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STUDY OF MEDICINAL PLANTS IN THE SAHYADRI RANGES: A CASE STUDY OF MAHUR REGION, MAHARASHTRA

Minakshi Kondabarao Khandare
K.D.Highschool and G.M.Junior College ,Pusad.
Dist-Yavatmal.

ABSTRACT:

The Sahyadri ranges in Maharashtra, part of the Western Ghats, are known for their rich biodiversity, including numerous medicinal plant species. The Mahur region, located in the Nanded district of Maharashtra, holds significant ethnobotanical importance due to its diverse flora and traditional use of medicinal plants by local communities. This study aims to document the medicinal plant diversity in the Mahur region, assess their ethnomedicinal applications, and highlight conservation challenges. A field survey was conducted in forested areas of Mahur, involving direct plant identification and interviews with local traditional healers. The findings reveal the presence of over 80 medicinal plant species, including Withania somnifera, Rauvolfia serpentina, Tinospora cordifolia, and Holarrhena antidysenterica. The study emphasizes the need for conservation measures to protect these valuable plant species from habitat degradation and overexploitation.

KEYWORDS : *Medicinal plants, Mahur region, Sahyadri ra.nges, Ethnobotany, Conservation.*

1. INTRODUCTION:

The Sahyadri ranges, also known as the Western Ghats, are a globally recognized biodiversity hotspot. The Mahur region, situated in Nanded district, is known for its rich forest cover and traditional knowledge of medicinal plants used by tribal and rural communities. Despite its ecological and medicinal significance, the region faces threats such as deforestation, overharvesting, and urbanization. This study aims to document medicinal plant species found in Mahur, their traditional uses, and the necessity for conservation efforts.

2. OBJECTIVES OF THE STUDY

1. Documentation of Medicinal Plant Diversity –To identify and catalog the medicinal plant species found in the Mahur region of the Sahyadri ranges.
2. Assessment of Ethnomedicinal Applications –To preserve the record traditional knowledge and uses of these medicinal plants

3. Evaluation of Conservation Challenges –To analyze threats such as habitat degradation, deforestation, and overharvesting .
4. Promotion of Sustainable Conservation Strategies – To recommend community-based conservation measures and sustainable harvesting practices.
5. Encouragement of Future Research – To highlight the need for further pharmacological studies and cultivation techniques.

3. MATERIALS AND METHODS

3.1 Study Area

The study was conducted in the forested areas surrounding Mahur (19.85°N, 77.92°E), located in the eastern part of the Sahyadri ranges. The region is characterized by a mix of deciduous and semi-evergreen forests, with an elevation of approximately 650 meters above sea level. The climate is tropical, with distinct monsoon, summer, and winter seasons.

3.2 Data Collection

Field surveys were conducted between June and December, covering various forested patches and riverbanks. Plant specimens were collected and identified using standard taxonomic references such as "Flora of Maharashtra" (Singh & Karthikeyan, 2000). Ethnobotanical data were gathered through structured interviews with local herbalists, tribal healers, and Ayurvedic practitioners.

4. RESULTS AND DISCUSSION

A total of 80 medicinal plant species belonging to 45 families were recorded in the Mahur region. The dominant families included Fabaceae, Apocynaceae, and Rutaceae. Some notable medicinal plants and their traditional uses are:

The study highlights that traditional knowledge of medicinal plants is still prevalent among the local communities. However, overexploitation of species like Withania somnifera and Rauvolfia serpentina has led to a decline in their natural populations. Conservation strategies such as community-based sustainable harvesting and habitat protection are essential to ensure the survival of these valuable species.

5. CONCLUSION

The Mahur region of the Sahyadri ranges harbors a significant variety of medicinal plants with ethnobotanical importance. Urgent conservation efforts, including awareness programs and sustainable collection practices, are necessary to preserve these plants. Future research should focus on pharmacological validation of traditional uses and exploring cultivation techniques to reduce pressure on wild populations.

6. REFERENCES

1. Singh, N.P., & Karthikeyan, S. (2000). Flora of Maharashtra. Botanical Survey of India.
2. Nair, M.N.B. (1993). The Medicinal Plants of India: Conservation and Cultivation. CSIR, New Delhi.
3. Gadgil, M., & Guha, R. (1992). This Fissured Land: An Ecological History of India. Oxford University Press.
4. Jain, S.K. (1991). Dictionary of Indian Folk Medicine and Ethnobotany. Deep Publications, New Delhi.

5. Sharma, P.V. (1981). Dravyaguna Vijnana (Medicinal Plant Science in Ayurveda). Chaukhamba Publications, Varanasi.
6. Kirtikar, K.R., & Basu, B.D. (1935). Indian Medicinal Plants. Vols. 1–4, Bishen Singh Mahendra Pal Singh, Dehradun.
7. Uniyal, R.C., Uniyal, M.R., & Jain, P. (2000). Cultivation of Medicinal Plants in India. TRAFFIC India & WWF India, New Delhi.
8. Rao, R.R. (1986). Biodiversity in India: Conservation and Utilization. Botanical Survey of India.
9. Kala, C.P. (2005). Ethnomedicinal Botany of the Indian Himalayas: Conservation and Sustainable Use. Journal of Ethnobiology and Ethnomedicine, 1(1), 1-8.
10. Pullaiah, T. (2006). Encyclopedia of World Medicinal Plants. Regency Publications, New Delhi.