

INTRODUCTION

Introduction

The present investigation, the "TAXONOMICAL STUDIES IN THE ASCOMYCETOUS FUNGI FROM SOUTH WESTERN MAHARASHTRA" is mainly based on taxonomical study of the fungi confined to Pune, Sangli, Kolhapur, Ratnagiri, Sindhudurg and Raigad districts of South Western part of the Maharashtra State.

Maharashtra State is one of the major states in India, which occupies an area of 306345 Square Kilometres and forms the Western Zone of the country. The State is divided into three parts viz. (i) Western Maharashtra, (ii) Marathwada and (iii) Vidarbha. Western Maharashtra is further divided into three parts viz. Coastal Konkan, Ghats and Desh due to Western Ghats or Sahyadri ranges, traversing this area more or less parallel to the West. Geography, climate, vegetation etc. of this State have been described in detail by Arunachalam (1967) and Deshpande (1971). The Western Ghat lying between 8°15' N and 21°20' N latitude.

Topography and Soil :

The Deccan trap influences the landscape over a major portion of the area with an average height of 500 m. above sea-level. Ghat is marked by several hill ranges and valleys

with characteristic 'Lava' topography and the soil vary from rich loam to poor 'murmud'. The hills and ridges are covered with characteristic lateritic soils; while in the valleys the soils are mixed character from brown to red. In eastern part, due to undulating nature, deeper soils are formed in the low lying parts, while ridges are covered by shallow soils.

Physiographically the area can be divided into three broad zones :

- i. The Western Part : It receives heavy rain and is mountainous and covered with lateritic soil.
- ii. The Central part : It receives moderate rain. The soil is brownish and fertile with excellent granular structure.
- iii. The Eastern Part : It receives precarious rain and with medium black, well drained soil of varying depth.

Rain fall :

The South-West Monsoon brings almost entire annual rainfall in the period of three months only from mid-June to mid-September, which is as high as 6350 mm at Mahabaleshwar in the West and minimum about 480 mm at the east of the area. About 90-95% of annual rainfall occurs in the Monsoon period in the extreme west and about 60% in the north-east. The month of October and December together receive 15-20%; April and May together receive about 5% of total annual rainfall. July is

the wettest month receives about 40% of annual rainfall.

Temperature :

There is wide range of variation in the temperature between winter and summer as well as between day and night. In summer, the temperature rises as high as 38°C during month of April while in the winter it declines as low as 9°C during month of December.

Relative humidity :

The average relative humidity is nearly 57%. It is maximum in the month of July and August followed by gradual fall every month from September to a minimum in March about 20%. The following table (Table No.1) shows average rainfall, temperature and relative humidity in the three successive years.

Table No.1 : Showing the average rainfall, temperature and relative humidity of Kolhapur district.

Year	Rainfall in mm	Temperature in degree Selsius		Relative humidity in percentage
		Maximum	Minimum	
1988	84.0 mm	31.2°C	15.5°C	77.9%
1989	57.3 mm	30.7°C	15.2°C	70.0%
1990	75.8 mm	33.3°C	17.6°C	73.0%

Climate :

Climate of the Maharashtra State is temperate especially of the Ghats. As far as climate is considered the year can be divided into three climatic periods - i) Hot weather period from March to May, ii) Rainy period from June to October and iii) Cold weather period from November to February. Edaphic and varied ecological factors leads to the development of the different types of vegetation of South-Western Maharashtra, which are as follows :

i) Evergreen Type :

This type of vegetation occurs at the foot of Ghats, dense evergreen forests receiving rainfall more than 2000 mm. It is extended from Mahabaleshwar to Bannoli region. At further east are semi-evergreen, mixed deciduous forests, while in the valleys and in depressions of Ghats evergreen forests of West Zone are luxuriently developed.

ii) Tropical Semi-evergreen type :

This type of vegetation occurs in region that receives rainfall less than 2000 mm per year.

iii) Tropical deciduous type :

This type of vegetation occurs in the Western hilly tracts at an altitude of about 650 m. with fairly high rainfall as compared to the rest of area. Vegetation in this area

