DISEASE NOTE

FIRST REPORT OF *ALTERNARIA ALTERNATA* ON *VERBESINA ENCELIOIDES* IN SAUDI ARABIA

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In winter 2009, severe foliar infections were observed on *Verbesina encelioides* in the greenhouse of the King Saud University at Riyadh (Saudi Arabia). Symptoms appeared first as greyish brown patches around the tips and margins of young leaves then extended towards the midrib, causing curling and shedding of the leaves. Leaf pieces with lesions plated on potato dextrose agar (PDA) yielded fungal colonies with brown septate hyphae bearing straight 1-3 septate conidiophores, 50x3-6 µm in size. Conidia were obclavate to ellipsoidal with a short cylindrical pale-brown to light-brown beak with muriform septation and were usually solitary, occasionally in short chains. On potato carrot agar (PCA), mature conidia were 10-3×5-12 µm in size, showed 3-7 transverse septa, 1-5 longitudinal septa and were borne in chains with more than 5 elements. Based on these morphological characters, the fungus was identified as *Alternaria alternata* (Simmons, 1992), confirmed by the Indian Type Collection Centre of the Indian Agricultural Research Institute, New Delhi, and given I.D.No.7912.10. Healthy *V. encelioides* seedlings obtained from the Botanical Garden of the King Saud University were grown in steam-sterilized soil and used for pathogenicity tests. Detached leaves and whole plants were inoculated with a $5x10^5$ ml^{-1} aqueous conidial suspension of the fungus (Pryor and Michailides, 2002). Detached leaves were maintained in a chamber at near 100% relative humidity for 3 days and inoculated plants were covered with a polythene bag and incubated at 28±2°C, in the glasshouse. Plants/leaves sprayed with sterile water served as controls. Disease symptoms developed within 3 days on inoculated leaves. Control plants remained unaffected. *A. alternata* was re-isolated from the lesions, thereby fulfilling Koch's postulates. To our knowledge this is the first report of a pathogenic *A. alternata* affecting *Verbesina encelioides.*

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Received January 28, 2011
Accepted March 10, 2011

DISEASE NOTE

FIRST REPORT OF LEAF BLIGHT CAUSED BY *SEPTORIA PISTACIARUM* ON *PISTACIA VERA* IN INDIA

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Pistachio (*Pistacia vera*), an important nut fruit of the Western Himalayas, is cultivated over an increasing acreage in the Kashmir valley of the Jammu and Kashmir State (India). In May-June 2010, a blight condition of the leaves was observed, characterized by small light brown spots that developed into reddish-brown angular lesions. The subsequent enlargement and coalescence of the lesions resulted in the formation of large necrotic patches with scattered black pycnidia. Isolations on potato dextrose agar and incubation at 20±1°C yielded furrowed grayish-white fungal colonies which ultimately turned grayish- black. Pycnidia (332×638 µm), partially embedded in the medium, produced after 12-15 days of incubation, were black, globose to sub-globose with rounded ostioles, and released cream-white cirrhi. Conidia were hyaline, filiform, straight to irregularly curved, 3-7 septate and measured 11.5-59.7×1-4.9 µm. Pathogenicity was assayed by artificially inoculating detached pistachio leaves after ruling out latent infections, with a $4×10^4$ ml^{-1} conidial suspension. Non-inoculated leaves served as controls. Inoculated leaves developed symptoms within 7-10 days. Re-isolations yielded the original pathogen. Based on morphological characters, the fungus was identified as *Septoria pistaciarum* Caracciolo and the identification was confirmed by Dr. P.N. Chowdary (National Centre for Fungal Taxonomy, New Delhi). A different species, *Septoria pistacia*, has been reported in wild pistachio (*Pistacia integerrima*) from Himachal Pradesh (India) by Bharadwaj and Sharma (1994). However, since there is no record of *S. pistaciarum* in the fungal flora of India (Bilgrami *et al.*, 1981; Sorbhy *et al.*, 1996; Jamaluddin *et al.,* 2004) this report constitutes the first record of this fungus on *P. vera* in this country.

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Received February 2nd, 2011
Accepted February 7, 2011