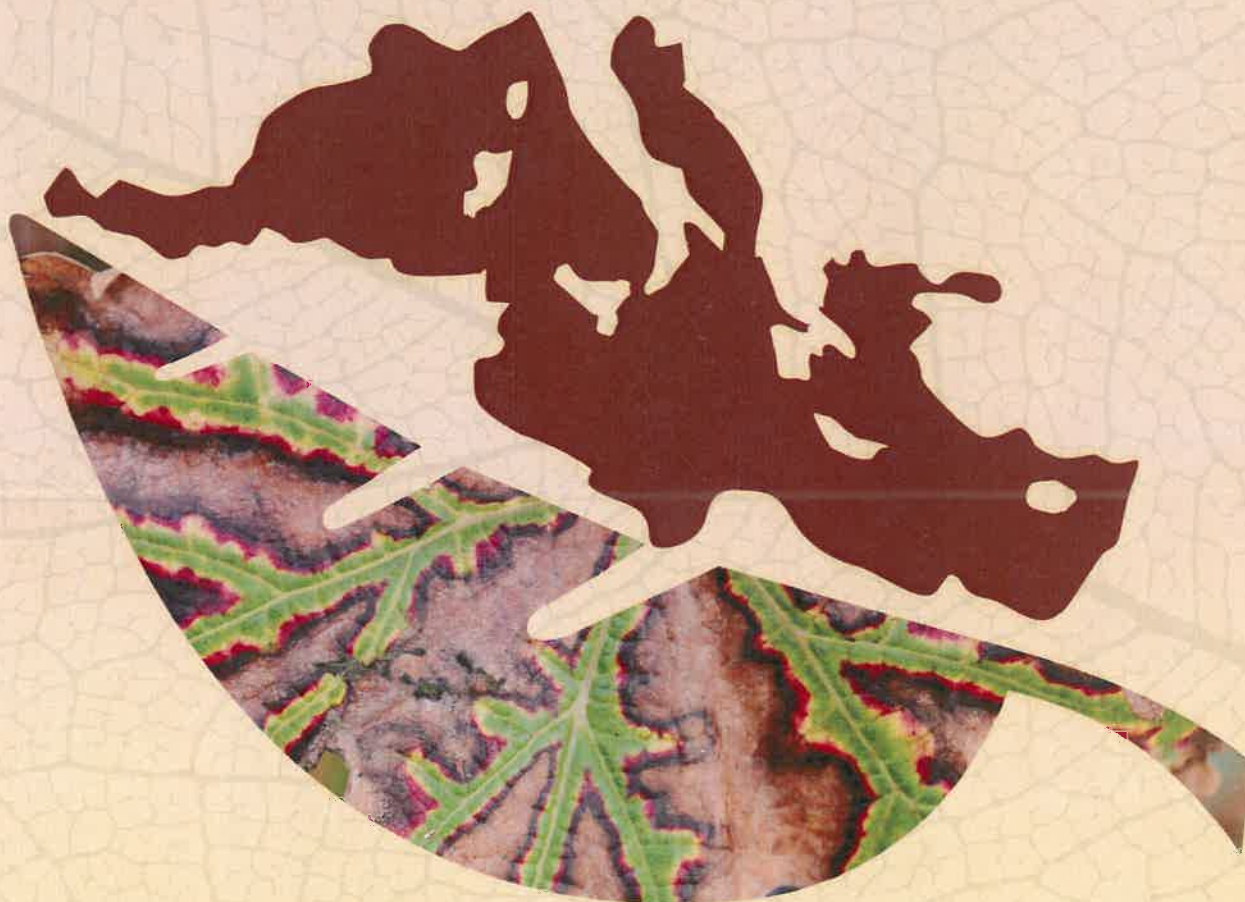




15TH CONGRESS OF
THE MEDITERRANEAN
PHYTOPATHOLOGICAL UNION

PLANT HEALTH SUSTAINING
MEDITERRANEAN ECOSYSTEMS

ABSTRACTS BOOK



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- 17:00-18:30 **Oral Concurrent 3**
- O.29 Characteristics of the biocontrol rhizobacterium *Pseudomonas chlororaphis* PCL1606.** S. TIENDA, C. VIDA, A. DE VICENTE, and F.M. CAZORLA.
- O.30 Biological characterisation of *Pochonia chlamydosporia* isolates associated with root-knot nematodes** J. HORTA, I. ABRANTES and J.L. CONCEIÇÃO
- O.31 The efficacy of plant-derived protein hydrolysates against zucchini powdery mildew is affected by their biochemical characteristics.** M. CAPPELLETTI, M. PERAZZOLLI, A. NESLER, O. GIOVANNINI and I. PERTOT
- O.32 *Geosmithia* spp. and *Ophiostoma novo-ulmi* a new fungus-fungus association mediated by Elm bark beetles.** ALESSIA L. PEPORI, ALBERTO SANTINI
- O.33 Endo- and epiphytic fungal communities of olive twigs is influenced by cultivar and Olive Knot infection** T. GOMES, J. A. PEREIRA, T. LINO-NETO, A. BENNET, P. BAPTISTA.
- O.34 Constitutive secretion of pisatin in root exudates participates in pea defence against *Fusarium oxysporum* f. sp. *pisi*.** N. RISPAIL, M. BANI, A. CIMMINO, A. EVIDENTE and D. RUBIALES.
- 16:30 -18:30 **Concurrent session 4. 'Salón Mudejar' Conference Hall**
Innovative approaches in plant disease diagnosis and management
Chairs: Darrell Desveaux, Diego Rubiales
- 16:30-17:00 **Can we breed for durable disease resistance in pea and faba bean?: The cases of broomrapes and powdery mildews**
 Diego Rubiales. *Institute for Sustainable Agriculture-CSIC, Córdoba, Spain.*
- 17.00-18.30 **Oral Concurrent 4**
- O.35 Establishment of specific molecular diagnostic tests for *Gnomoniopsis smithogilvyi* (syn. *castanea*) and *Cryphonectria parasitica*.** M. CONTI, J. CROVADORE, B. COCHARD, R. CHABLAIS, J. B. MEYER M. JERMINI and F. LEFORT
- O.36 Does resistance to *Plasmopara viticola* in grapevine influence infectivity of sporangia?** F. BOVE, T. CAFFI, V. ROSSI.
- O.37 Development of $\Delta\Delta$ ct Real Time RT-qPCR for the detection of *Onion yellow dwarf virus*.** A. TIBERINI¹, R. MANGANO, S. B. GRANDE, L. TOMASSOLI, G. ALBANESE.
- O.38 Cytogenomic analyses reveal nuclear content variation along the life cycles of the Pucciniales (rust fungi).** T. RIBEIRO, S. TAVARES, A.P. RAMOS, M. MONTEIRO, M COELHO, M.C. SILVA, J. LOUREIRO, L. MORAIS-CECÍLIO and P. TALHINHAS
- O.39 A diagnostic microarray for the multiplex characterization of strains of the *Ralstonia solanacearum* species complex.** G. CELLIER, S. ARRIBAT, F. CHIROLEU, P. PRIOR, and J. ROBENE.
- O.40 Selection of genetic variants of *Citrus tristeza virus* as a strategy to protect against severe seedling yellow strains.** G. SCUDERI, R. FERRARO, M. RUSSO, M. C. BAZZANO, A. CATARA and G. LICCIARDELLO
- 19:00 -20:00 **Night visit Mezquita de Córdoba and free dinner**

