CHAPTER-5

GENERAL MATERIALS AND METHODS
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Rao and Hajra (1987) stated that first step in Ethno-botanical investigation is to identify a particular tribe in their local jurisdiction. Accordingly in the present investigation Jaintia and Rongmai Naga tribe inhabited villages of the Barak Valley were identified with the help of the data from the Tribal Office and local people.

Intensive field work has been undertaken from 2007 to 2010 in 34 Jaintia and Rongmai Naga villages covering different seasons for collection of information regarding medicinal plantlore.


For conducting interviews every possible opportunities were taken. Some people were contacted at their homes, at times staying with them and their uses of medicinal plants were observed and noted. Some people were interviewed at public meetings and conferences, social gatherings etc.

During plant exploration and data collection, it was also observed that most of the tribals followed medical advice of kabiraj, ohjas or chief of their communities. Now a days, these tribals are in continuous touch with urban life, therefore there is an evident threat of a gradual decline of their touch with their indigenous knowledge of herbal medicine. Contacts were made with these tribal people (i.e Jaintia, Rongmai Naga) in a different manner, most of the times they were approached through their village headman who were very helping in reaching the remote areas. It was also essential to make hut-to hut queries and personal observations were also done in their villages, collectiong plants and inviting elder persons for discussions. It was felt that interview with a group was more reliable as unanimous affirmations or denials could be easily assessed. Moreover, heated controversises and discussions were of much use in making the information more reliable.
As far as possible sufficient information have been recorded about the plants with regards to their vernacular name, plant/plant parts used, mode of preparation of medicine either individually or in combination with other plants, mode of application and approximate dosage for the treatment of ailments, domestication of such plants used as herbal drugs for their subsistence and livelihood and commercial exploitation of wild plants based on the market survey. At the time of collection of the voucher specimens of the plants and the herbarium technique followed are as suggested by Jain & Rao (1977); Mehrotra (1989); Martin (1995). The therapeutic value of plants as suggested by tribal medicine men have also been recorded.

Plants have been collected in its flowering and fruiting conditions as far as possible from its natural habitat and tagged with collection numbers. Small herbaceous plants as a whole whether it is bulbous or rhizomatous and in case of trees, shrubs, undershrubs, woody herbs and climbers representative twigs have been collected. For collection of very large plants the habit of the plant and approximate size of the culm/pseudostem, leaves and inflorescences were recorded in the field note book, or the whole plant or its main parts are photographed.

At the time of collection of plant specimen, mature seeds were also collected as far as possible for experimental purposes. These were dried and mounted along with the herbarium specimens. Thorough observations were made in the field of the collected specimens and date was recorded regarding the location, natural habitat, date of collection distribution pattern etc. Small herbaceous plants were collected as a whole and in case of trees, shrubs, undershrubs and climbers, respective twigs were collected.

Amongst the collected plants, the delicate ones were pressed in the field itself and the rest were brought in plastic bags and were put in the press for drying. The collected specimen were dried and poisoned in saturated solution of mercuric chloride dissolved in absolute alcohol and mounted with glue on standard herbarium sheets (42 x 28 cm) with help of fevicol/just warmed glue. The printed labels were affixed at the right hand corner of the bottom of the sheet before mounting of the specimen and later field data were transferred with the help of
collection number, date of collection, locality, distribution, short description as recorded in the field data book. Their vernacular names, scientific name and uses along with the photographic notes and collectors name and herbarium sheets prepared were kept ready for identification.


Plant species were finally arranged according to the families (Assam’s Flora, Chowdhury, 2005), followed by genus name with citation on the reference of original publication, botanical name, vernacular name along with name found, if any, in Hindi, Bengali or Sanskrit literature.

All the plant species have been described briefly for easy identification followed by phenological data, date of collection, name of collector, collection number, habitat, mode of preparation of the plant parts, purpose of use along with the established reports of utilization were also furnished.