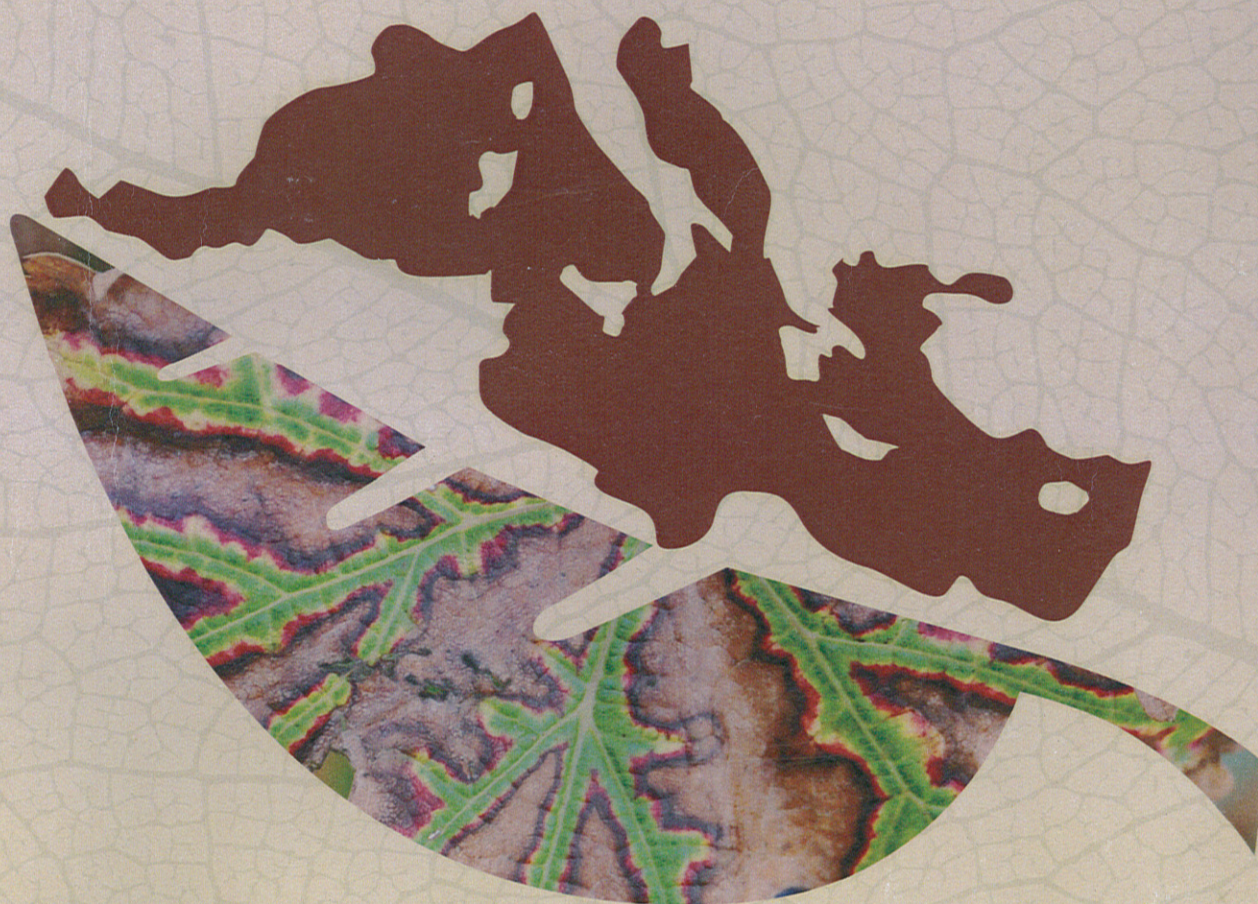




15TH CONGRESS OF  
THE MEDITERRANEAN  
PHYTOPATHOLOGICAL UNION

# PLANT HEALTH SUSTAINING MEDITERRANEAN ECOSYSTEMS

## ABSTRACTS BOOK



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features of *P. capsici*. *Phytophthora* sp. was isolated from 44.1% of peppers greenhouses, 90% of melon greenhouses and 100% of greenhouses with the other crops. One fourth of the surveyed greenhouses had been partially or completely flooded before the occurrence of symptoms and subsequent sampling. Here, a higher association between symptoms and the presence of *Phytophthora* sp. was found. Wilted plants and *Phytophthora* sp. were present in 75% of flooded pepper greenhouses, 80% for melon, and 100% for watermelon and zucchini flooded greenhouses. Mating type was checked for 57 *Phytophthora* sp. isolates (obtained from all the cited host species). All isolates belonged to A1 group. Molecular identification as *P. capsici* was confirmed for 24 isolates by sequencing ITS-rDNA region. These 24 isolates were inoculated on pepper, and 4 of them on the other plant species. All of them confirmed their pathogenicity. These results prove the emergence of *P. capsici* causing soil-borne diseases simultaneously in different economically important greenhouse crops in Almería.

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**0.20 Assessment of the host status of ornamental rutaceous species to *Xanthomonas citri* pathovars causing Citrus Bacterial Canker.** G. LICCIARDELLO<sup>1</sup>, O. PROUVOST<sup>2</sup>, I. ROUBENE<sup>2</sup>, J. CUBERO<sup>3</sup>, C. REDONDO<sup>3</sup>, A. CARUSO<sup>1</sup>, C. LICCIARDELLO<sup>4</sup>, P. CARUSO<sup>4</sup>, V. CATARA<sup>1</sup>. <sup>1</sup>Dipartimento di Agricoltura Alimentazione e Ambiente, Università degli Studi di Catania, Via Santa Sofia 100, 95130 Catania, Italy. <sup>2</sup>CIRAD, UMR Peuplements Végétaux et Bioagresseurs en Milieu Tropical (PVBMT), 7 chemin de l'irat - 97410 Saint Pierre, La Réunion, France. <sup>3</sup>INIA, Departamento de Protección Vegetal, Ctra De La Coruna Km 7.5, 28040 Madrid, Spain. <sup>4</sup>Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria, Centro di Ricerca per l'Agrumicoltura e le Colture Mediterranee, Corso Savoia 190, 95024 Acireale, Italy. E-mail: vcatara@unict.it.

