

The Fine Structure of the Antennae in *Capnodis cariosa* (Coleoptera: Buprestidae) and their Role in Populational Distribution

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Abstract: *Capnodis cariosa* represents the largest buprestid beetle in Europe. Historically recorded in Romania, specifically in Southern Dobrogea (Southeastern Romania) until 1967, after which it was presumed extinct within the region. However, a subsequent observation in 2015 indicated its presence in Southwestern Romania, specifically within the Danube Defile. A stable population was identified and monitored between 2023 and 2024 in this locale. Furthermore, it was noted that the beetles cohabitated with their host plant, *Cotinus coggygria*, within the same bushes during these investigations. Consequently, the study involved a detailed examination of the antennae from both male and female specimens, focusing on their ultramicrostructure and the arrangement and types of sensilla present, which allowed for conjecture regarding the role of the antennae in group dynamics of the species.

Keywords: *Capnodis cariosa*; Rediscovery in Romania; *Cotinus coggygria* Association; Antennal Sensilla; Population Monitoring.

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