



## NEW SPECIES OF SAPROXYLIC BEETLES FROM THE "PLAIUL FAGULUI" AND "PĂDUREA DOMNEASCĂ" RESERVES

Svetlana BACAL, Galina BUSMACHIU

Moldova State University, Institute of Zoology, Chisinau, Republic of Moldova

Corresponding author: Galina Busmachiou, e-mail: bushmakiu@yahoo.com

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**Introduction.** The work includes the result of scientific researches on saproxylic coleopterans collected in the dead wood of the Reserves "Plaiul Fagului", "Pădurea Domnească" and during the spring-summer period of 2022 and 2023. "Pădurea Domnească" Reserve ([47°36'35"N 27°23'37"E](#)) is located on the bank of Prut River in the north of the country and has an area of 6032 ha; "Plaiul Fagului" Reserve ([47°17'28"N 28°3'16"E](#)) has a surface of 5558,7 ha, being located in the central region, at 70 km northwest of Chisinau. The dominant species of trees in the "Pădurea Domnească" are plant associations based on poplar and oak essences. "Plaiul Fagului" is characterized by the dominance of oak, mixed with linden, elm, maple, etc. and plots of monodominant beech trees. The willow species predominate in the flooded area of the "Prutul de Jos", while the oak forests prefer the highest meadow sectors that are very rarely flooded.

**Aim.** Identification and inventory of saproxylic Coleoptera from decomposed wood of silvicolous ecosystems in the Republic of Moldova.

**Material and methods.** The faunal material was collected in natural forests using several methods: direct manual collection, exhaustor usage, and flight interception traps, which were mounted on the trunks of dry trees at heights of 2 and 4 meters above the ground. These traps were set on various tree species, including oak, maple, wild cherry, and willow. As a conservation measure, kitchen salt was used in a proportion of 100 grams per 10 liters of water. Coleopterans were extracted from the traps every 2 weeks.

**Results.** As a result of the study, in the "Plaiul Fagului", "Pădurea Domnească" and "Prutul de Jos" scientific reserves, a total of 15 specimens of saproxylic beetles belonging to 5 species, 5 genera and 5 families were collected, new for the fauna of the Republic of Moldova: *Attagenus punctatus* (Scopoli, 1772) (Dermestidae family), *Latridius hirtus* Gyllenhal, 1827 (Latridiidae), *Aulonothroscus brevicollis* (Bonvouloir, 1859) (Throscidae), *Triplax collaris* (Schaller, 1783) (Erotylidae) and *Triphyllus bicolor* (Fabricius, 1777) (Mycetophagidae).

**Conclusions.** The considerable diversity of newly discovered saproxylic coleopteran species in the investigated forest ecosystems serves as an indicator of the quality of the "Plaiul Fagului," "Pădurea Domnească," and "Prutul de Jos" Reserves. The presence of dead wood in various stages of decomposition, affected by fungi, is crucial for the proper functioning of ecosystems and the development of saproxylic coleopteran species.

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