



## Sex-Specific Extra Floral Feeding Preferences among Subtropical Butterfly Fauna of Terai Arc Landscape, Southern Himalaya, India

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Abstract: The knowledge on specialized feeding requirements of adult butterfly species with the exception of dietary floral sources is crucial for the proper management and conservation of butterflies. Present study conducted from September 2016 to August 2017 under the natural wild conditions of Nandhaur Wildlife Sanctuary (NWS) located in the central position of Terai Arc Landscape, India, aimed to observe extra floral feeding preferences, sex–specific and seasonal puddling patterns among butterfly communities. Out of the total 497 individuals recorded, 85.92% males and 14.08% females of 22 species belonging to four families were recorded from the different puddling sites in NWS. Observations revealed that sex–specifically, 80.09% of individuals of males of 22 species that were probed feeding at different substrates such as puddles, moist soil, mammalian dung and algal mats, showed rich puddling behavior in comparison to the females of butterflies belonging to seven species that were recorded feeding particularly on puddles and soil. Across the different seasons, maximum number of species and individuals of butterflies were recorded in puddling activity during the summer season, followed by rainy and winter seasons, respectively. It is suggested that habitats providing puddling grounds in and around the NWS should be earmarked for conservational and ecological research aspects of butterflies.

Keywords: Behavior, Butterfly families, Mud puddles, Sanctuary, Seasons