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# EDUCATION MATERIAL

# ON

# CONSERVATION, MULTIPLICATION AND UTILIZATION OF RARE, ENDEMIC ANGIOSPERMS AND PTERIDOPHYTES IN FOREST BOTANIC GARDEN OF STATE FOREST RESEARCH INSTITUTE, JABALPUR (M.P.)


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## FOREWORD

As a part of conservation programme, institute has established an arboretum-cum-botanic garden in 1976, covering an area of 4.25 ha and houses 325 plant species including trees, shrubs, climbers and herbal plants in various sections. Of the total species planted, over 50% are threatened and ascribed with conservation value. The garden is of scientific and educational utility. It is among the 140 Botanic gardens of India registered at serial number 14 by Botanic Garden Conservation International under BGCI - Investing in Nature - India programme. The institute garden provides diploma and degree courses in collaboration with Universities and colleges. SFRI-BG is unique in terms of its scientific arrangement of plants adopting Bentham and Hooker's classification system.

This education material is based on the plants conserved in the forest botanic garden with particular reference to RET, endemic and rare angiosperms, pteridophytes and fern allies which were collected and conserved from different agroclimatic zones of Madhya Pradesh. The pteridophytes are an important, ancient and diverse group of plants that includes ferns, horse tail and club mosses distributed all over the world. Ferns are found to provide food, medicine and fiber. Today ethnobotany has become an important and crucial area of research, resource management, conservation at genetic, species and ecosystem levels. The hilly and undulating topography of the area with several large and small rivers, ponds, lakes and swamps harbors rich population of pteridophytic plant diversity. The medicinal uses of pteridophytic species were documented from different agroclimatic zones of Madhya Pradesh. The manuscript provides useful information on their distribution, conservation and multiplication as well as infrastructure development in the forest botanic garden. Among infrastructure development erection of lighting poles, expansion of micro irrigation network, repairing of chain link fencing, erection of stone display and other extension boards. Besides the above, pteridophytic species were also collected from Forest nursery of Rewa, Forests of Chhitrakut (UP), National Botanical Research Institute, Lucknow (U.P.), Botanical Survey of India, and Forests of Massauri hills, Dehra dun (U.K.). In all, 25 pteridophytic species and 6 species of RET, endemic and rare angiosperms were collected and conserved in the forest botanic garden.

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