REVIEW OF LITERATURE

Ethnobotanical studies in India in modern lines started before the term was coined with the collection of information by G. Watt (1889-1896) in connection with compilation of his dictionary, about a century ago. Among other things, the need for preparation of bibliography on ethnobotany and the task was entrusted to the Botanical survey of India. In 1984 a book titled ‘Bibliography’ of Ethnobotany was published by Government of India (Jain et al., 1984). Literatures on ethnobotany are accumulating at a rapid pace as the scope of the subject gets expanding with time. Realising the significance of interdisciplinary approaches to ethnobotany, dozens of books have been published on the subject, while several thousand research papers both in India as well as abroad are reviewed here.

ABROAD

A few significant contributions on medicinal plants undertaken by various ethnobotanist abroad are mentioned below.

The evolution of the modern approach to the science of ethnobotany started in the United States, and the foremost centre is the Botanical museum of Harvard University Massachusetts. Ethnobotanists such as E. Wade Davis, Richard Gordon Wasson, R.E Schultes, Timothy plowman and others have contributed in various fields of ethnobotany from this centre (Jha and Lalnungdanga, 1998). The best studies area for this purpose is the South-West of the United States of America by Ford, (1985). El Rayah (1993) documented a brief account of herbal medicines prescribed for various ailments in Sudan.

Barrett (1994) has investigated 152 plants used by the people of Nicaragua’s Atlantic coast for the treatment of various diseases. George (1995) has reported pharmacopoeia of 108 medicinal plant species from 52 families. The medicinal uses of 121 plant species which grow in the Akha tribe zone of Thailand have been documented by the Anderson (1985). Cunningham (1993) studied African medicinal plants with emphasis on conservation and primary health.

Joshi and Edington (1990) reported medicinal plants of Central Region of Nepal. Ethnobotanical observation on 7 plants species from Tharu tribe of Chitwan District, and 86 plant species from Makawanpur District of Nepal were reported by


India

In India, there is tremendous scope for the study of literature for ethnobotanical knowledge because of the vast heritage of vedic literature, which dates back to 2000-1000 B.C. Studies on Ethnobotany in India were initiated by the Economic botany section of Botanical Survey of India since 1954. Ethnobotanical studies in India in modern times started before the term was coined with collection of information by Watt (1889-1896) in connection with the compilation of his dictionary, about a century ago. Haines (1910) work of the peoples association with plants, work of Russel and Hiralal (1916), Bodding (1927), further enhanced the preparatory framework of modern ethnobotany by the way of their contributions in different cultural aspects of the Santals for a long period. Jain started intensive field studies among the tribals of Central India in 1960 and published a good number papers on ethnobotany Jain (1963a,b,c,d, 1964a,b,c; and1965). Singh and Chunekar (1972) have published a full glosssary of medicinal plants included in the ancient classical works of Charak Samhita, Sushruta Samhita and Astanga Hridiyam. Mudgal and Pal (1987) gave a synoptic treatment on the ethnobotanical works in India. Binu et al. (1992) compiled an outlined of ethnobotanical work carried out in India. Mhaskar & Caius (1931) published a list of plants used as antidote in their paper “Indian plant Remedies in snake bite”. Ethnobotanical contributions are arranged
statewise, alphabetically. Work carried in North-Eastern States, on the ethnobotanical plants employed by the people of these regions, have been reviewed separately.

**Andhra Pradesh**


**Bihar**


**Chattisgarh**

Vivek and Sikawar (2003) documented Plants used as fish poison by the tribals of Surguja District in Chattisgarh.

**Gujarat**

The folk medicines used by the Dang tribe are reported by Joshi et al., (1980). The plant species having ethnobotanical value, used by the Bhils, Rabaries, Gharashias and Dubias tribes in Gujarat was documented by Shah and Gopal (1985). Joshi (1988) provided information on the 139 plants of medicinal value. The ethnomedicinal uses of plants in Sunderban was recorded by Tribedi et al., (1993).
Bhasker (2007) reported 29 dye yielding plants used for indigenous art in Patan city of Gujarat.

**Haryana**

Lal and Yadav (1983) recorded 69 species having medicinal importance and 66 prescriptions for therapeutic dose, of the plant extracts were also mentioned. Medicinal application of each species was presented. Jain (1984) documented 26 medicinal plant species of Morni and Kabasar hills in Ambala.

**Himachal Pradesh**

50 plant species having ethnobotanical importance along with parts of plants used and mode of administration of each species are reported by Kapahi (1990). Pandey *et al.*, (2000) reported 17 gymnospermic medicinal plants from Kumaon Himalaya. Singh (2000) reported useful plants of Kullu District in North-Western Himalaya. While Savitri and Bhalla (2007) studied about the food and beverages producing plants of Himalaya.