*Xanthomonas citri* pv. *citri* (Xcc) and *X. citri* pv. *aurantifolii* (Xca), are causal agents of Citrus Bacterial Canker (CBC) a severe disease that requires costly control measures and primarily causes defoliation and fruit blemish and drop. Xcc and Xca are quarantine pathogens for UE, not known to occur in the Mediterranean region. The probability of their entry, via import of ornamental rutaceous plants, through both the commercial trade and passenger pathways, is rated as likely by EFSA (2014). To provide useful information for the pest risk assessment, 25 ornamental rutaceous plants in the genera *Atalantia*, *Balsamocitrus*, *Clausena*, *Eremocitrus*, *Glycosmis*, *Melicope*, *Microcitrus*, *Murraya*, *Vespris*, not covered by Directive 2000/29EC, as well as *Citrus* and *Fortunella*, were tested for resistance to Xcc (pathotype A, A\*, A<sup>w</sup>) and Xca (pathotype B and C) strains in controlled environment by a detached leaf assay. Nine plant species were presumptively classified as non-host, among them *Murraya paniculata*. Only *M. ovatifoliolata* and *Eremocitrus glauca* were susceptible to all pathotypes. The remaining species were susceptible at least to one of the pathotype A strain. Bacterial population densities ranged from 10<sup>3</sup> to 10<sup>6</sup> cfu mL<sup>-1</sup> and 10<sup>7</sup> to 10<sup>9</sup> cfu mL<sup>-1</sup> in plants showing HR or no response and typical CBC lesions, respectively. Crystal violet staining showed aggregation of citrus canker strains on *M. paniculata* leaf similar to that on citrus species but different to that found for a non-citrus *Xanthomonas*. Moreover, a *de novo* sequencing of *M. paniculata* genome, already completed, will serve for RNAseq studies on both *Murraya* species.

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