



IOBC/WPRS

Integrated Protection of Olive Crops



8th IOBC/WPRS Meeting - Florence, Italy, June 4-7, 2018

Abstract book



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**8th IOBC-WPRS meeting on
“Integrated Protection of Olive Crops”**

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16:15-16:30	Coffee break
16:30-17:30	POSTER SESSION (Session 3)
Poster n. 16	<i>Xylosandrus compactus</i> (Coleoptera, Curculionidae, Scolytinae): a new possible threat for olive trees <i>Valeria Francardi, Fabrizio Pennacchio</i>
Poster n. 17	Evaluation of attractant devices for the monitoring of Olive Fruit Fly with particular reference to colour, size and selectivity toward natural enemies <i>Pasquale Calabrese, Andrea Sciarretta</i>
Poster n. 18	Captures of olive fruit fly in Alto Garda Trentino with different traps <i>Massimo Mucci, Mario Baldessari, Franco Michelotti, Serena Giorgia Chiesa, Gino Angeli</i>
Poster n. 18b	Secondary pest and climate changes affect Calabrian olive growing <i>Veronica Vizzarri</i>
20:30	Gala dinner

Thursday 7 June 2018

Session 4	<i>Biological and biotechnological control of pests and diseases in olive crops</i> <i>Chairpersons: Virgilio Caleca and Jennifer Gillett-Kaufman</i>
9:15-9:30	The contribution of ground predation to the reduction of the overwintering pupae of the olive fruit fly <i>Malayka Samantha Picchi, Susanna Marchi, Albertini Alice, Ruggero Petacchi</i>
9:30-9:45	Post mortem gut content analysis for determining the contribution of different soil predators to control <i>Bactrocera oleae</i> <i>Esther Lantero Bringas, Susana Pascual López, Beatriz Matallanas Peñas, Carmen Callejas Hervás</i>
9:45-10:00	The use of complementary approaches for conservation biological control: carabid and staphylinid beetles as natural enemies of the olive fruit fly <i>Alice Albertini, Paula Baptista, Giovanni Burgio, Serena Magagnoli, Susanna Marchi, Fátima Martins, José Alberto Pereira, Ruggero Petacchi, Claudio Ratti, Sónia Alexandra Santos Paiva</i>
10:00-10:15	Functional response of <i>Chrysoperla carnea</i> (Neuroptera: Chrysopidae) to <i>Saissetia oleae</i> (Olivier) (Hemiptera: Coccidae) <i>Abdelkader Meni Mahzoum, María Villa Serrano, Jacinto Benhadi-Marín, José Alberto Pereira</i>
10:15-10:30	Biodiversity and pollen feeding habits of syrphids in olive groves and surrounding landscape in northeastern Portugal during spring <i>María Villa Serrano, Sónia Alexandra Santos Paiva, Rosalina Marrão, Lara Pinheiro, José António López-Sáez, Carlos Aguiar, José Alberto Pereira</i>

FUNCTIONAL RESPONSE OF *CHRYSOPERLA CARNEA* (NEUROPTERA: CHRYSOPIDAE) TO *SAISSETIA OLEAE* (OLIVIER) (HEMIPTERA: COCCIDAE)

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Lacewings are common biocontrol agents against a wide range of agricultural pests. These predators are highly voracious against soft-bodied preys such as juveniles of scale insects. In this context, the present work aims to study the use of *Chrysoperla carnea* (Stephens) (Neuroptera :Chrysopidae) as biological control agent against *Saissetia oleae* (Olivier) (Hemiptera: Coccidae). For that, we studied the functional response of the larval instars of *C. carnea* to nymphs of *S. oleae*. Increasing densities (3, 5, 10, 15, 25 and 40) of *S. oleae* nymphs were offered to the three larvae stages of *C. carnea* in a controlled laboratory environment. After 24 hours, the number of *S. oleae* consumed by *C. carnea* larva were recorded and the functional response calculated. The three larval stages of *C. carnea* displayed a type II functional response behavior. Prey consumption by *C. carnea* larvae increased with high *S. oleae* densities. Moreover, younger larvae showed a lower predation rate in comparison with the older ones. The search rate and handling time of the third instar larvae were lower than those of the younger larval instars, and the simulated max attack rate of the third instar larvae was higher than those of the first and second instar larvae. Our results suggest that all larval stages of *C. carnea* could be important in *S. oleae* biological control in olive orchards, although the third larval stage of the predator was more efficient in reducing *S. oleae* densities than first and second *C. carnea* larval instars.