

ETHNOBOTANY & ECOLOGY

Objectives

- Ethnobotanical and folklore surveys in the tribal tracts and forest areas in India.
- Collection, processing, identification and documentation of plants and plant products used by the tribals and aboriginals for food, fodder, medicine, oils, tribal crafts, gums, resin, contraceptive narcotics, etc.
- Documentation and preparation of resource inventories of ethnobiological plants used by the tribals and aboriginals.
- Phytochemical, biological and nutritional screening of ethnomedicinal and food plants for value added products.
- Development of ethnobotanical gallery, herbarium and garden for conservation of threatened ethnomedicinal plants.

Achievements

- During the last twenty five years, extensive and intensive ethnobotanical surveys for the collections, identification and documentation of plants and plant products of ethnobotanical value used by the tribals of Uttar Pradesh, Uttaranchal, Madhya Pradesh, Himachal Pradesh and Andaman & Nicobar Island were carried out.
- The studies were conducted among the main tribes namely, Abhujmaria, Baiga, Bhoja, Bhotia, Gond, Gaddi, Kharwar, Kol, Korwa, Oraon, Parahiyas, Saharia, Mushar, Tharus, Jaunsaris, shimper, settlers of Andaman & Nicobar Island, etc. living in close vicinity of the forest.
- Detailed resource inventory of nearly 465 plants and plant products of ethnobotanical value used by the tribals of Uttar Pradesh and Uttaranchal, 500 plants and plant products used by the tribals of Madhya Pradesh and 450 plants and plant products of ethnobotanical importance used by the Gaddi tribes of Himachal Pradesh, 300 plants used by tribes and settlers of Andaman & Nicobar Island along with many new or less known medicinal uses traditional indigenous knowledge on ethnomedicinal and other useful plants has been prepared and published.
- The resource inventory comprises of plants which are utilized by the tribals for food, fiber, medicine, veterinary medicine, oil, cordage, brooms, gums, resin, tannin, fodder, timber, woodwork, tribal crafts, basketry, agricultural implements, musical instrument, fish poison, narcotics, drinks and contraceptive for meeting their day-to-day life and health care. The studies have led to the organization of ethno botanical museum, herbarium and garden in the Institute for future reference and study on ethnobotany.
- The pharmacological and nutritional screening of about twenty-five ethno medicinal and food plants have also been carried out for verification of the tribal claims. The various aspects of tribal conservational practices have also been suggested for effective and wise management of biodiversity.
- The study provides scope for bioprospecting of phytomedicine and nutraceuticals for 21st Century and have opened new vistas in the ethnobiological research for developing new sources of phytomedicines neutraceuticals, fibers, oils, etc. needed for meeting the requirements of pharmaceuticals, agro-based industries and plant based cottage industries in the tribal tracts for improving the life and economy of the tribals and rural populations of country in 21st century.

Publications

4 research books of Ethnobotany, 2 books on Floras of National Parks, 1 review article and approximately 120 research papers have been published.