

Ground beetles (Coleoptera: Carabidae) from ripening oilseed rape fields (*Brassica napus*) in Southern Bulgaria



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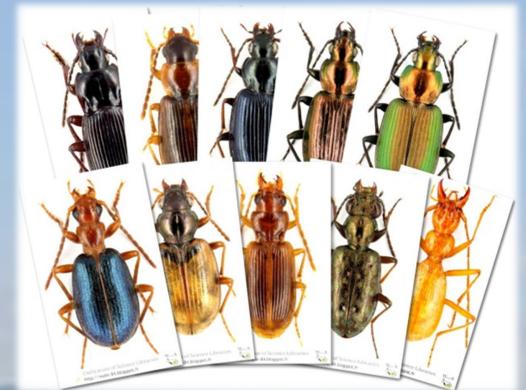
Habitat

10 fields of oilseed rape during its ripening

Thracean Lowland: near the villages of Malak Chardak, Kostievo, Stryama, Momino Selo, Dobrich and Stalevo
Sarnena Sredna Gora Mts.: near the village of Zelenikovo



Model organisms
Ground beetles
(Coleoptera: Carabidae)



Results

Captured beetles belonged to **83 species** and **34 genera**, representing 11% of the species and 27% of the genera in Bulgaria

New for the Thracean Lowland:
Brachinus alexandri, *Brachinus berytensis*, *Brachinus nigricornis*, *Calathus cinctus*, *Carterus dama*, *Harpalus fuscicornis*, *Harpalus subcylindricus*, *Microlestes maurus*, *Microlestes schroederi*, *Parophonus planicollis*, *Scybalicus oblongiusculus* and *Trechus cardioderus*

New genera:
Genus *Scybalicus* was a new geographic record in Thracean Lowland;
Amblystomus and *Apotomus* were new for the whole Sredna Gora Mts.



New for the Sarnena Sredna Gora:
Carabus montivagus and *Carabus coriaceus*

New for the whole Sredna Gora:
Acupalpus meridianus, *Amblystomus metallescens*, *Apotomus clypeonitens*, *Brachinus alexandri*, *Carabus granulatus*, *Ophonus sabulicola* and *Stenolophus abdominalis*

Life forms

Seventeen life form categories were established (11 zoophagous and 6 mixophytophagous). The analysis of the life forms showed a slight predominance of the zoophages (46 species; 55,4%) over the mixophytophages (37 species; 44,6%)

Zoophagous:

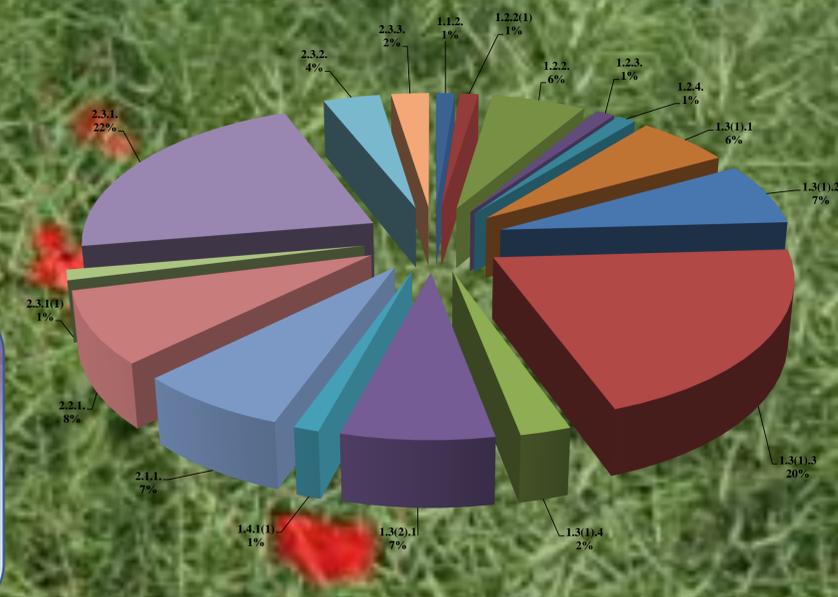
Life form subclass: 1.1 – Phytobios; 1.2 – Epigeobios; 1.3 – Stratobios; 1.4 – Geobios.

Life form groups: 1.1.2 – stem-dwelling hortobionts; 1.2.2 – large walking epigeobionts; 1.2.2(1) – dendroepigeobionts; 1.2.3 – running epigeobionts; 1.2.4 – flying epigeobionts; 1.3(1) – series crevice-dwelling stratobionts; 1.3(1).1 – surface & litter-dwelling; 1.3(1).2 – litter-dwelling; 1.3(1).3 – litter & crevice-dwelling; 1.3(1).4 – endogeobionts; 1.3(2) – series digging stratobionts; 1.3(2).1 – litter & soil-dwelling; 1.4.1(1) – narrow-headed running & digging geobionts.

Mixophytophagous:

Life form subclass: 2.1 – Stratobios; 2.2 – Stratohortobios; 2.3 – Geohortobios.

Life form groups: 2.1.1 – crevice-dwelling stratobionts; 2.2.1 – stratohortobionts; 2.3.1 – harpaloid geohortobionts; 2.3.1(1) – crevice-dwelling harpaloid geohortobionts; 2.3.2 – zabroid geohortobionts; 2.3.3 – dytomeoid geohortobionts.



The present study was carried out thanks to the financial aid and in parallel with the implementation of the Project BiodivERSA-FACCE2014-47 “SusTaining AgriCultural ChAnge Through ecological engineering and Optimal use of natural resources (STACCATO)”