



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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Poster n. 14	<p>Potential Auchenorrhyncha vectors of <i>Xylella fastidiosa</i> in Crete (Greece): Survey, identification, seasonal abundance and vector management tactics</p> <p><i>Argyro Kalaitzaki, Ioannis Koufakis, Emmanouil Vasakis, George Broufas, Maria L. Pappas, Antonios Tsagkarakis, Despina Tzobanoglou, Emmanouil Roditakis</i></p>
Poster n. 15	<p>The effect of <i>Philaenus spumarius</i> feeding on the endophytic fungi community of <i>Coleostephus myconis</i> and its possible applicability in the insect biocontrol</p> <p><i>Cristina Cameirão, Gisela Fernandes, Fátima Martins, José Alberto Pereira, Paula Baptista</i></p>
11:30-13:00	<p>Round table on <i>Xylella fastidiosa</i></p> <p><i>Chairperson: Marco Scortichini</i></p>
13:00-14:30	lunch
Session 3	<p><i>Insect pests and diseases of olive crops under a worldwide changing scenario</i></p> <p><i>Chairpersons: Nikos T. Papadopoulos and Antonio Belcari</i></p>
14:30-14:45	<p>Land Surface Temperature (LST) as an environmental variable in the study of insect pest populations: the population dynamics of the olive fly in the eastern Mediterranean</p> <p><i>Moshe Blum, Itamar Lansky, Polychronis Rempoulakis, Mariano Ordano, Nikos T. Papadopoulos, <u>David Nestel</u></i></p>
14:45-15:00	<p>Evaluation of physiological parameters in early detection of Verticillium Wilt of Olive (VWO) during the host colonization phase</p> <p><i><u>Marc Sancho-Adamson</u>, Joan Romanyà, Jordi Bort, Maria Isabel Trillas</i></p>
15:00-15:15	<p>Determining pests of concern for olives (<i>Olea europaea</i>) a new potential crop in Florida</p> <p><i><u>Jennifer L. Gillett-Kaufman</u></i></p>
15:15-15:30	<p>Effect of diet and temperature on the development and survival of <i>Closterotomus trivialis</i> (Hemiptera: Miridae)</p> <p><i><u>Argyro Kalaitzaki</u>, Adel Amara, Sofia Dervisoglou, Despina Tzobanoglou, Dionyssios Perdikis, Antonios Tsagkarakis</i></p>
15:30-15:45	<p>Olive seed wasps (Hymenoptera: Chalcidoidea), potentially important pests of olive crops in the Western Cape of South Africa</p> <p><i>Virgilio Caleca, Christian Giacalone, <u>Elleunorah Allsopp</u>, Carlo Costa, Maria Concetta Rizzo, Gabriella Lo Verde, Francesco Tortorici, Stefania Laudonia, Martina Sinno, Barbara van Asch, Gary Gibson</i></p>
15:45-16:00	<p><i>Dasineura oleae</i> outbreaks in Tuscany: first observation on pest status and biology</p> <p><i><u>Elena Tondini</u>, Malayka Samantha Picchi, Ruggero Petacchi</i></p>
16:00-16:15	<p>Wild olive seed weevil in South Africa, <i>Anchonocranus oleae</i> Marshall (Coleoptera Curculionidae), a rediscovery after a century</p> <p><i><u>Virgilio Caleca</u>, Christian Giacalone, Elleunorah Allsopp, Carlo Costa, Francesco Tortorici, Stefania Laudonia, Barbara van Asch, Enzo Colonnelli</i></p>

THE EFFECT OF *PHILAENUS SPUMARIUS* FEEDING ON THE ENDOPHYTIC FUNGI COMMUNITY OF *COLEOSTEPHUS MYCONIS* AND ITS POSSIBLE APPLICABILITY IN THE INSECT BIOCONTROL

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Philaenus spumarius was recently confirmed as the European vector for the ongoing *Xylella fastidiosa* outbreak in the olive orchards of Southern Italy. In the northeast region of Portugal, *P. spumarius* is widespread and common in olive groves. In these groves was observed that their nymphs feed preferentially on the weed *Coleostephus myconis*, displaying in the same time period and area different levels of infestation. This work aims to assess the correlation between the fungal endophytic communities inhabiting *C. myconis* with the feeding preference of *P. spumarius*. Fungi were isolated from stems, leaves and inflorescences of plants with three levels of *P. spumarius* infestation (no infestation, moderate and high infestation), collected in an olive grove located in Mirandela. The fungal isolates were further identified by sequencing the ITS region of rDNA and the partial *tefl*. A total of 138 OTUs belonging to 37 genera were isolated, being *Alternaria*, *Valsa*, *Cladosporium* and *Chalastospora* the most abundant genera. An increase in overall endophytic fungal abundance and richness was observed across infestation levels, in particular of isolates belonging to *Chalastospora* and *Cladosporium*. In contrast, *Biscogniauxia*, *Chaetomium* and *Stemphylium*, decreased across the levels of infestation. Differences in fungal composition between non-infested and infested plants were particularly observed in stems, where the *P. spumarius* foam nests are present. Some genera were exclusively found either in non-infested or in infested plants. Our survey provides fungal candidates for further evaluate their role in the repellency/attraction of *P. spumarius* in order to develop new management tools against this insect.