



# **PHYSIOGRAPHY OF THE REGION**



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The hilly state of Kerala, which lies in the southwest corner of peninsular India, occupies a geographical area of 38,864 sq. km. and is positioned between 8° 18' and 12° 48' north latitudes and between 74° 52' and 77° 22' east longitude. It is bounded by the Western Ghats mountain ranges to the east and the Indian Ocean to the west. The state can be longitudinally divisible in to three geographical zones-Highlands, Midlands and Lowlands. Highlands exceed altitude of 900 m in the Western Ghats with several peaks, the highest being Anamudi, at 2680 m. Midlands lie between the mountains and the plains of the coastal region and is chiefly constituted by undulating hills and valleys. Lowlands, the coastal area, comprise river deltas, backwaters and the shores of Arabian sea.

The vegetational luxury of Kerala and its unusual wealth of variety, unique for so small a region, are mainly due to the diverse range in altitude and the resultant variation in rainfall, temperature and humidity. Forests in Kerala which cover 24% of its total geographic area can be broadly classified in to wet evergreen (rain) forests, moist deciduous forests and dry deciduous forests.

The unique floristic diversity of Kerala is closely related to the two principal monsoons, southwest and northeast. The southwest monsoon starts its activity during early June and extends up to September. The northeast monsoon, otherwise known as the retreating monsoon brings less rain in the month of October to December. Dry weather starts from the middle of December and extends to early June. Temperature varies from a monthly mean maximum of 33 °C in April to 27 °C in July and a monthly mean minimum of 26° in April to 21 °C in July.

TBGRI campus, the main focus of collection in the present study, is situated in the southern most part in the forlorn foothills of Western Ghats at Palode, in the Nedumangadu Taluk of Trivandrum district. It has an area of 121 hectares of forest land and is positioned between 8° 45' north latitude and 77° 1' east longitude, at an altitude of 160 m.

The floristic survey on higher plants in the campus by Nayar et al (1986) revealed that the vegetation is rich and diverse. Hills and hillocks undulating with plains dominate more than two thirds of the entire site. The river Chittar flows zig-zag covering the complete southern belt. The evergreen, deciduous forests, plantations of Teak and Cashew together with wet lands and grass lands constitute its unique biotype.

The average rainfall is around 3000 mm and maximum temperature varies from 24-34 °C. Highest humidity varies from 100% in June to 80% in December. The soil type is lateritic. The campus is non residential.

# MAP OF KERALA SHOWING COLLECTION LOCALITIES

