Ethonobotanical Studies of Important Edible Plants of Rajasthan

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Abstract—Ethnobotany came into being when the earliest man observed the animals mostly the apes and Monkeys eating certain plants often to satisfy their hunger and times to heal their wounds and get rid from pain and sufferings. Thus on the basis of uses of plants first by animals and later by Human beings the concept of ethnozoology and ethnobotany emerged to give birth to ethnobiology. Food has different roles depending on the ailment products. The food through activities, conscious or unconscious, produces a transcendental significance, there is an enculturation and socialization through their components. The study of wild edible plants is important not only to identify the potential sources which could be utilized as alternative food or in times of scarcity but to select promising types for domestication. Recently the role of Ethnobotany al studies in trapping the old traditional knowledge as well as in searching new plant sources of food. The aboriginals inhabiting the forests are consuming a number of wild plants which are unknown and inaccessible to urban elite class. Numerous food and non food crops have been adopted by the tribal's in their agriculture, however great many of them depend on the rain crops like kharif for their survival, there being a lesser dependence on the winter crop like Rabi.

1. INTRODUCTION

Ethnobotany is a multi-disciplinary science which has grown as a mushroom in a short span of time . It is the study of past and present inter-relationship of human societies and the surrounding plant wealth. The term ethnobotany was first coined by Harshberger in 1895. The origin and soul of this subject are in primary basic human needs, in tradition and in faith, things which are immortal and infinite. Secondly the body and substance of this science are in plant resources plants which sustain all life on this earth and are a renewable resource. Thirdly, and most significantly, the subject has close relation with our past and future welfare and needs of food and conservation of genetic diversity (Jain, 1977). The invaluable role of the ethnic people in the conservation of the plant genetic resource is now beginning to be recognized. However, the economic benefits from the utilization of these materials seldom accrue to them. The ethnic people have provided several "Miracle plants" of immense food and nutrition value to modern civilization. The primitive cultivars and wild relative of crop plants preserved by the indigenous ethnic

people may hold the "genetic key" of many valuable "miracle crops" of the future. The investigation ethnobotanical studies of important edible plants of Rajasthan aims at bringing out the inter relationship of the Flora and tribal people of the state viz. Meena, Naika, Dhanka, koli, Kumhar, Kalbelia, Gadia-Lohar, Sansi, Nut, Bagri, Kanjar, Dhor etc. based on field surveys of various tribal villages and localities. About 139 species of plants were observed which are utilized for food.

2. METHODOLOGY

During investigation of study it was intended to bring to light the little known interactions and inter-dependence to tribal communities and plants existing together in the state of Rajasthan. The method of study was put into two broad categories; Field research and Literary research. Field research included surveys, prolonged stay in the area of work, travel in forests with local resource persons, visits to agricultural fields, festivals, markets and socio-religious ceremonies. Very elaborate proforma was devised for field work (Jain, 1987,1989, Jain & Mudgal, 1999). Voucher specimens and museum materials were collected for future reference. Standard methods were used for this (Jain & Rao, 1976). According to (Cotton, 1996) for proper recording of etnobotanical data and understanding of the local, spiritual, social and economic background is also necessary.

Literary research included search for etnobotanical data from published and unpublished work in different manner like – by enquiry, observation, interview and participation. General and specific queries were made with the tribals about the plants. A general round of the villages gave an impression of the common cultigens, construction of dwellings, farm boundaries and fencings, cattle etc. By observing them working for food gathering and by visiting their huts and witnessing in presence their daily chores or household chores and studying the articles in their huts, detailed observations were taken. During the field visits edible plant species were collected and preserved. Some plants are lying in the laboratory and for others Herbarium sheets were prepared and were deposited in the Herbarium of Department of Botany, University of Rajasthan. Photography and tape recording was also important part of the methodology. Listing and classification of collected plants were made as per there use as staple food. The role of plants in food has been innumerated in form of table which has been incorporated in the form of text.

3. RESULT AND DISCUSSIONS

The present work can by no means be termed a complete one. It just attempts to give a macro level bird's eye view of the ethnobotany of the studied tribes. It is apparent from the findings that the tribal and rural people are highly dependable on the plant resources in their vicinity and these resources play a vital role in our routine life. They exploit the plant resources not only for house (hut) building, timber, agricultural implements, food, fodder, oil, rope,mat, gum, beverage, musical instruments and religious ceremonies, but also for a variety of ailments of both human beings and cattle. These multifarious uses of the rich raw materials available in the surrounding forests warrant the establishment of cottage industries in the region for the upliftment of tribal and rural population.

4. **BIO-DIVERSITY CONSERVATION**

Conservation of biological diversity is one of the national and international needs to save our natural wealth, The local inhabitants are custodians and they maintain the diversity of wild plants, land races of crop plants, medicinal plants with their traditional methods, The acculturation and modern impact of civilization have created problems to their indigenous ethnobotanical knowledge and it is disappearing at a fast rate, The erosion of traditional knowledge is due to displacement of tribal people from developmental sites, industrialization, urbanization and globalization, There is a need that no displacement or minimum possible displacement of tribal people from their original settlements is made, The emphasis should be given to small scale , sustainable, eco friendly projects which give more power in the hands of the community.

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