



9th IOBC-WPRS meeting on Integrated Protection of Olive Crops

BOOK OF ABSTRACTS

26th-29th October, 2021, Lisbon, Portugal



IOBC-WPRS



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Protection of Olive Crops



WPRS *International Organisation for Biological and Integrated Control
West Palaearctic Regional Section*
SROP *Organisation Internationale de Lutte Biologique et Intégrée
Section Régionale Ouest Palaéarctique*



Technical Information

Book of Abstracts

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Publish by:

Associação Portuguesa de Horticultura (APH)
Rua da Junqueira, 299, 1300-338 Lisboa
<http://www.aphorticultura.pt/>

Editors and Coordination

Ana Cristina Ramos
José Alberto Pereira
Paula Baptista

Cover design and layout

Isabel Rodrigues

ISBN

978-972-8936-40-2

This publication brings together the works presented at the 9th IOBC-WPRS meeting on Integrated Protection of Olive Crops in the form of abstracts.



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Poster n° 19

Predatory potential of Forficulidae (Dermaptera) on the olive fly *Bactrocera oleae*

Marco Neto¹, Jacinto Benhadi-Marín¹, Fátima Gonçalves¹, Maria Villa¹, José Alberto Pereira^{1*}

¹*Centro de Investigação de Montanha (CIMO), Instituto Politécnico de Bragança, Campus de Santa Apolónia, 5300-253 Bragança, Portugal*

**jpereira@ipb.pt*

Earwigs (Dermaptera: Forficulidae) are omnivorous insects, feeding on a variety of plants and animal material and are described as natural control agents of pests in several agroecosystems. Earwigs are abundant in olive orchards and their adult stage overlaps in time and space with the pupae stage of the main olive pest, the olive fly *Bactrocera oleae* (Rossi). However, the role of earwigs as natural control agents of *B. oleae* is almost unknown. The present work aimed to study the functional response of female and male earwigs on olive fly pupae in order to analyse their potential ability to limit this pest. Increasing densities of pupae were offered to starved earwigs in a controlled laboratory environment. After 24 h, the number of attacked pupae was recorded. The type of functional response, handling time, and attack rate of the earwigs was assessed. Our results disentangle the potentiality of earwigs as predators of *B. oleae* during the pupae stage and provide relevant information for further studies and applications.

Keywords: earwigs, natural enemies, functional response, biological control.

Acknowledgements: The authors are grateful to the Foundation for Science and Technology (FCT, Portugal) for financial support by national funds FCT to CIMO (UIDB/00690/2020). National funding by FCT, through the individual postdoc grant (SFRH/BPD/119487/2016) (María Villa). This work was funded by the European Social Fund (ESF) through the Regional Operational Program North 2020, within the scope of the Program “Contratação de Recursos Humanos Altamente Qualificados”, (Oleachain project “Skills for sustainability and innovation in the value chain of traditional olive groves in the Northern Interior of Portugal“ - Norte-06-3559-FSE-000188), and by Horizon 2020 (NovaTerra project “Reducing the negative impact of pesticides through innovation in Mediterranean olive groves and vineyards” - H2020-SFS-2018-2020).