INTRODUCTION

The origin of ethno-botany takes place in ancient period. Nomadic man observed animals eating certain plants. Plants are used as fodder or food, and used as medicine to cure wounds. During ancient period people largely depended on plant resources which were available in forests for fulfilling their day to day needs like food, fodders, shelter, clothing and medicines. The rural people or tribal people are closely associated with natural vegetation. They have developed unique system of traditional knowledge regarding utilization of plants by trial and error methods. The traditional knowledge has got wider use and success in experiments carried out on human beings and leads to our recognized food and medicines. The first basic utility of plants is by animals and later by human beings. The concept of ethno-biology includes ethno-botany and ethno-zoology which emerged to give birth to ethno-biology. The traditional knowledge was developed by oral transmission and not by written form. The age old people from the society gave knowledge to their younger generation.

The first word used by Power (1874) as aboriginal botany, means a study of plants which the aboriginals used for medicine, food, textile and ornaments, etc. Harshberger (1896) first used the term ‘Ethnobotany’ means the study of plants by primitive and aboriginal people. Similarly, Faulks (1958) defined the term ethno-botany as total relationship between man and vegetation. Schults (1962) interpreted ethno-botany as study of inter-relationship which exists between people of primitive society and their plant environment.

SCOPE OF ETHNOBOTANY

Ethno-botany has wide scope in terms of its theoretical contributions and understanding plant human relationship, as well as practical application of biological knowledge of tribal people in medicine, agriculture, health and industry. Traditional herbal medicines, sustainable use of plant resources, rural development and biodiversity conservation with applied approaches in the fields are important aspects of ethno-botanical search.
Interrelated fields in Ethno-botany.

1. Basic documentation of traditional botanical knowledge.
2. Quantitative evaluation of the use and management of botanical resources.
3. Experimental assessment of the benefits derived from plants both for subsistence and for commercialization.
4. Applying traditional ecological knowledge to biodiversity conservation and community development.
5. Ethno-botany provides basic concepts, skills and methods for collection and documentation of quality data in the field.
6. In ethno-botany tribal communities developed their own cultures, customs, culture religions, rituals, taboo, totems, legends and myths, folk tales and songs, witch-craft, foods and medicinal practices. The wild and cultivated plants play important role among these culture and this inter-relationship has evolved over generations of experience and practices. These studies have been used in tracing human and plants migrations.
7. Tribal people conserve their local wild crop land races and wild edible plants resources for future global warming.
8. Ethno-botany protects genetic plants diversity by maintaining live seeds sample at community level.

Ancient Indian literature has heritage of Indian ethno-botany in Vedic era. This literature mentioned in common names or Sanskrit names. A large number of plants referred in ancient literature has controversy due to local names. In the case of Soma of Hindu epics, about 20 different plants viz. Sarcostemma acidum and Ceropegia juncea, Ephedra spp. etc, (Alam, et al. 1882. Mahadihassan, 1986). They vary from arid-regions to temperate regions. The main obstacle in identification of names given to drugs in ancient literature is due to the lack of plant description and illustrations. The local names of medicinal plants collected through ethno-botanical research play an important role in the practical aspects of traditional medicines. The tribals people do not known botanical names of plants as they are non botanists. Thus if their help is taken for collected materials for information, research and industry they tell names which are familiar to them and this is only real ethno-botanical work.
Asian region has the richest ethno-botanical treasures in the world which must be fully documented, utilized and conserved. The forests are not only rich in species of plants but provide a valuable pharmacopoeia and gene-pool for improving domestic crops. Several Asian countries are among the most densely populated countries of the world. The Asian region is inhabited by millions of indigenous communities and forest-dwellers whose culture and economy vary with the ecosystems. Most of the people living in tropical forests are the key communities in understanding, utilizing and conserving plant diversity. Traditional storage of ethno-botanical knowledge in memory and practice has a long history. At least 6500 species of plants are used locally in Asia in traditional and folk medicines. Several Asian countries have begun to encourage traditional medicines as an integral component of health care systems. It is realized that the scope of ethnobotany has now greatly enlarged, both in terms of its theoretical contributions to an understanding of plant human relationships, as well as for the practical applications of the biological knowledge of tribal people in medicine, agriculture, health and industry. In recent years development of ethnobotany in India, China, Nepal, Pakistan, Philippines, Malaysia, Sri Lanka Thailand, Indonesia and other countries has been strongly oriented towards the promotion of traditional herbal medicines, sustainable use of plant resources, rural development and biodiversity conservation with applied approaches in the field. (Maheshwari, 1996).

