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Research Article

Community composition and diversity of spider assemblages in relation to dry deciduous forest of Chandrapur district, India

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ABSTRACT

The tropical, dry deciduous forests of Chandrapur district provide a wide variety of natural ecosystems to the spider species, leading to spider diversity and abundance. Hence the spiders can be grouped into various ecological guilds, based on the foraging mode as orb weavers, space web builders, sheet web builders, ambushers, ground runners, foliage runners, stalkers etc. The present investigation, therefore, has an interdisciplinary approach that will undertake a comprehensive and holistic study of spider diversity along with the plant diversity. Well established sampling protocols for spider collections were adapted in different selected sampling plots from Chandrapur district. The present study reveals the occurrence of 21 different families, 57 genera and 90 species. Out of total spider species recorded, about 43% were found orb weaver, 17% stalker, 14% ground runner, 13% ambusher, 8% foliage runner, 3% space web builder and 2% were sheet web builder. Occurrence of high number of Araneids could be due to mixed vegetation of the forest which provides enough space to build web of different size and protection from their predators. The forest is dry deciduous and rich in shrubs as understory habitats resulting into more number of Salticides and Lycocides which are stalker in guild. Moderate numbers of Thomicides found in this region is due to availability of flowering plants with deep vegetation in forest area.

Key word: Spider diversity, Tropical dry deciduous forest, Araneidae, Lycocidae, Salticidae.