Preliminary bioassays on the susceptibility of stone fruits rootstocks to *Capnodis tenebrionis* (L.)

<u>H Kokiçi¹</u>, L Morano¹, L Nigro¹, G Bari¹, M Meneghini², E de Lillo¹

¹Università degli Studi di Bari "Aldo Moro", Dipartimento di Scienze del Suolo, della Pianta e degli Alimenti (DiSSPA), sezione di Entomologia e Zoologia; ²Vivai Piante Battistini Societa Agricola s.s.

Capnodis tenebrionis (L.) (Coleoptera: Buprestidae), the so called Mediterranean flatheaded root-borer, is an economically important phytophagous pest species mainly on stone fruit trees (apricot, plum, cherry, peach and nectarine). Chemicals and Entomopathogenic nematodes are used for the control of adults and neonate larvae, respectively. Further control means are under investigations in order to have more options within Integrated Pest Control strategies. This study is aimed at investigating the susceptibility of rootstocks to the larvae of C. tenebrionis. Two bioassays were carried out during 2016 and 2017. A first bioassay was based on the evaluation of a potential antixenosis action expressed by neonate larvae infesting twigs of rootstocks (Marianna 26, Barrier, Adesoto, Mylaboran 29C, GF677, Garnem, Cab 6P, Max Ma60 and Colt). This bioassay allowed to process a high number of different rootstocks in a short time. It has a preliminary value. The second bioassay assessed the antibiosis influence of the rootstocks through the breeding of larvae (since the neonate ones) on artificial diets containing bark flour of Adesoto, Cab 6P, Colt, Garnem, GF677, Max Ma60, Montclar and 29C rootstock. The first bioassay showed that Colt, Mylaboran 29C and GF677 were the most susceptible rootstocks to larval infestation of C. tenebrionis and Max Ma60 was less favorable to the pest. Concerning the effects of the diet, larvae reared on a diet containing Montclar, Cab 6P and GF 677 bark flour had a mean daily increase of their weight higher that those reared on cortex tissues of other genotypes whereas Garnem and Colt had a lower increase.

