, local name of plant, plant part used in medicine etc. specimens were collected for making herbarium sheets by standard method. The plant specimens were identified with the help of Floras. (Hooker et al 1872-1897). Duthie (1973) and other standard literature.



*Eucalyptu globules.* Nilgiri.



*Azadirachta indica* Neem



*Catharanthus rosus* Sadabahar



*Tridax procumbens*

Observation Table

S.N.	Botanical Name	Vernacular Name	Famaily	Medicinal Uses
1	<i>Abitulon indicum</i>	Kanghi	Malvaceae	laxative, diuretic, sedative, astringent, expectorant, tonic, anti-inflammatory, anthelmintic,
2	<i>Acacia nilotica</i>	Babul	Mimosaceae	Malaria fever. skin diseases and piles, Tender twigs are used as tooth - brush
3	<i>Aegle marmelos</i>	Bel	Rutaceae	diarrhoea. Pulp of ripe fruits mixed with water for making 'Sharbat' Tender leaves are used to prepare 'Chutney'
4	<i>Achyranthes aspera</i> Linn.	Latjira, Hathjira	Amaranthaceae	Stem is used as a toothbrush. Root juice helps in the treatment of snake bite, scorpion bite etc.
5	<i>Aloe berbandis</i> Mill.	Ghrtkumari	Liliaceae	A jelly like substance applies directly upon wounds and burned skin, as moisturizer, digestive juice.
6	<i>Azadirachta indica</i> Meliaceae	Neem	Meliaceae	for leprosy, eye disorders, bloody nose, intestinal worms, stomach upset, loss of appetite, skin ulcers, diseases of the heart and blood vessels (cardiovascular disease), fever, diabetes, gum disease
7	<i>Barleria prionitis</i> Linn.	Deo katas	Acanthaceae	In powder form given in dental carries
8	<i>Boerhaavia diffusa</i> Linn.	Vishkhapra	Nyctaginaceae	Leaves help to cure jaundice and kidney
9	<i>Cassia tora</i> Linn.	Puwada	Fabaceae	skin diseases such as leprosy, ringworm, itching, & psoriasis and also for treatment of snakebite and arthritis.
10	<i>Calotropis procera</i>	Madar	Asclepiadaceae	cure cough. Latex applied to remove thrown from legs.
11	<i>Cathranthus rosus</i>	Sadabahar	Apocynaceae	Diabetes
12	<i>cissus quadrangularis</i>	. Hadjod	Vitaceae	Anti-Inflammatory, Anti-Osteoporotic, Antioxidant, Anti-Ulcer: BoneHealing Central Nervous System Activity:
13	<i>Emblica officinalis</i>	Amala	Euphorbiaceae	Diabetes, respiratory disorder, diarrhea, heart diseases, and dental disease. Amla cleanses the mouth, strengthens, rich in Vit. A,C

14	<i>Psidium guajava</i> – Linn	Amrud	Myrataceae	Digestive, toothache, Diabetes, rich in Iron
15	<i>Eucalyptus globulus</i>	Nilgirir	Myrataceae	Oil used in cough cold
16	<i>Mangifera indica</i> Linn	Aam	Anacardiaceae	Unripe fruits used in dysentery, rich in Vit A
17	<i>Ocimum tenuiflorum</i>	Tulsi	Labiataeae	herbal tea for cough, cold cancer
18	<i>Tribulus terrestris</i> Linn.	Gokharu	Zygophyllaceae	Dried fruit powder is taken with honey in urinary, kidney trouble and stone trouble
19	<i>Tinospora cordifolia</i>	Giloy	Menispermiaceae	Skin diseases, Cure gastro-intestinal disorders: Panacea for liver diseases, Stress management, Diabetes urinary infection
20	<i>Tridax procumbens</i> Asteraceae	Mamaji ki mundi	Asteraceae	To cure urinary problem in male and also in hair fall problems

### 3. Result and Discussion

In the present biodiversity survey provides medicinal values of the medicinal plants used to cure various diseases and ailments. The twenty mentioned plant species belong to different families. Most of the plant species are wild and few of them are cultivated and used as spices, vegetables, and medicines. As per the survey, we can conclude that there are so many medicinal plants available in college campus which are too much beneficial for health purpose and can provide easy source for phonological studies.

It also shows that the college campus has a great diversity of medicinal plants with different medicinal properties. They utilize numerous plants and their various parts viz, roots, leaves, stems, flowers and fruits in various ways for the medicinal purposes because medicinal plants and their extracts have immense potential for the management and treatment of various diseases as well as the phytomedicines that are used by the local people for various diseases

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### References

- [1] McNeely J. A, Miller K. R, Reid W. V, Mittermeier R. A, Werner T. B. Conserving The World's Biological Diversity. IUCN, Gland, Switzerland. (1990) pp.193.
- [2] Bole P. V, Santapau H. A note on Neuracanthus sphaerostachys Dalz. Jour. Bomb. Nat. His. Soc. 50: (1951) 428-430.

- [3] Chowdhery H. J, Murti S. K. Plant Diversity and Conservation in India - An Overview. Bishan Singh Mahendra Pal Singh, Dehradun (2002).
- [4] Jain A. K, Wagh V. V, Kadel, C. Conservation status of some miniature sacred groves in Jhabua district (M.P.). Ethnobotany 23: (2011)106-115.
- [5] Jain S. K, Rao, R. R. A Handbook of field and Herbarium Methods. Today and tomorrows Printers and Publishers, New Delhi, pp. 157 (1977).
- [6] . 6. Khanna K. K, Kumar A, Dixit R. D, Singh N. P. Supplementary flora of Madhya Pradesh. Botanical Survey of India, Publications, Calcutta, India (2001).
- [7] Mudgal V, Khanna K. K, Hajara P. K. Flora of Madhaya Pradesh Vol. II. Botanical Survey of India, Calcutta (1997).
- [8] Myers N. Threatened Biotas: 'Hot Spot' in tropical forests. The Environmentalist 8(3): (1988)187-208.
- [9] Oommachan M. Flora of Bhopal. J. K. Jain brothers Bhopal, India (1997).
- [10] Ray Sudip, Sheikh M & Mishra S, Ethnomedicinal plants used by tribals of East Nimar region, Madhya Pradesh, Indian Journal of Traditional Knowledge 2011; 10(2):367-371. 13.
- [11] Mahajan S.K., Khare Bharti, Mahajan D.D., Gupta Vrinda, Muwel S.L., Gupta Madhu and Mahajan Pooja, Folk medicinal uses of plants against Malignant Tumor in Khargone district of M.P., India, Journal of Environmental Research and Development 2010;4 No.

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