

INTRODUCTION

INTRODUCTION:

The present study on discomyceteous Fungi is based on floristic and taxonomic view and confined to the south western part of Maharashtra state. Most of the Discomycetes forms are ephemeral except few majority of them are saprophytic growing on ^athe variety of ~~the~~ substrate. They are available in abundant ^{ge}during ^pmansoon only in the forest ^sof Western ghats so their study remain neglected by most of the workers from the Maharashtra state. Only saprophytic Discomyceteous fungi are studied from Maharashtra, ^{vt}Dr. S. D. Patil, Dr. M. S. Patil, Dr. D. N. Ghadge, Sawant R. S. The work on the Discomyceteous fungi is scanty and not studied systematically except ^{for}few workers who worked on taxonomy of Discomycetes.

Therefore the topic has been selected to investigate the Discomyceteous fungi from south western districts of Maharashtra.

Maharashtra is the major state of India having ^{au}area of 306345 sq. km. from western zone and in the limits of Deccan trap. The state is divided into i) Western Maharashtra ii) Marathwada and iii) Vidarbha. The Western - Maharashtra is further divided into three areas as coastal Konkan, Ghats and Desh. Geography, Climate, Vegetation etc., of the state has been described in details by Arunachalam (1969) and Deshpande (1971). Edaphic and climatic factors shows great diversity. The present study is confined to

South-western Maharashtra and especially to the western Ghats. The area under study includes Koyananagar, Mahableshwar, Radhanagari, Gaganbawda and Panahala of the Western ghats, particularly Satara and Kolhapur districts.

The western ghats lying between $8^{\circ}15'N$ and $21^{\circ}20'N$ latitude with average height of 1200 m. and runs for about 1600 km. along the western side of the Deccan trap.

TOPOGRAPHY AND SOIL:

The Deccan trap influences the landscape over a major portion of the area. The rocks of Dharwar and lower Kaladgi series introduce change in the topography southern extremities. Sahydri trap forming the prominent feature along the western boundry. West portion of pleateau is marked by hill ranges. These ranges have characteristic 'Lava' topography. Due to topographical characters the soil varies from tract to tract like rich loamy to poor thin 'Murmud'. Soils are formed from the trap except the forest area of west where they are of laterite in origin. The hilltops and ridges are covered with laterite soil while valleys are of mixed characters and varies from brownish and reddish. In the eastern portion due to undulating nature deeper soils are formed in the low lying while with ridges are covered with shallow.

The western part of Maharashtra receives heavy rain fall in ⁰monsoon. The PH of soil varies from 4.5 to 6.5. The soils of hills are red to brownish^{>C}red mostly eroded

and with good drainage with low percentage of Phosphorus, Nitrogen and Lime. This area is not covered by forest but soils on hilltops and ridges under forest cover are fertile and rich in humus. Soil in the vallies are rich with Nitrogen and Organicmatter but with lower phosphorus *and* Potash content. The soils are fair in moisture content and microflora.

RAINFALL:

South west ^omonsoon from mid June to mid ^gseptember brings the entire annual rainfall which is as high as 6350mm at Gaganbawda area and lowest about 480 mm. at East part of the area. The monsoon months accounts 90% to 95% of the annual rainfall. July is the wettest month with about 40% of annual rainfall.

TEMPERATURE:

It ranges seasonally in summer ^{to} it rises up _^ 107°F during the month of April while in winter it goes down upto 58°F during the month of December and January.

RELATIVE HUMIDITY:

The relative humidity of the area is nearly 57%. The maximum relative humidity is in the month of July

and August then there is fall in every month from September. Climate of the area of adjoining ghats are temperate. There are three climatic periods as hot (March to May), rainy (June to October) and cold (November to February).

VEGETATION:

The soil and climatic variations lead to diversity in vegetation in this state. The type of vegetation in south western part includes tropical deciduous, dry deciduous, thorn ~~and~~ scrub, semievergreen, evergreen and open grasslands. The varied ecological factors change from locality to locality ^{and} also changes type of vegetation. The varied agricultural practices, cool and humid weather provides good opportunity for the growth of many parasitic and saprophytic fungi. Kamat et. al. ← (1971). Dr. S.D. Patil ^{year?} and Dr. M.S. Patil, Ph.D. Thesis (1979) Dr. D.N. Ghadge Ph.D, Thesis (1987). From previous works the chief natural source of fungi are the localities like Ajara, Amboli, Koyananager, Patgaon, Gaganbawda, Panahala, Radhanagari, Mahableshwar, Kas and other in Western ghats.

This reveals that there is no systematic work has been done on Discomycetes (except few localities).

The present study is concerned with systematic investigation of Discomyceteous fungi occurring in south western

part (western ghats) particularly from Koyananagar and Mahableshwar of Maharashtra state.

These Discomyceteous fungi collected particularly from this region are mostly saprophytic growing on dead or living parts of the plants, on humus rich soils as well as on dungs of the animal.