



Conference Abstract

Ground beetles (Coleoptera: Carabidae) diversity from pastures in Southern Bulgaria

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Abstract

This study aimed at clarifying the species composition and ecological structure of carabids, associated with active pastures. Field work was carried out in 2017 and 2018. Pitfall traps (5 in each site) were set in 10 sampling sites in Thracean Lowland and Sarnena Sredna Gora Mts. Captured beetles belonged to 90 species and 33 genera, representing 12% of the species and 26% of the ground beetle genera occurring in Bulgaria. The most diverse was genus *Harpalus* (22 species), followed by the genera *Amara* (7 species), *Microlestes* (6 species), *Ophonus* (6 species) and *Parophonus* (5 species). Twenty species were new for the region of the Thracean Lowland: *Amara fulvipes* (Audinet-Serville, 1821), *Anisodactylus binotatus* (Fabricius, 1787), *A. intermedius* Dejean, 1829, *Apotomus clypeonitens* Müller, 1943, *Calathus cinctus* Motschulsky, 1850, *Carterus gilvipes* (Piochard de la Brûlerie, 1873), *Gynandromorphus etruscus* (Quensel en Schönherr, 1806), *Harpalus fuscicornis* Ménétrié, 1832, *H. subcylindricus* Dejean, 1829, *Microlestes apterus* Holdhaus, 1904, *M. corticalis* (L. Dufour, 1820), *M. fulvibasis* (Reitter, 1901), *M. maurus* (Sturm, 1827), *M. minutulus* (Goeze, 1777), *Notiophilus laticollis* Chaudoir, 1850, *Pangus scaritides* (Sturm, 1818), *Parophonus laeviceps* (Ménétrié, 1832), *P. planicollis* (Dejean, 1829), *Polystichus connexus* (Geoffroy in Fourcroy, 1785) and *Pterostichus strenuus* (Panzer, 1796). Twenty species were new for the whole Sredna Gora Mts.: *Acinopus picipes* (Olivier, 1795), *A. megacephalus* (P. Rossi, 1794), *Amara anthobia* A. Villa et G. B. Villa, 1833, *Ditomus calydonius* (P. Rossi, 1790), *Harpalus albanicus* Reitter, 1900, *H. angulatus* Putzeys, 1878, *H. attenuatus* Stephens, 1828, *H. dimidiatus* (P. Rossi,

1790), *H. flavicornis* Dejean, 1829, *H. pumilus* Sturm, 1818, *H. pygmaeus* Dejean, 1829, *H. subcylindricus* Dejean, 1829, *H. tardus* (Panzer, 1796), *H. signaticornis* (Duftschmid, 1812), *Lebia scapularis* (Geoffroy, 1785), *Microlestes fissuralis* (Reitter, 1901), *M. fulvibasis* (Reitter, 1901), *M. maurus* (Sturm, 1827), *M. minutulus* (Goeze, 1777) and *Ophonus sabulicola* (Panzer, 1796). Forty-one species were new for the region of the Sarnena Sredna Gora. Genus *Apotomus*, *Gynandromorphus*, *Pangus* and *Polystichus* were new geographic records for Thracean Lowland. Genera *Acinopus* and *Ditomus* were new for the Sredna Gora Mts. Fourteen life form categories were established (9 zoophagous and 5 mixophytophagous). The analysis of the life forms showed a slight predominance of the mixophytophages (53 species; 59%) over the zoophages (37 species; 41%). *Microlestes minutulus* was a constant species occurring in all sampling sites.

Keywords

carabids, agrocoenoses, new records, diversity

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