

FOREST FLORA OF MEGHALAYA

Volume I

Ranunculaceae to Cornaceae

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1985

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INTRODUCTION

The state of Meghalaya, which earlier formed a part of Assam is one of the richest and interesting Botanical regions in the whole of Indian subcontinent (Hooker and Thomson, 1855; Clarke, 1898; Chatterjee, 1962). This State, particularly, Khasi and Jaintia hills have been a focal point of floristic attraction for a number of well known British botanists (Buchanan-Hamilton, 1820; Roxburgh, 1820-1824, 1832; Wallich, 1820-32; Griffith, 1848; Hooker, 1854, 1872-97; Burkill, 1925; Bor, 1940, 1942a, 1942b), who from time to time, have studied the flora of these hills from various angles. But still a comprehensive flora of this state remains to be worked out. The only regional flora to cover Meghalaya is that of Flora of Assam (Kanjilal *et al.*, 1934-40), which is firstly incomplete and secondly being a regional flora emphasis given to Meghalayan region is very limited.

The reorganisation of Botanical Survey of India and setting up of a separate circle in Shillong in 1956, has triggered the floristic activity in this region and numerous valuable contributions from this survey have appeared on the flora of the state (Kar and Panigrahi, 1963; Raju, 1964, 1968; Joseph, 1968; Joseph and Deka, 1973; A.S. Rao and Verma, 1969, 1970, 1972, 1973, 1976; Kataki, 1973; Hajra, 1974, 1975; Balakrishnan, 1981-1983). Added to this, the establishment of the University in Shillong has further intensified the floristic activity in this region, and a number of contributions have appeared from this herbarium (Neogi, 1980; Myrthong, 1980; Myrthong and R.R. Rao, 1982; Haridasan *et al.*, 1981; Baishya and R.R. Rao, 1982; R.R. Rao, 1982; R.R. Rao and Kharkongor, 1977; R.R. Rao and Dam, 1979; R.R. Rao and Haridasan, 1982). But none of these studies exclusively deal with the forest flora of the State.

The publication of a number of forest floras in the early part of the present century (Gamble, 1902; Brandis, 1906; Talbot, 1909-11; Parker, 1918; Parkinson, 1923; Osmaston, 1927), mainly by the forest botanists, were all primarily aimed

at assessing the country's natural wealth. But there appears to be a lull in this direction in the post independence period. After the reorganisation of the north-eastern states and formation of Meghalaya, numerous intensive programmes of development are being planned and it is highly necessary to have an inventory or assessment of the forest wealth of the state, before any developmental projects are thought of.

Also, the natural forests are being cleared extensively either for shifting agriculture (*jhuming*) by the local people or in the name of developmental activities. This has rendered a number of economically important species or germplasm stocks endangered or threatened and perhaps extinction of a few. The latest reports of IUCN indicate that there is a possible extinction of about 10 per cent of our flora by the end of the present century, if immediate conservation measures are not undertaken. Therefore, it is imperative to have an inventory of our forest wealth before we lose many of these species.

Keeping these aspects in view, a '*Forest Flora of Meghalaya*', based on extensive survey and study of forest flora for little over 5 years is presented here.

LOCATION AND GEOGRAPHICAL FEATURES

The state of Meghalaya comprising of the west Garo, East Garo, West Khasi, East Khasi and Jaintia hill districts, which earlier formed part of Assam, came into existence on 19th January, 1972. It lies between 25°.00' and 26°.10' N latitude and 89°.45' and 92°.45' E longitude and covers an area of 22,549 km². It is bordered on the north-west, north, and east by Assam and south and south-west by Bangladesh (Fig. 1).

The state is a conglomeration of undulating hills mainly with an east west orientation, separating the valleys of Surma on the south and Brahmaputra on the north, dissected by deep ravines, rivers and rivulets. It presents a picturesque landscape of plateaus, planes, lakes and waterfalls. The altitude ranges from 50-1950 m with the highest peak, the Shillong peak lying centrally in the plateau of Khasi hills. There are several

other peaks such as Diengiei peak (1770 m), Kyllang rock (1705 m) in Khasi hills; Mawryngksih in Jaintia hills (1631 m) and the Nokrek peak in Tura range (1515 m).