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*IOBC Working Group*  
*“Integrated Protection of Fruit Crops”*  
*Subgroup “Soft Fruits”*

# **VIII Workshop**

## ***on Integrated Soft Fruit Production***

**■■■■ Book of abstracts ■■■■**

Fondazione Edmund Mach  
Vigalzano di Pergine Valsugana (TN)  
26-28 May 2014

## EVALUATION OF PREDATORY ACTIVITY OF *ORIVUS LAEVIGATUS* (FIEBER) AND *O. MAIUSCULUS* REUTER TOWARDS *DROSOPHILA SUZUKII* (MATSUMURA) UNDER LABORATORY CONDITIONS

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*Drosophila suzukii* (Matsumura) (Diptera Drosophilidae) is a highly polyphagous insect which is native to South East Asia and now is widespread in many regions of Europe causing severe damages to crops mainly soft fruits. As economic losses due to *D. suzukii* damages are relevant many efforts should be done to find strategies to control this pest. There are multiple biocontrol agents (fungi, bacteria, viruses and other natural enemies of the pest, such as predators and parasitoids) that could be employed in IPM for *D. suzukii*. Natural enemies in the invaded area may establish new associations with invasive pests, thus gradually contributing to its control. There is hence a high probability for natural enemies in the invaded regions to exploit also *D. suzukii*. The predatory activity of Anthocorids was suggested by some Authors. The aim of this study was to test the predatory activity against *D. suzukii* of two specie of Anthocorids such as *Orius laevigatus* (Fieber) and *O. maiusculus* (Reuter), under laboratory conditions.

*D. suzukii* females and males from FEM rearing were put into plastic box containing blueberries, and let lay eggs for 24-48 hours. After this period *D. suzukii* individuals were removed and the eggs laid in each blueberry fruit were counted. Blueberries infested by *D. suzukii* eggs were exposed to 0, 1, 2, 3 adult stages of *O. maiusculus* or *O. laevigatus*. A treatment containing blueberries without *D. suzukii* eggs and 3 Orius was also considered as control for the surviving of Orius. The number of emerged *D. suzukii* was checked daily until no more *D. suzukii* was born for three consecutive days. This number was compared with the initial egg counts to assess the predation of Orius on *D. suzukii*. The longevity of Orius was also considered. The experiments was carried out in a climatic chamber at 22°C, U.R: 70% L:D 16:8. The results obtained in this trial showed a slightly predatory activity of *O. maiusculus* and an increase of its longevity, but no significant differences were observed among treatments. No predatory activity was observed for *O. laevigatus*. Data obtained in this study suggested a marginal role of *O. laevigatus* and *O. maiusculus* in controlling *D. suzukii*.

**Key words:** spotted wing drosophila, anthocorids, insect control