I. INTRODUCTION

The biological resources are indispensable for economic growth and development of any nation. The Convention on Biological Diversity held at Rio in 1992 has made impetus on the importance of understanding and conserving the existing biological resources for the benefit of the present as well as future generations. Following this convention, the biodiversity conservation has become the hottest subject in the contemporary world scenario. The biodiversity particularly that of tropical world needs immediate attention as its resources are facing a high degree of threat of extinction. There are about 2,50,000 vascular plants in the world and the current indication that 20,000 to 25,000 of these (i.e. 10%) are dangerously rare or coming under severe threat (Lucas & Synge, 1978). If the same principle is applied, around 2,000 of Indian plants are at the verge of extinction. The three volumes of Red Data Book of Indian Plants (Nayar & Sastry, 1987, 88 & 90) published by Botanical Survey of India enlist only about 30% of these and the remaining is yet to be identified. The rate of destruction of tropical forests and the rate of extinction of existing life forms have led to the recognition of the need to inventorise the biota of our planet as quickly as possible. India has to expedite the task of documentation of its bioresources to develop and implement an appropriate strategy for their conservation and sustainable utilization.

India is rich in biodiversity by virtue of its different geographical, bioclimatic and edaphic conditions and altitudinal ranges influenced by three mountainous ranges: Himalaya, Eastern and Western Ghats and stretches of ocean surrounding peninsular India and monsoonic weather. Besides being one of the 12-mega biodiversity countries of the world, India harbours 2 of 25 biodiversity hot spots [recently it has been revised to 34
(Huge Synge, 2005) of the world (Myers et al., 2000) viz. the Himalaya and the Western Ghats. As of now 19,395 taxa (incl. infraspecific taxa) of flowering plants have been reported from this country (Karthikeyan, 2000). The number is increasing rapidly owing to addition of several new taxa and new distributional data from different parts of the country. This indicates that the floristic richness of India has not been adequately documented yet and several areas are still underexplored with many pockets of forests remain botanically unexplored.

Tiruvannamalai district of Tamil Nadu State is one such neglected and inadequately studied areas despite its reputation for harbouring rich vegetation. Though most of the forest areas are disturbed by the anthropogenic pressures, some pockets are fortunately still intact and are more or less unexploited. A thorough inventory of these selected areas may unfold the diversity of botanical resources and similar exercises in other parts of the country would help in compiling a national Flora. Subsequent to Hooker's (1872-1897) *Flora of British India*, there is no updated Flora providing a reliable documentation of the floristic diversity of the country. The attempt of revising the Flora of India by Botanical Survey of India is still inchoate. Owing to lack of an updated and complete Flora of Tamil Nadu state, the 'Flora of the Presidency of Madras', prepared almost 70 years ago, is being consulted. The present study on floristic diversity of Tiruvannamalai district is sure to contribute to the preparation of Flora for the Tamil Nadu.

Tiruvannamalai, one of the 30 districts and the sixth largest in Tamil Nadu, has 22% of its geographical area under forest cover. A major portion of Javvadhu hills (Javadi hills) occupies the western part of the district. This hill range is best suited for the lush growth of sandalwood trees and bamboos. This mountain also houses settlements of tribal
populations and their precious traditional knowledge. The plains and foothills of the district possess degraded scrub forests. The deciduous forests occur in the hills are also facing anthropogenic pressure. However, some pockets e.g. Valasamalai, Melpattu (Melpat), Inner Javvadhu, etc. are fortunately still in good condition and in these areas the forests have attained their climax status of moist deciduous type of vegetation. Besides these undisturbed forest patches like Paruvathamalai, Swamimalai, etc. the district also possesses several areas having taxonomically interesting species and are also rich in medicinal plants.

Being one of the important pilgrimage centers of the state, the Tiruvannamalai town with its famous Arunachala temple and important Arunachala hill has received great attention and attraction by several renowned saints and religious scholars. Thousands of devotees visit the temple and perform girivalam of the sacred hill every month. It is believed that some of the rare herbs found in and around the hill have medicinal properties. The Paruvathamalai, which is also known for its rich medicinal wealth, has been identified as an important hot spot of the district as it harbours several endemic and endangered species.

The present study has resulted in the preparation of a detailed inventory of flowering plants and ethnobotany of Tiruvannamalai district. Updated nomenclature, brief description, key for easy identification, distribution (global as well as within the district), frequency of occurrence, flowering and fruiting months, taxonomical and/or ecological notes, medicinal and other uses, conservation status and local names are provided for the naturally occurring species. This work is expected to be useful to botanists, college and university teachers and students, foresters, zoologists, town planners, healers,
pharmacists, manufacturers and users of herbal drugs, agriculturists, horticulturists, and any plant lovers of the region.

II. AREA OF STUDY

1. History of Tiruvannamalai

Early period: There is very little information available about the early history of the district. From the remote period of Stone Age, man must have been living in the district. Polished stone axes and other materials used by those men, excavated by the Archaeological Survey of India in the district are said to belong to Neolithic period and estimated as at least 4000 years old. This period was succeeded by Iron Age along with which agriculture and rearing of domesticated animals were also started (Rajagopalan, 1978).

Medieval period: From the historic period, this part of the country had been ruled by several dynasties which can be seen in the various epigraphs archived in the district. The district might have been under the sway of the Pallava Kings, who ruled from Kancheepuram before the 9th century A.D. The Chola Kings ruled over the country for more than four centuries from 850 A.D. to 1280 A.D. In the 14th century the Hoysala Kings had their capital at Tiruvannamalai. Afterwards the Kings of Vijayanagar and Nayak Kings of Thanjavur ruled over this part of the country. In the 17th century it came under the sway of the Nawabs of Carnatic.

Modern period: After 1753 A.D. Muraru Raya, Krishna Raya, Mrithis’Ali Khan, Burkat Ullakhan, French Soupries and Sambrinet, English Captain Stephen Smith besieged this