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Authors: Dávid D. Nagy, Tibor Magura, Roland Horváth, Zsuzsanna Debnár, Béla Tóthmérész



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Arthropod assemblages and functional responses along an urbanization gradient: a trait-based multi-taxa approach

Running title: Taxonomic and functional responses of arthropods to urbanization

Dávid D. Nagy^a, Tibor Magura^b, Roland Horváth^b, Zsuzsanna Debnár^a, Béla Tóthmérész^a

^aMTA-DE Biodiversity and Ecosystem Services Research Group, University of Debrecen, Egyetem sq. 1, Debrecen H-4032, Hungary

^bDepartment of Ecology, University of Debrecen, P.O.Box 400, Debrecen H-4002, Hungary

*Corresponding author

Dávid D. Nagy

MTA-DE Biodiversity and Ecosystem Services Research Group, University of Debrecen, Egyetem sq. 1, Debrecen H-4032, Hungary

Telephone: +3652 512900/22632

E-mail: nagydavin@gmail.com

Highlights

- We studied the taxonomic and functional responses of arthropods to urbanization
- We found no differences in diversities of spiders along the urbanization gradient
- Urbanization caused a decline in taxonomic diversity of staphylinids
- The diversity of woodlice did not recover in forested urban greenspaces
- Spiders recolonized the urban greenspaces, while staphylinids and woodlice did not

Abstract

Urbanization causes considerable alteration across a wide range of ecosystem functions at regional and global scales. These changes could be key drivers of habitat stability and ecosystem services in urban greenspaces. The aim of this study was to test the influence of urbanization on taxonomic and functional diversities of arthropods of different trophic levels. We collected predator spiders, polyphagous rove beetles, and decomposer woodlice along a

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