#### **DISEASE NOTE**

# FIRST REPORT OF *TRICHOCONIELLA PADWICKII* CAUSING LEAF SPOT DISEASE ON PARTHENIUM WEED

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Parthenium hysterophorus is an annual or ephemeral weed causing great damage to grassland ecosystems, but also allergy and dermatitis in humans and livestock. Since the use of fungal pathogens has been suggested as a most efficient biocontrol method, a survey was conducted in 2012-2014 in the Haryana state (India), during which dark brown to black marginal spots were observed on parthenium leaves. These lesions were initially round pinpoints that enlarged and coalesced causing a premature defoliation. From symptomatic leaves collected from different areas, surface-sterilized in 70% ethanol and placed on PDA, a fungus was isolated showing an initially whitish brown aerial mycelium that turned orange-brown to purple black (Aneja et al., 2000). Conidiophores were brown, straight to geniculate (160×5.0-9.3 µm), bearing obclavate, rostrate, pale to golden brown 71-103×16.4-23.6µm conidia, smooth to minutely verruculose, with 5-9 transverse but no longitudinal septa, singly or in chains of two. The conidial beak (50-172×1.4-3.1 µm) was hyaline, filiform, septate, straight to geniculate, sometimes swollen at the apex, often much longer than the spore body. Based on these characteristics, the fungus was identified as Trichoconiella padwickii (Ellis, 1971), as confirmed by the International Mycological Institute (IMI accession no. 502783). Pathogenicity was proven by placing seven-day-old mycelial plugs (5 mm) on detached parthenium leaves that reacted with spots from which T. padwickii was re-isolated. The ITS rDNA sequence analysed using the FASTA algorithm shared 100% nucleotide similarity to six unpublished ITS sequences from Alternaria padwickii (current name T. padwickii). This pathogen has previously been reported on rice, millet, sorghum, eucalyptus and various grasses but, to our knowledge, this is the first report on P. hysterophorus.

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Received October 28, 2014 Accepted November 3, 2014

## FIRST REPORT OF *PAPAYA RINGSPOT VIRUS* W INFECTING *MOMORDICA CHARANTIA* IN CUBA

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During a survey conducted in July 2010, severe mosaic and deformations were observed on the leaves of cerasee (Momordica charantia) in Villa Clara, Cuba. The symptoms resembled those induced by Papava ringspot virus (PRSV) in papava (Carica papaya L.) plants (Olarte et al., 2011). Leaf samples were ELISA positive when tested with a specific PRSV antiserum (Agdia, USA). The presence of PRSV was confirmed by the amplification of a 850 bp fragment by RT-PCR using primers specific to the PRSV coat protein gene (unpublished information). BLASTn analysis of the sequences from the RT-PCR amplified product (GenBank accession No. KP019380) showed 94% identity with PRSV-W isolates from Citrullus lanatus in the USA (GenBank accession Nos. JN132439 to JN132457) and PRSV-P isolates (GenBank accession Nos. AF196839 and EF189736). Crude sap extracts from symptomatic M. charantia leaf samples were mechanically inoculated onto Cucurbita moschata and papava plants. Symptoms developed in the former but not in the latter plants, suggesting the presence of PRSV-W, since only PRSV-P is able to infect papaya plants (Romay et al., 2014). In inoculated plants, the presence of this virus was determined by ELISA. In Cuba, the first molecular detection of PRSV-W was from Cucurbita pepo (Rodríguez-Martínez, personal communication) and PRSV-P has only been reported in papava plants (Portal et al., 2006). To our knowledge, this is the first report of PRSV-W infecting M. charantia in Cuba. This finding is relevant for the epidemiology, and management of this disease in cucurbits.

This research was supported in part by the International Foundation for Science, Stockholm, Sweden, through a grant to Dariel Cabrera Mederos (D/5134-1).

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Received October 31, 2014 Accepted January 16, 2015

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