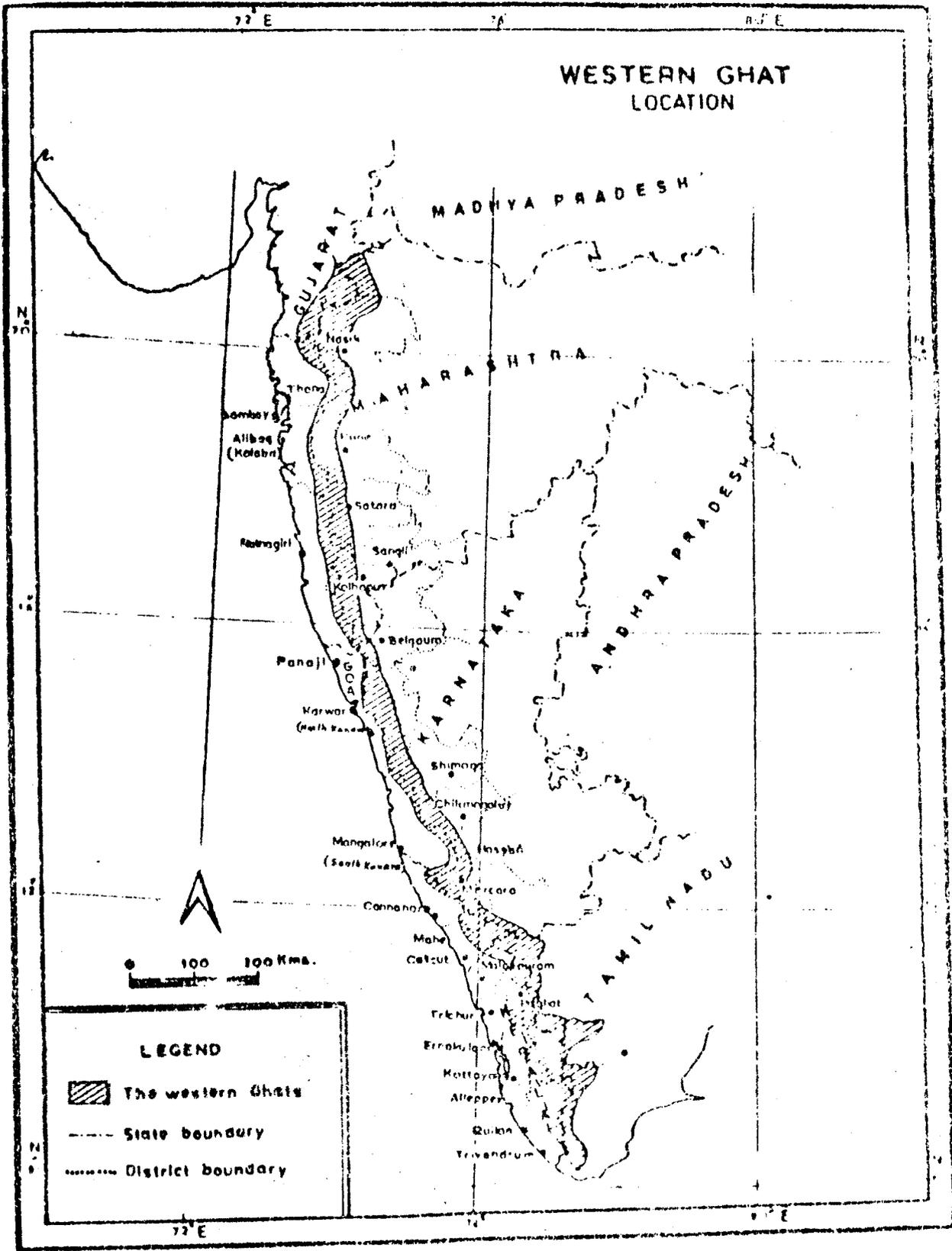
consist of deciduous mixed with a few stunted evergreen species except a few pockets like Amboli which mainly composed of evergreen species.

iv) Dry deciduous type :

