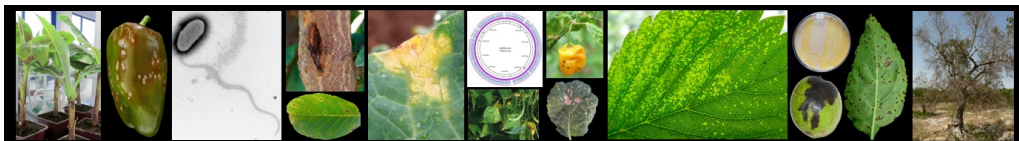




3rd Annual Conference of the EuroXanth COST Action
Faculty of Horticulture, Lednice, Czech Republic
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Wednesday 11th of September

Session 4 **Disease Management – Vector Control**

Chairs: Tamás KOVÁCS & Jakub PEČENKA

08:30-09:10 – **Jeffrey B. JONES** (*University of Florida, Gainesville, USA*): Prospects for using bacteriophages for plant disease control

09:10-09:30 – **Massimiliano MORELLI** (*Institute for Sustainable Plant Protection, Bari, Italy*): Insights on *Paraburkholderia phytofirmans* PsJN behaviour as biocontrol agent of *Xylella fastidiosa* in olive

09:30-09:50 – **Cristina CAMEIRÃO** (*Instituto Politécnico de Bragança, Portugal*): Olive tree core microbiome: the first learning step towards the development of biological control strategies for *Xylella fastidiosa*

09:50-10:10 – **Saul BURDMAN** (*The Hebrew University of Jerusalem, Israel*): Random antimicrobial peptide mixtures for management of *Xanthomonas* plant diseases

10:10-10:40 – COFFEE BREAK

Session 4 (cont'd) **Disease Management – Vector Control**

Chairs: Claude BRAGARD & Katarina GAŠIĆ

10:40-11:10 – **Vojtech ADAM** (*Mendel University in Brno, Lednice, Czech Republic*): Nanoparticles as new weapons in the war against antibiotic resistant bacterial strains

11:10-11:30 – **Isabel RODRIGUES** (*Instituto Politécnico de Bragança, Portugal*): Potential vectors of *Xylella fastidiosa* in olive groves, almond orchards and vineyards in Trás-os-Montes region, Portugal

11:30-11:50 – **Vincenzo CAVALIERI** (*Institute for Sustainable Plant Protection, Bari, Italy*): First studies on the relationship between *Xylella fastidiosa* subsp. *pauca* ST53 and its insect vector in Apulia

Potential vectors of *Xylella fastidiosa* in olive groves, almond orchards and vineyards in Trás-os-Montes region, Portugal

Isabel Rodrigues, Maria Villa, Paula Baptista, José Alberto Pereira

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

Keywords: emerging plant diseases, *Cicadomorpha*, sweepings, *Philaenus*, *Neophilaenus*

Xylella fastidiosa, was recently detected in Portugal (January 2019), this phytopathogenic bacterium is a threat to important crops of agricultural interest. It is transmitted by xylem-feeding insects that belong to the suborder Auchenorrhyncha. However, the knowledge about these insects in Portugal is scarce. In this context, the goal of this work was to identify the frequency and biodiversity of *Auchenorrhyncha* in Trás-os-Montes region, Portugal. For that, in 2018, in Trás-os-Montes region, five olive groves, five almond orchard and five vineyards with ground cover were sampled for adults of *Auchenorrhyncha*, during three distinct periods (beginning of July, mid-September and mid-October). Sampling was performed in the ground and in the aerial part of the plants. In each sampling date, 10 samples of 10 sweepings were collected on the ground in each orchard and vineyard. On the aerial part of the orchards 10 samples of 4 sweeping in 6 trees were collected and in the vineyard 10 samples of 50 sweepings were collected. A total of 3741 adults of *Auchenorrhyncha* were recovered on the three sampling dates. From these, 949 were *Fulgoromorpha* and 2792 *Cicadomorpha*, being the highest abundance observed in the beginning of July. In general, the vineyards presented the higher number of individuals of the *Cicadomorpha* and the olive orchards presented the smaller number of individuals of this infraorder. However, almond orchards presented the higher abundance of confirmed vectors of *X. fastidiosa*, 16 individuals belonging to the genus *Neophilaenus* and seven individuals of the genus *Philaenus* in the three periods. The higher number *Philaenus* individuals was observed in mid-October on the vegetation cover.

Acknowledgments

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