CHAPTER - I
INTRODUCTION

1.1 CHOICE OF THE PRESENT WORK

The North Eastern region comprising of Assam is regarded as the biogeographical ‘gateway’ for much of India’s biological resources. It represents nearly 50% of the flora of the Indian subcontinent (Rao, 1994). The region is botanically very interesting due to occurrence of varied kinds of floristic elements. This is the place where Takhtajan (1969) found the ‘cradle of angiosperms’ on the basis of a number of primitive angiosperms. The forests here produce a large variety of valuable trees, shrubs, herbs, climbers, along with epiphytic and parasitic angiosperms. This geographical region is rich with plant resources of potential economic value.

North Guwahati and Kurua hill ranges on the north bank of the river Brahmaputra (Kamrup & Darrang districts) in central Assam, comprising about of 25 small and big hills, 11 reserve and proposed reserve forests, about 35 small and big swamp areas or beels. The region is considered as one of the less disturbed and unexplored forested belt of Assam. As the area is on the northern bank of the river Brahmaputra and lacks of surface communication leading it to a less noticed one by human settlement. The area with several vegetation types, hills, wetlands, natural resources, etc. are also attracted not only to the academicians, scientists and researchers but botanists, tourists, foresters, traders, planners, archaeologists, environmentalists, horticulturists, NGO’s and all those interested in plants and plant wealth of Assam in general and the area in particular also. All kinds of plants relating to different climatic conditions are available in this area. Except some sporadic collections made by different workers, the area is still remains botanically unexplored and as such a detail account of floristic diversity of the area is still lacking. This floristically rich area was unnoticed and unexplored by plant explorers where the area containing immense plant resources of botanical interests.

The vegetation of this area is unique and provides ample scope of study of plants in its natural environment whether they are terrestrial, aquatic, epiphytic, parasitic, saprophytic, etc. The tropical climatic condition and the river Brahmaputra has a great influence over the flora of this region. Botanically a very limited or almost negligible work has been done in this area. The botanical explorations made from time to time in various parts of Assam by different workers. But the present study area got a little importance or in some cases total negligence was seen. Workers like Griffith (1848), Hooker (1872-1897), Kanjilal et al., (1934-1940), Sengupta (1937), Das (1942), Rowntree (1953), Rao & Panigrahi (1961), Rajkhowa (1961), Bhatnagar (1963), Das & Rajkhowa (1968), Rao and Verma (1970-1976), Rao (1974), Baishya (1999), Barua (2001), etc. are some good examples of floristic documentation of Assam. But proper documentation or inventorisation is still lacking in the above floras of the present study site. Even after the establishment of the Botanical Survey of India, Eastern Circle at Shillong in 1956, only a little botanical work has been done (Barua, 1992 and 2001) from the area. Recently, Kalita (2006) reported 21 species of orchid and Kalita & Borthakur (2006) reported two new species of Glochidion J. R. & G. Forst. from this area.

Keeping in mind the above facts the present work on the flora of North Guwahati hill range and its adjoining areas of Kamrup and Darrang districts of Assam has been undertaken.
1.2 AIMS AND OBJECTIVES

Lack of industry and other avenue for development, it is the only option is to incorporate the natural resources of North Guwahati and Kurua Hill ranges for initiating socioeconomic scheme for the people of the area. Keeping this in mind the present work has been taken up to record the plant diversity with the following objectives:

1. To record the plant diversity of the area.
2. To work out the updated nomenclature of the plant species.
3. To find out the rare and threatened plant species.
4. To find out the endemic plant species.
5. To find out the useful plants for the local inhabitants and also those plants of economic importance but not used by the local people.

The work is expected to fill the gap in our knowledge on angiospermic plants of the area in particular and Assam in general.