

Ethnobotany: In broad terms, ethnobotany is the study of the interrelationship between plants and people. The two major parts of ethnobotany are encapsulated in the word itself; **ethno**, ‘the study of people’, and **botany**, ‘the study of plants’. However, the field is limited on both sides.

It may be defined as the study of a region's plants and their practical uses through the traditional knowledge of a local culture and people. The field combines botany, anthropology, economics, and sometimes archaeology (in paleoethnobotany, the study of vanished agricultural systems).

The nature of relationships between man and plants however, may be either Abstract (worships/rituals, faiths and beliefs, natural powers, taboos, sacred plants, folklore, legends, sylvan environments, myths, etc.) or Concrete (material use, cultural use, conservation, disuse).

The prehistory man must have used plants as food and for curing ailments. A variety of uses of plants are mentioned in the ancient Indian Sanskrit literature like **Rigveda** (ca 4000-1500 BC), **Atharvaveda** (1500 BC), **Upanishads** (1000-600 BC), **Mahabharata** and **Puranas** (700-400 BC), etc. These include plants used in worships, as medicines, food, fuel and for tools of agriculture. A specific mention may be made of the uses of different varieties of **Rudraksha** (*Elaeocarpus ganitrus*) in **Lakshmi-puran** and **Shivapurana**. Uses of about 1200 plant drugs along with their action and specific therapeutic applications are mentioned in **Sushruta Samhita** (ca 500 BC), **Charaka Samhita** (ca 100 AD) and **Ashtanga Hridaya Samhita**. In fact, many more references of plants are reported but their identity has not yet been established.

Richard Evans Schultes, often referred to as the "**Father of Ethnobotany**".

Dr. Sudhanshu Kumar Jain [Dr. S. K. Jain] (NBRI, Lucknow) affectionately known as "**Father of Indian Ethnobotany**"

ETHNOBOTANY AS AN INTERDISCIPLINARY SCIENCE

Interdisciplines of ethnobotany:

Ethnopharmacology deals with the identification, description, observations and experimental investigations of the ingredients used in various recipes prepared by aborigines, and the effects of indigenous drugs on laboratory animals and man.

Ethnomedicine includes research that deals with medicines derived from plants, animals, minerals, etc., and used in the treatment of various diseases and ailments, based on indigenous pharmacopoeia, folklore and herbal charms.

Ethnotoxicology deals with the use of various toxic plants as fish poison (Ichthyotoxic), arrow poisons, etc., in human societies.

Ethnomusicology is the study of music of tribals and aborigines, its documentation, forms and content.

Archaeoethnobotany involves three subjects namely, ethnology, archaeology and botany. This interdisciplinary of ethnobotany studies the identification of plant materials from archaeological sites for studies on migration of human cultures, and origin, dispersal and domestication of crops, etc.

Ethnogyneacology is an emerging discipline that deals with various diseases among women in tribal societies, related to sterility, conception, abortion, etc., and use of abortifacients.

Ethnonarcotics is the study of the use of narcotics, snuffs, hallucinogens, etc., in primitive societies.

Ethnogastronomy is the study of ethnic groups in relation with their food and food habits. It also includes traditional recipes of different ethnic groups.

Ethnopediatrics involves study of the science of health care in children practiced among different ethnic groups.

Ethnoorthopaedics is the study of knowledge of different ethnic tribes/communities about setting and healing of bones.

Ethnohorticulture involves study of management of useful plants (e.g., fruits, vegetables, ornamentals) in home gardens or orchards.

Ethnoforestry deals with the study of human management of forests and forest trees.

Ethnoagroforestry is the study of land management for the simultaneous production of food, crops and trees.

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Ethnolinguistics is the study of linguistic terminology for plants and plant parts by people of different language groups.

Ethnosilviculture deals with practice of raising plants of economic and cultural values.

Ethnozology is the study of complex relationships between people and animals, which includes human relationships with and use of domesticated animals, and management of wild animals for hunting and other uses.

Ethnoentomology deals with the study of relationships between people and insects. This can include studies of useful insects and their products (honeybees, silkworms, etc.) and poisonous species as well, insects used in rituals, beliefs (taboos, avoidance), etc., and how people interact with and control pests.

Several such combinations of words could be possible where the knowledge of ethnology and various other science subjects is required. Today, ethnobotany is regarded as an independent subject and the prefix ethno is generally taken to indicate interdisciplinary nature of the subject. In view of the interdisciplinary nature of ethnobotany, an ethnobotanist should be familiar with at least six disciplines namely, **botany, anthropology, chemistry, linguistics, economics and ecology**, but should try to specialise in any one or two of them. The field of specialisation which an ethnobotanist may choose include traditional taxonomy, morphology, plant chemistry, drug plant cultivation, anthropology, traditional medicine, pharmacy, pharmacology and even therapeutics. A basic knowledge of floristics and anthropology is essential for an ethnobotanist.