**Jammu & Kashmir**


**Karnataka**


**Kerala**

Manilal (1981) reported ethnobotanical account of the resemblance in shape of dolmens to that of mushrooms in several localities of Kerala. Kumar *et al.*, (2000) documented ethnobotanical studies on the hill tribes of Shola forest of high ranges of

**Madhya Pradesh**

Jain (1962) studied the Indian ethnombotanically plants used as medicine by the tribals of Madhaya Pradesh. Jain (1963 a, b) also reported the uses of 50 less known common plants as well as ethnombotany of the tribal areas of Madhaya Pradesh. Report on the classification of 88 recorded wild plants under 10 groups used by the tribes of Baster district has been reported by (Jain, 1965). Pandey et al. (1991) reported folk medicine of *Baiga* tribes and mentioned uses of 25 plant species. A few other contribution are ethnombotanical herbal legumes of Bundelkhand by Bhalia et al., (1992); Ethnomedicinal plants of Murias of the Indravati Tiger Reserve, Baster by Kumar (1996); Maheswari and Singh (1996).

Report of the 101 medicinal plants mentioned in the medicinal plant lores and their arrangement in 35 groups of ailments with 8 methods employed in the preparation for different treatments have been presented by Jain (1965). Jain et al., (2010) also documented the unreported ethnomedicinal uses of plants of Betul district of Madhya pradesh.

**Maharashtra**

Upadhye et al. (1997) documented ethnomedico-botany of some sacred plants of Western Maharashtra. Kothari and Rao (2000) contributed in the field of ethnobotany of Thane District. Kulkarni and Kumbhjojkar (2007) have reported the Kitchen garden plants of ‘Mahadeokoli’ tribe. Herbal antidotes used by banjara people of Umerkhed region was reported by Bhogaonkar & Kadam (2007). Bhogaonkar & Ahmed (2007) also reported some less known folklore Unani uses of plants of Amravati District. Kamble et al.,(2010) have reported about the plant used in traditional medicine by the Bhilla tribe.
Orissa

Jain (1965) reported, 9 timber yielding plants used in the making of different musical instruments used by the Gonds and 20 species by the Kondh and Savara tribes of Ganjam and Phulbari areas in Orissa. These are used for magico-religious purposes. Srivastava and Rout (1994) reported some plants of ethnopaediatric importance observed in the district Koraput. Medico-ethnobotanical studies in Ganjam and Phulbari district was documented by Mohanty et al., (1996). Ethnomedicinal plants used in touch therapy at Bargarh district was reported by Sen & Bahera (2007). Prusti (2007) documented ethnomedicine used by the Bondo tribe of Malkangiri district. Rout (2007) documented ethnomobotany of 19 diversified wild edible fruit plants from the Similipal Biosphere Reserve, Orissa. Satapathy (2010) documented the ethnoveterinary practices in Jajpur district of Orissa.

Punjab

Koelz (1979) studied ethnobotany of Lahoul in Punjab. Lal and Lata (1980) provided information on the plants used to regulate fertility by Bhat community in Punjab.

Rajasthan


Sikkim

The contribution made by Hajra and Chakraboty (1982), Bennet (1983) and Uniyal (1980) in the field of ethnobotanical plant are important. Bharti and Sharma (2010) reported some ethnoveterinary plants records for Sikkim Himalaya.
**Tamil Nadu**


**Uttar Pradesh**


**Uttarakhand**


**West Bengal**

North-Eastern Region of India

A review of literature on ethnombotany from the region reveals that there are many tribal areas/tribes remained ethnobotanically unexplored. The peculiar geographical position and the location of the hills compounded by rough terrains, kept those areas and tribes out of ethnobotanical studies (Dutta and Dutta, 2005). So far different authors from the north eastern region have reported 1350 ethnomedicinal uses of plants, 665 uses as food plants and 899 for miscellaneous uses. Clarke (1889) extended his ethnobotanical work upto Kohima and Manipur. Many reports of ethnobotanically impotant plants were reported by different authors from North East India viz., Jain and Dam (1979); Arora (1981); Islam (1996); Awasthi et al. (2000); Dutta and Dutta (2001); Dutta and Dutta (2007); Singh et al.,(2007); Basak et al., (2010). Many tribal areas and tribal communities in the North-East India are either unexplored or under explored with regard to their knowledge of floral wealth along with their ethnobotanical aspect (Rethy et al.,2010).

Arunachal Pradesh


Meghalaya

India” was documented by Kayang (2007). Hynniewta and Kumar (2010) documented hidden knowledge of traditional medicines of the Khasis.

