Disease Note

FIRST REPORT OF JUJUBE DIEBACK CAUSED BY *FUSARIUM SOLANI*

M.R. Mirzaee[1], M. Jahani[2], H. Mahmoudi[1] and K. Ghos[3]

[1] Agricultural and Natural Resources Research Center of Southern Khorasan, Birjand, P.O. Box 413, Iran
[2] Plant Protection Department, Faculty of Agriculture, Birjand University, Birjand, Iran
[3] Agricultural Management of Sarbishah, Sarbishah, Iran

In spring 2010, a severe branch dieback was observed in jujube (*Ziziphus jujuba*) orchards of the Sarbishah region of southern Khorasan (Iran). Symptoms included twig dieback, blackish discoloration of wood and foliage, and wilting followed by leaf shedding. Samples of symptomatic tissues, including discoloured wood and cambium from twigs and branches, were excised, surface-sterilised, plated onto Petri dishes with potato dextrose agar (PDA), and incubated in the dark at 25°C for 10 days. On PDA, the colonies presented a cream-coloured mycelium with yellow pigmentation and a creamy reverse. On carnation leaf agar, macroconidia were abundant, thick walled, 4 to 6 celled, hyaline, fusoid, and measured 5-7×20-37.5 µm. Microconidia, which were formed in false heads developing on long monophialides, were oval, reniform and fusiform, had 0 to 2 septa and measured 2.5-5×7-15 µm. Chlamydospores were single, double or several in chain, and measured 5-7.5×5-9 µm. Based on these morphobiometric and cultural characteristics, the fungus was identified as *Fusarium solani* (Demicri and Maden, 2006; Leslie and Summerell, 2006). For pathogenicity tests, normal and wounded shoots of three 6-year-old jujube trees were inoculated with 5 mm diameter mycelium disks from two 10-day-old single-spore isolates. Inoculation sites were covered with moistened cotton wool and parafilm. Control inoculations were made with sterile PDA. Disease symptoms, including tissue discoloration, were first observed 14 days after inoculation of the shoots, from which the fungus was reisolated. Controls did not develop symptoms. *F. solani* is frequently found associated with damage or stress events caused by other biotic or abiotic agents (Booth, 1971). This represents the first evidence of *F. solani* pathogenicity to *Z. jujuba.*

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Corresponding author: M.R. Mirzaee
Fax: +98.5612222624
E-mail: reza.mirzaee.mrz@gmail.com

Received March 18, 2011
Accepted April 16, 2011

Disease Note

FIRST REPORT OF *PLUM BARK NECROSIS STEM PITTING-ASSOCIATED* VIRUS IN STONE FRUIT TREES IN TUNISIA

W. Salleh[1,2], N. Mahfoudhi[2] and K. Djelouah[1]

[1] Istituto Agronomico Mediterraneo, Via Ceglie 9, 70010 Valenzano, Bari, Italy
[2] Laboratoire de Protection des Végétaux, Institut National de la Recherche Agronomique de Tunisie, Rue Hédi Karray, 2049 Ariana, Tunisia

During a survey carried out in two stone fruit mother blocks located at Kairouan (central Tunisia) and Jendouba (northern Tunisia), a total of 212 leaf samples were collected from peach (70), almond (37), apricot (53), plum (36) and cherry (16) trees, respectively. These samples were tested by DAS-ELISA for the presence of *Plum bark necrosis stem pitting-associated virus* (PBNSPaV) using specific antibodies (Agritest, Italy) according to the manufacturer's instructions. Serological analysis showed that nearly 8% of the samples were infected by PBNSPaV, particularly those from peach (15.7%), plum (11.1%) and almond (5.4%) trees. Virus presence was confirmed by RT-PCR using the specific primers ASP1 5' CGGTAGGGCTGTGACTACCG-3' and ASP2 5'-GTAGTCCGCTGGTACGCTACAAG-3' (Abou Ghanem-Sabanadzovic *et al.,* 2001) and total RNA extracted from leaf veins according to Foissac *et al.* (2001). This assay confirmed the results obtained by serology and identified three more infected samples, one from peach and two from apricot, which were negative in DAS-ELISA. None of the infected trees showed particular field symptom. To the best of our knowledge, this is the first report of PBNSPaV from Tunisia.

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Corresponding auhor: K. Djelouah
Fax: +39.080.4606275
E-mail: djelouah@iamb.it

Received July 18, 2010
Accepted October 20, 2010