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Contents

Preface		vii ix
1.	Multiplication and Conservation of Wild Asparagus Species Using Tissue Culture Technique Anish Kumar Sharma, Vinay Deep Punetha, Ashutosh Kumar, Aakanksha Wani, Virendra Yadav, Nisha Choudhary ⁴ and Jyotsana Pandit ⁴	1
2.		19
3.	Regeneration Issues and Fruit/Seed Maturation Timing of Some Edible Wild Tree Species With Medicinal Properties in Kumaun Himalaya Ashish Tewari, Shruti Shah, Jyotsna and Bhawna Tewari	30
4.	Lichen Mediated Fabrication of Nanoparticles and Their Biological Potential Deepa Kholia, Garima Chand, Rini Joshi, Santosh K. Upadhyay and Penny Joshi	44
5.	Diversity And Distribution of Butterflies in Kumaun Hills, Uttarakhand, India Deepika Goswami, Manisha Bisht, Deeksha Arya and Sagar Balmiki	60
6.	Nanomedicine: Advances and Prospects in Medicinal Plants Garima Pathak	77
7.	Ethnobotanical Investigation On Medicinal Plants Used By Tribals of Himachal Pradesh, India Kirti Negi, Ikramjeet Maan, Anu Sharma, Anita Sharma, Shruti Shah and Harminder Pal Singh	94
8.	Biosorption: An Emerging Technique of Removing Heavy Metal Pollutants from Aqueous Streams Kirti Singh, Manoj Dhouni and Pushpa Joshi DEPARIMENT OF FRUMAUN UNIVERSITY	ORESTR

Regeneration Issues and Fruit/Seed Maturation Timing of Some Edible Wild Tree Species With Medicinal Properties in Kumaun Himalaya

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ABSTRACT

Among Non-Timber Forest Products (NTFPs), wild medicinal trees play an important role for the communities residing near the forest areas. Misconception prevails among the local population that forest trees will yield medicine forever without considering the relentless anthropogenic pressure they face without any respite in the Himalayan region. Several species are failing to regenerate and only old and mature trees remain. Most of the wild medicinal and edible fruit species in forests are being over exploited which ultimately affects their regeneration. The present study deals with evaluating the regeneration status and determining the time of fruit/ seed maturation and germination of four important wild edible species, Myrica esculenta Buch-Ham, Prunus cerasoides D. Don, Diploknema butyrcea (Roxb.) Lamb., and Ficus auriculata Laur, which have several medicinal uses. The study area was located between 29°18' and 29°24' N and 79°19' and 79°30' E at an altitudinal transect of 900 and 2100m in the Nainital district of Kumaun Himalaya. Among all the selected wild edible species the maximum seedling density was in P. cerasoides (690.0 seedlings/ha) followed by M. esculenta (371.6 seedlings/ha) and D. butyracea (47.50 seedling/ha). In all the selected species the seedling density was high but the conversion of seedlings into saplings was relatively poor. On the other hand, in F. auriculata both saplings and seedlings were completely absent. In M. esculenta colour change of fruit from green to dark red, in P. cerasoides from green to pale red, in D.

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