

STRUCTURE, DYNAMICS, AND ABUNDANCE OF BEETLE SPECIES FROM A CORN CROP FROM THE WESTERN AREA OF ROMANIA

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Abstract

The observations regarding the useful and harmful fauna belonging to the Coleoptera order were made in the western part of Romania in a corn crop in Arad county.

For these observations, 12 pitfall traps were used, and they were placed in the culture in two rows of 6 per row from the beginning of the emergence of the plants until harvesting at intervals of about 2 weeks per during the year 2022 on the following calendar dates: 15.05, 29.05, 12.06, 26.06, 24.07, 7.08, 21.08, 4.09, and 18.09.

Only carabid species were retained from the collected material. The experience was organized in two variants:

Variant 1 is represented by an ecological corn culture where no chemical treatment was done to combat pathogens and pests. Variant 2, represented by a corn crop grown in a conventional system where chemical treatments were applied both to the seed and to the crop to combat pathogens and pests. Among the carabid species collected, I mention *Pterostichus pubescens*, *Harpalus distinguendus*, *Ophonus azureus*, *Anysodactylus signatus*, etc.

In general, a greater diversity and an important number of carabids are found in the corn crop cultivated in an ecological system (variant 1).

Key words: corn, abundance, trap, carabids
