

Researches Regarding the Coevolution of The Species *Attelabidae* and *Rhynchitidae* (Coleoptera: Curculionoidea) with Different Groups of Plants

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Abstract. The coevolution of the species of insects with different groups of plants supposes the assurance of essential functions for both categories of organisms, with the appearance and retain by natural selection of some reciprocal adaptations.

The aim of this present work is to emphasize the relationship between the phytophagus insect, stressing some adaptations linked to nutrition, defense, spreading at both categories of organisms.

During 1996 – 2006 there were done observations on a number of 1244 samples belonging to the *Rhynchitidae* and *Attelabidae* families in the Sibiu Depression, Valcea and Covasna County. There were 42 collecting points. In order of obtaining this present work there were used the following methods: the direct observation, the gathering of the insects together with different parts of the plants, the gathering and pressing of the attacked organs o the plants, the gathering of some parts of branches having galleries dug by rinchitidae and attelabidae.

As a result of the research was established the interdependence *Rhynchitidae*, *Attelabidae* – plants, emphasizing some adaptations of the plants reported to the researched species, adaptation of the leaf-rolling weevils reported to different species of plants, adaptations linked to the reproduction of the insects.

The correlation between plants – *Rynchitidae*, *Attelabidae* must be regarded like a process of adaptation, step by step, which is in favor for both categories of organisms, assuring the persistence in time and space of their populations and finally the persistence of the system.

Key words: coevolution, phytophagus, *Rhynchitidae*, *Attelabidae*.

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