

**DIET STRESS EFFECT ON ADAPTIVE STRATEGY OF BLACK BUPRESTIDAE
CAPNODIS TENEBRIONIS (COLEOPTERAN: BUPRESTIDAE) TRANSLATED BY ITS
ENERGY-GIVING ALLOTMENTS FLUCTUATIONS**

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ABSTRACT

In trees with stones, *Capnodis tenebrionis* appears among major depredators and the most dangerous, but the most mysterious too because of its resistance facing all phytosanitary treatments and so of its biological cycle enough confused going from 1 to 2 years. Present study is performed in the centre of Atlas Tellien in region of Medea. Zone of potential production of rosaceous with stones on plums trees' orchards (*Prunus domestica*) and cherry trees (*Prunus mahaleb*) seriously infested by *Capnodis tenebrionis*. Our vestigations had been spread on 3 seasons (winter, spring, summer), with aim to grasp relation which may exist between nourishing support and biological performance of *Capnodis tenebrionis*.

This trophic relation is estimated through energetic results of *Capnodis* individuals moving around on different hosts. Results had been significant in term of phytochemical quality variability of both studied hosts. Relation between variation of leaf limbus and petioles' composition and so *Capnodis* females numerical and ponderal evolution has been considered. Variations of total sugars contents and condensed tannins during seasonal variation have been observed. Those modifications affect females' energetic result. Abundance of *Capnodis* individuals on *Prunus domestica* is linked to total sugars quantities, whereas on *Prunus mahaleb*, it would be linked to condensed tannins.

KEYWORDS: Lipidic Reserves, Carbohydrate Reserves, Rosaceous with Stones, Total Sugars, Condensed Tannins, Stress