SUMMARY
SUMMARY

Critical review of literature related to the field concerned (not only of North-Eastern region but also India as a whole and to some extent countries abroad) has been done in order to assess the present state of knowledge on the study of medicinal plants and their use in Ethno-medicine at large.

History of Barak Valley, geographical features, present status of Cachar district, location, river system, climatic condition, and soil, which have great impact on the floristic composition are correlated with the tradition, and herbal medicine system of different communities.

The people inhabiting Cachar district and their problem has been highlighted. Brief account of the origin and socio-cultural aspects of the selected communities (H’mar, Barman, Riang etc.) have been illustrated.

Soil analysis was carried out from the selected areas of Cachar district to correlate their impact on the growth and distribution of the vegetation i.e. medicinal plants.

Intensive field work has been carried out during the last four years and data collected specially on the Ethno-medicinal uses of plants have been recorded and presented. While carrying out the work the methods suggested by Jones (1941), Schultes (1960, 1962), Jain (1964a, 1967a, 1986, 1987, 1989) and Ford (1978) have been followed. Extensive field surveys were conducted in different tribal and non-tribal villages of Cachar district. A number of old medicine-men were interviewed and information i.e., either individually or in combination with other species in herbal medicine with their process of preparation of products and doses for the treatment of diseases, have been collected from them. Repeated queries for authenticity of the information have
also been made and useful medicinal plants have been recorded. The plants were serially numbered and field data including vernacular names, the spot of collection etc. were also recorded. Collected plant species were preserved as Herbarium following the methodology as suggested by Jain & Rao (1977). Necessaryphotographical documentation have also been done in the field itself.

Critical morphological studies of the collected specimen have been made for identification. Plants were identified with the help of the available literature. These were confirmed by consulting the Herbarium of North Eastern Hill University, B.S.I. (Shillong & Dehradun).

Arrangement of the plant species enumerated have been presented alphabetically and the correct nomenclature and citation of references of the original publication has been provided. The family names have been given in brackets. This is followed by the brief description of the plants, phenological data, locality, date of collection, distribution, utilization of plants, finally established reports of their uses in medicine, if available, have also given.

The established reports on the utilization of each plant species have been consulted from a number of published account like Kirtikar & Basu (1935); Nadkarni (1954); Chopra etal. (1956); Wealth of India Series (1948 – 1976); Ambasta (1986); Nayar etal. (1989); Pal & Jain (1998); Asolkar etal. (1992); Anonymous (1992); Rawat & Chowdhury (1998); Bhattacharjee (2001); Sharma etal. (2003); Sharma (2003).

Finally collected plant species were categorized on the basis of their uses in the ailments / diseases. It was observed that the maximum number of species are used in Cuts and Wounds and only one species has been reported against Mouth cancer.
The total 245 plant species collected comprises Angiosperms (245) and Pteridophytes (13). Out of which 36 species are recorded in the present investigation as new claims and 98 species are reported having additional new uses in Ethnomedicine.

Few rare and endangered plant species were also collected & reported in the present investigation.

It has been observed that the increase in population, commercial exploitation, extensive utiliization, industrialization, construction of road, practice of shifting cultivation, disturbance of Wetlands have seriously threatened the survival of some of plant the species viz. *Angiopteris evecta* (Forst.) Hoffm., *Costus speciosus* (Koen.) Sm. of this region.

Biological screening of seven plants have been carried out against the bacteria *Staphylococcus* sp and *Streptococcus* sp using the methodology as suggested by Vincent and Vincent (1944). The positive result against both the bacteria confirmed the authenticity of the reports given by the ojha, baidya, old folkmen and other medicine men for the use of these medicinal plants.

Out of the 245 plants, four plants were considered for Phytochemical analysis. The results suggest that this may have potential for the development of new drugs. However, it needs further in-depth study, if they are to be considered for commercial exploitation.

Conservation strategies of the medicinal plants vis a vis indigenous knowledge has been discussed.