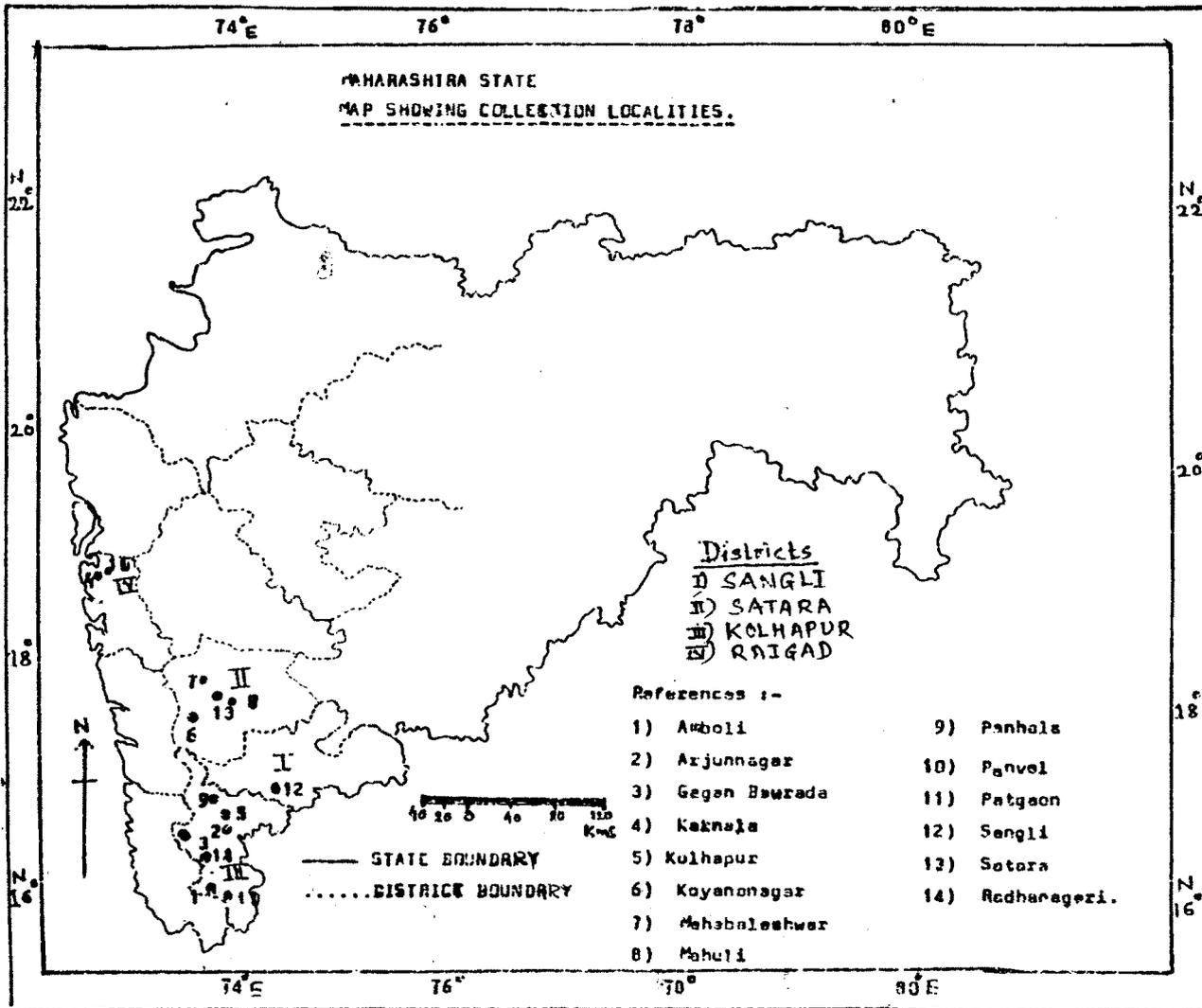
This type of vegetation occurs in low hilly tracts in the middle portion extending from Western rim to gently undulating eastern plains with moderate annual rainfall higher than eastern region but lower than western region.

v) Thorny and shrubby type :

This type of vegetation occurs in gently undulating eastern region with scanty rainfall.



TEXT PLATE 1



TEXT PLATE 2