**Nagaland**


**Mizoram**


**Tripura**


Some observation on status of medicinal plants of Barak valley was reported by Saha and Dutta (2001). Nath and Choudhury, (2011) reported 64 plants species as medicinal used by Hmar people of Cachar District of Assam. Nath et al., (2011) also reported 34 medicinal plants used in different ailment by the Dimasa Tribe of Barak valley. Baruah et al., (2011) documented 42 ethnomedicinal plants used to treat 18 different diseases by the Kuki tribe of Cachar district of Assam. Paul et al.,(2011), published 15 medciinal plant species found in the Subankhata Reserve forest of Assam. Ethnomedicinal plants used by the Barman and Manipuri communities of Cachar district (Das and Sharma, 2002), Home garden plants & their uses in Karimganj district (Das et al., 2006), Cycas pectinata – a wonderful native plant remedies for piles and asthma in Southern Assam (Das and Dutta, 2007), Medicinal plants used by the tribes of Cachar district (Das et al., 2008), Edible plants of South Assam (Das et al., 2008), Ethnomedicinal uses of Drynaria quercifolia (Das et al., 2009), Household courtyard plants of Southern Assam (Das et al., 2009) etc. Das et al., (2010) published a book about the medicinal plants used by the Tribal people of southern Assam. Chakraborty et al., (2010) reviewed the ethnobotanical studies in Barak Valley. Bharali et al., (2013) gave an account of Ethnobotanical studies on the Lalung tribe of Nagaon district.
Manipur

A detailed study on the botany of Manipur state was done by Deb (1956-61). He reported 2192 plant species distributed over 213 families and 1012 genera ranging from Pteridophytes to angiosperms. Sinha (1987) was the pioneer in the field of Ethnobotanical study in Manipur and reported 667 ethnobotanically important plant species. He also reported a new plant species of Isoetes i.e. *Isoetes debii* Sinha. Sinha (1990) also studied the flora of Tamenglong area and reported 640 species of which 516 plant species were found to be ethnobotanically important. Singh (1990) studied the medicinal plants of Manipur and collected about 150 plants. Singh (1992) listed 54 medicinal plants according to the phytochemicals constituent of the plants. Devi (1995 and 1998) published two volume of books entitled “Folklore on the use of indigenous plans and animals species that are ethnobotanically used by the Manipuris”. Singh, *et al.*, (1999) reported 41 medicinal plants which are used in the treatment of dog bites in a traditional way by the Meitei community of Manipur. Singh, *et al.* (2001) studied wild edible aquatic plants of Manipur and reported 31 wild plants which are commonly used by the Manipuris as edible plants. Singh *et al.* (2000) reported 25 medicinal plants used to enhance the vocalism by the traditional Meitei singer of Manipur. Elangbam (2002) reported on the various aspect of wild edible plants of Manipur. Sharma (2003) studied ethnobotanical use of edible monocotyledonous plants by the Meitei community of Manipur and reported 29 plants species which are commonly used by the Manipur as edible, ethnomedicinal folklores and various other aspects. Khan (2005) also reported on the ethnobotanical aspect of Thoubal district, of Manipur. Ashalata *et al.*, (2005) published 120 medicinal plants used in skin disorder, ulcer, rheumatism and bronchitis. Meitei and Singh (2007) reported 160 medicinal plants under 151 and 82 families found in the Thoubal District of Manipur.

Sumitra *et al.*, (2009) published a total of 57 traditional medicinal plants used by the Tangkhul Naga tribe in Ukhrul District of Manipur. Sandhyarani *et al.*, (2009) described 63 species of edible flowers pertaining to 51 genera and 34 families found in the valley districts of Manipur. Romila *et al.*, (2010) reported 15 plant species used as remedy for the treatment of diabetes in Manipur. Devi *et al.*, (2011a, b) reported 74
medicinal plants used by the Kabui Naga tribe of Manipur and 65 vegetable plants used by the Monsang Naga tribe of Manipur. Khatoon et al. (2012b) reported 50 plant species used by the Kom tribes of Manipur.

In addition to this many researcher have also published a number of papers on various indigenous plants which are used as edible and ethnomedicinal plants. Some of the publications are Singh and Singh (1985), Singh and Yadav (1989), Mao (1993 and 2000), Chakarborty (2003), Singh and Singh (2003), Akimpaо et al., (2005), Devi, (2010), Sumitra et al. (2011), Daimei et al.,(2011), Luwang (2013). Khatoon et al. (2012 a, b,c and 2013 a, b) recently carried out ethnobotanical studies on the Kom tribe of Manipur.

Only few research works have been done about the ethnobotanical aspects in Manipur. So far, no work has been done on the intensive ethnobotanical aspect of the Kom tribe of Manipur. In the present study an attempt has been made to investigate the various aspects of plants used by the Kom tribe of Manipur.