Biodiversity and Community structure of spiders in Saran, part of Indo-Gangetic Plain, India

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ABSTRACT

Present study was conducted to reveals the community structure and diversity of spider species in different habitat types (gardens, crop fields and houses) of Saran; a part of Indo – Gangetic Plain, India. This area has very rich diversity of flora and fauna due to its climatic conditions, high soil fertility and plenty of water availability. The spiders were sampled using two semi-quantitative methods and pitfall traps. A total of 1400 individual adult spiders belonging to 50 species, 29 genera and 15 families were recorded during 1st December 2013 to 28th February 2014. Spider species of houses were distinctive from other habitats it showed low spider species richness. The dominant spider families were also differs with habitat types. Araneidae, Pholcidae and Salticidae were the dominant spider families in gardens, houses and crop fields respectively. Comparison of beta diversity showed higher dissimilarity in spider communities of gardens and houses and higher similarity between spider communities of crop fields and gardens. We find that spiders are likely to be more abundant and species rich in gardens than in other habitat types. Habitat structural component had great impact on spider species richness and abundance in studied habitats.

Key words: Spiders, Indo-Gangetic Plain, Diversity, Species richness, Saran.