observations of the interaction between ONU and *Geosmithia*; pathogenicity trials on elm trees. The relationship was close and stable, and characterised by the parasitism of ONU by *Geosmithia*. Our results add new complexity to the DED pathosystem, by demonstrating that *Geosmithia* conducts mycoparasitic activity against ONU. The rise of *Geosmithia* modifies the relationships and the dynamics among the DED components, potentially reducing the overall impact of the disease, for this reason it can be exploited as a possible biocontrol agent against ONU. Such a holistic approach to plant pathology strengthens the idea that a different management of diseases in natural environments is possible.

O.33 Endo- and epiphytic fungal communities of olive twigs is influenced by cultivar and Olive Knot infection T. GOMES^{1,2}, J. A. PEREIRA¹, T. LINO-NETO², A. BENNET³, P. BAPTISTA¹. ¹CIMO/ Polytechnic Institute of Bragança, School of Agriculture, Campus de Santa Apolónia, 5300-253 Bragança, Portugal. pbaptista@ipb.pt. ²Biosystems & Integrative Sciences Institute (BioISI), Plant Functional Biology Center (CBFP), University of Minho, Campus de Gualtar, 4710-057 Braga, Portugal. ³Ecological Sciences, The James Hutton Institute, Errol Road, Invergowrie, Dundee, DD2 5DA UK. E-mail: teresa.mdg@gmail.com

Olive tree phyllosphere is colonized by a diverse microbial assemblage that may interact with pathogenic fungi, making them potential candidates for disease suppression. Olive knot (OK) is a disease caused by the bacterium *Pseudomonas savastanoi* pv. *savastanoi* (Psv.) causing significant economic losses in olive tree (*Olea europaea* L.). With this work we want to evaluate the effect of cultivar and OK infection on both endo- and epiphytic fungal community inhabiting olive twig tissues. For this, fungal composition and diversity was assessed in both asymptomatic and OK-symptomatic twigs of tree co-occurring olive cultivars with different susceptibilities to OK disease. The identification of isolated species was performed by ITS rDNA sequencing. The cultivar and OK infection were important in shaping both endophytic and epiphytic fungal communities. Fungal community composition was found to differ significantly ($P=0.005$) between olive tree cultivars, being Nectriaceae - the dominant family in cv. Cobrançosa and Verdeal Transmontana, whereas Pleosporaceae was dominant in the cv. Madural. Epiphytic and endophytic fungal communities also differed in size and in composition in asymptomatic and OK-symptomatic twigs, for the three cultivars. In general, asymptomatic twigs were more diverse and rich (up to 1.4-fold) when compared to OK-symptomatic twigs. Among the species identified in the asymptomatic tissues, *Cladosporium cladosporioides* and *Chromelosporium carneum* were the most frequently isolated within epiphytic and endophytic community, respectively; whereas in the OK-symptomatic tissues *Cladosporium* sp. and *Fusarium lateritium* were the most frequently isolated within epiphytic and endophytic community, respectively. According to indicator species analysis *C. carneum*, *Pyronema domesticum* and *Phoma aloes* (IndVal up to 0.56) may be promising species in the OK suppression. Better acknowledgement should be developed in order to uncover their role on plant health.

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