XXII NATIONAL MEETING
OF THE ITALIAN SOCIETY FOR PLANT PATHOLOGY (SIPaV)

Roma, September 19-22, 2016

Abstracts of papers
The Società Italiana di Patologia Vegetale, SIpAV, (Italian Society for Plant Pathology) was established in 1992 following the dissolution of the Italian Society for Crop Protection (SIF) and the Italian Phytopathological Association (AFT). Its main aims are to promote research into different branches of plant pathology, to disseminate knowledge about plant diseases and their aetiological agents and to promote cooperation among experts working in the field of plant pathology, and partnership in fundamental and applied research. The Society organizes meetings, gathers and distributes information about plant diseases, and maintains cooperation with other national and international scientific organizations and with national and local administrative authorities on problems involving plant health management.

The Society publishes a journal (Journal of Plant Pathology), which hosts articles by members and external contributors, a bulletin and other bibliographic material to exchange information among members.

The SIpAV is affiliated to the International Society for Plant Pathology (ISFP) and to the European Foundation for Plant Pathology (EFPP).

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of each cultivar was compared to the incidence of the wild-type, assumed as reference population, through an innovative approach based on the Pearson system of generalized frequency curves and on Monte Carlo simulations. In the wild-type, the incidence of G. castaneae increased from 2013 (4.8%) to 2014 (19.6%) and a similar trend was also observed, on average, in the chestnut cultivars (up to -297%). Cultivars significantly more susceptible (P<0.05) than the wild-type (22% of the total number of cultivars in 2013 and 59% in 2014) were detected by definite integration of curves associated with the Pearson system. The validation analysis revealed no significant association between the most susceptible cultivars detected in 2013 and 2014 (odds ratio 2.85: 0.18-176.61 95% CI), suggesting that the susceptibility to G. castaneae is substantially homogeneous between the chestnut cultivars and the wild-type.

COMPETITION ASSAYS REVEAL A NOVEL PUTATIVE BIOCONTROL AGENT: PAENIBACILLUS PASADENENSIS STRAIN R16. A. Passera, P. Casati, G. Venturini, F. Penaca, F. Quagliolo, P.A. Bianco. Università degli Studi di Milano, DISAA, Milano, Italia. E-mail: aleسانaro.passera@unimi.it

Since European policies aim to reduce the environmental impact of agriculture and implement sustainable control strategies for diseases, research of novel biocontrol agents is very important. In this study, the plant growth promoting potential and biocontrol effect against three important plant pathogenic fungi (Boysia cinerea, Fusarium verticilloides, and Phomopsis viticola), exerted by the novel candidate biocontrol agent Paenibacillus pasadenensis strain R16, isolated during previous investigation carried out to characterize the microbiome of diseased and healthy plants, were assessed in vitro. Biochemical assays to determine plant growth promoting potential gave negative results in regard to siderophore production and phosphate solubilization, and positive results for ACC-deamination, IAA production, and activity of catalase and chitinase. Biocontrol assays showed that strain R16 is very effective against B. cinerea in several tests, reducing mycelial growth both in dual-culture and through volatile substances only, as well as reducing infection rate on berries and inhibiting conidia germination. Strain R16 also showed good biocontrol potential also against F. verticilloides.

Obtained results proved for the first time the efficient biocontrol activity against fungal pathogens and putative plant growth promotion traits of P. pasadenensis strain R16, opening an interesting scenario for further studies investigating the application of this endophytic bacterium as a biocontrol agent in open field.

THE EU RESEARCH PROGRAMS IN RESPONSE TO THE XYLELLA FASTIDIOSA EMERGENCY. D. Bosco, M. Sapone. CNR Istituto per la Protezione Sostenibile delle Piante (IPSP), S3 Bari - 70126 Bari, Italy. E-mail: donato.bosco@ipsp.cnr.it

The identification in 2013 of a large outbreak of Xylella fastidiosa (Xf) in olive groves in the Salento peninsula (southern Italy) has resulted in a plant health emergency of unprecedented proportions for the EU. Afterwards, in 2013 numerous Xf outbreaks were identified in Corsica and France. Because of the complexity of the Xf-associated diseases, the management and the control of these outbreaks is an urgent and ongoing effort. One of the most important challenges is to develop effective strategies for prevention and management of Xf disease. The identification of new biological control agents is a promising approach for the development of sustainable strategies for the management of Xf diseases. The use of biocontrol agents has the potential to reduce the impact of Xf on plants and the environment, while minimizing the use of chemical pesticides. The successful implementation of biocontrol strategies for Xf disease requires a multidisciplinary approach involving researchers from different fields, such as plant pathology, molecular biology, and environmental science.