India has diverse flora due to different climatic conditions coupled with large number of aboriginal tribes inhabiting different pockets in the country. Specially mentioned here are from mountainous tracts in central India, Western Ghats and Himalayas. The northeast India is inhabited by the tribals. There are more than 427 tribal communities in India. Ethno-botanical studies cover an inventory of diverse approaches viz ethnobotany of certain large or small geographic regions, selected primitive tribe or human societies, certain plants groups of individual plants species, certain utility groups like - food, fibres, dyes and drugs. Different states has regional specific tribes which are studied by regional research workers (Goel and Tripathi, 2009). While considering Maharashtra state Korkus (Kamble and Pradhan, 1980) and Mahadeokoli tribes were studied for ethnobotanical point of view (Kulkarni 1992).
Pioneer work on ethno-botany was initiated by E.K. Janaki Ammal in 1960 on food plants of certain tribals of South India by creating an ethno-botanical section at Central Botanical Laboratory of BSI at Allahabad. Jain (2001) mentioned that ethno-botany deals with study of total natural and traditional interrelationship between man and his domesticated animals. Ethno-botany is simply defined as “The total natural and traditional relationship and the interactions between man and his surrounding plant wealth” (Chandra, 1996).

Maharashtra State has 47 tribal communities residing in hilly parts. Majority of them are Mahadeokoli, Bhil, Gond, Warli, Kokana, Thakur, Katkari, Gamit, etc. Total population of Maharashtra as per census 2001 is 96,878,627 out of this 8,577,276 belong to Scheduled tribe i.e. 8.9 percent.


Ethno-botanical survey of Mahadeokoli tribe was made by Kulkarni, (1992) and published papers on different topics like food, fodder, ethno-agriculture, ethno-veterinary, etc. (Kulkarni and Kumbhojkar, 2003; Kumbhojkar et al. 2003; Kulkarni and Upadhye, 2006). Kulkarni and Kumbhojkar (2002) published information on ethno-veterinary medicinal practices in Mahadeokoli tribe. Kulkarni and Kumbhojkar (2002) reported present status and future prospects of ethno-botanical studies which are essential in recent fragile ecosystem for biodiversity conservation (Upadhye et al. 2004). Considering the earlier research on ethno-medico-botanical studies in Maharashtra state in general and Pune district in particular. The aim of the
present work is to document information on medicinal plants utilized by local people for human and animal ailments on priority basis before it vanishes forever from Bhor taluka in Pune district

Pune district is located between 17.5° to 19.2° North lat. and 73.2° to 75.1° East. Long. Pune district has 14 talukas. Population of Pune district is 7,224,224 as per census of 2001. Out of which Junnar, Rajgurunagar, Ambegaon, Velhe, Maval, Mulshi, Bhor, Hevali are situated in Western Ghat area. Tribal population in above area is Mahadeokoli, Thakur and Katkari. Bhor taluka has 185 villages and total population is 1,71,719. Out of this scheduled casts and scheduled tribes population is 10,917 (7576 + 3341) as per census 2001. Local people have traditional knowledge of medicinal plants but it was not documented by earlier workers. In recent years due to developmental activities, changed social and cultural aspects, educational facilities in the area and attitudes of people are changing. There is an urgent need to document these plant resources for future use.

The major component of the present ethno-medico-botanical studies is human and animal ailments and traditional practices in Bhor taluka and validation of some ethno-veterinary claims. The following objectives are considered for the thesis:

**Objectives.**

1. To document ethno-medicinal plant resources from Bhor taluka.
2. To record the disease-wise application of important herbal drugs in humans and livestock.
3. To study five selected medicinal plants for social validation with the help of ANTHRA for documented applications.
4. The innovative formulation/s, if found suitable, will be patented and credit will be shared among all concerned parties.

The thesis is formulated in following manner.
FORMAT OF THE THESIS.

**Introduction** - Definition of ethno-botany in general and importance in ethno-medico-botanical studies in different parts of India and Maharashtra. Importance of the present study for human and animal health care.

**Review of Literature** - This chapter gives most of the appropriate studies carried out in foreign countries, India and Maharashtra.

**Materials and Methods** - Description of the study area, climatic conditions, population of the different communities in the area, Ethno-medico-botanical data collection from local informants, herbarium preparation, Plant names, local names, family and herbarium number of AHMA. Various methods used for validation of ethno-veterinary claims, Data of selected claims in tabular form.

**Ethno-medico-botanical observations** - Observations of various human and animal diseases are reported in this chapter

**Validation of ethno-veterinary claims:** This chapter embodies the non-experimental validation of plant drugs on wound, wound maggots and diarrhoea/dysentery.

**Results and Discussion** - Findings of the various ethno-medico-botanical survey / validation results are discussed.

**Summary and conclusion** - The salient features of the work are reported in this chapter.

**Bibliography** - The relevant literature is cited in this chapter.

The thesis is based on above chapters.