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## Butterfly Diversity along Urban-Rural Gradient in Kolkata, India

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**Abstract :** Urbanization leads to habitat degradation and is responsible for the fast disappearance of native butterfly species. Random sampling of rural, suburban and urban sites in an around Kolkata metropolis revealed the presence of 28 species of butterfly belonging to 5 different families in winter (February-March). Butterfly diversity, species richness and abundance decreased with increase in urbanization. Psyche (Leptosia nina of family Pieridae) was the most predominant butterfly species found everywhere in Kolkata during the winter period. The most dominant family was Nymphalidae (11species), followed by Pieridae (6 species), Lycaenidae (5 species), Papilionidae (4 species) and Hesperiidae (2 species). The rural and suburban sites had butterfly species that were unique to those sites. Vegetation cover and flowering shrub density were significantly related to butterfly diversity.

Keywords: butterfly, Kolkata metropolis, Shannon-Weiner diversity index, species diversity

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