

DISEASE NOTE

FIRST REPORT OF *DRECHSLERA HALODES* CAUSING LEAF BLIGHT OF *CRINUM LATIFOLIUM* IN INDIA

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Crinum latifolium, a bulbous herb of the family Amaryllidaceae, is greatly valued for traditional medicine in India (Beckstrom *et al.*, 1994). During a post-rainy survey, leaves of *C. latifolium* showed symptoms characterized by scattered, small circular to irregular, brown to light-red lesions with a yellow halo. Old lesions became shrunken and brick-red in the centre. The disease caused significant reduction in the weight and volume of the medicinally valuable bulbs. Diseased tissue fragments were surface-sterilized and plated on PDA at 22±2°C for 7 days. A fungus producing greyish to blackish colonies with red pigmentation, which consistently isolated from diseased tissue, was identified as *Drechslera halodes* (Drechsler) Subramanian et Jain using standard monographs and taxonomic keys (Ellis, 1971). Conidiophores were up to 200 µm long, 5-10 µm thick, septate, cylindrical, brown and paler towards the apex. Conidia were straight to slightly curved, thick-walled, had a basal septum darker and thicker than the other septa and measured 15-170×5-25 µm. The identity was confirmed by the National Fungal Culture Collection of India (NFCCI), Agharkar Research Institute, Pune, India (Culture no. OP 75). To confirm pathogenicity, disease-free plants were inoculated with conidial suspensions containing 1000 conidia per ml. Controls were inoculated with sterile distilled water. After 1 week, leaf spots similar to those observed in the field were observed on inoculated but not on control plants. The pathogen was re-isolated from inoculated leaves, fulfilling Koch's postulates. To our knowledge, on the basis of the literature (Jamaluddin *et al.*, 2004), this is the first report from India and worldwide of *D. halodes* infections causing leaf blight of *C. latifolium*.

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Received April 4, 2012
Accepted May 2, 2012

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FIRST REPORT OF *CUCUMBER MOSAIC VIRUS* ON *IBICELLA LUTEA* IN IRAN

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During a survey conducted in summer 2010, severe virus symptoms including mosaic, mottling and leaf malformation were observed on *Ibicella lutea* in fields of the Varamin region in the Tehran province of Iran. Four symptomatic samples were collected and leaf extracts were tested by DAS-ELISA for the presence of *Arabis mosaic virus* (ArMV), *Cucumber mosaic virus* (CMV), *Potato leaf roll virus* (PLRV), *Potato virus Y* (PVY), *Squash leaf curl virus* (SLCV), *Tomato bushy stunt virus* (TBSV), *Tomato ringspot virus* (ToRSV), *Tomato spotted wilt virus* (TSWV), *Tomato yellow leaf curl virus* (TYLCV), *Watermelon mosaic virus* (WMV), and *Zucchini yellow mosaic virus* (ZYMV), using commercial kits (Bioreba, Switzerland). None of the samples reacted with any of the antisera, except for that to CMV. The occurrence of CMV was confirmed by bioassays on herbaceous plants and by RT-PCR using total RNA isolated with TRI-Reagent (Sigma, USA) and CMV-specific primers designed on the coat protein gene (Blas *et al.*, 1994). An amplicon of the expected size (540 bp) was obtained from symptomatic but not from apparently healthy samples. Comparisons of the nucleotide sequence of the coat protein gene of a CMV isolate from *I. lutea* designated CMV-ALF (accession No. JF343525) with other sequences available in GenBank revealed 99% and 98% identity with CMV-Cu (EF620777) and CMV-CS (D28489), respectively. Furthermore, phylogenetic analysis showed that isolate ALF belongs to CMV group IA. This is the first report of CMV on *I. lutea* in Iran.

Blas C.D., Borja M.J., Saiz M., Romero J., 1994. Broad spectrum detection of Cucumber mosaic virus (CMV) using the polymerase chain reaction. *Journal of Phytopathology* **141**: 323-329.

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Received April 30, 2012
Accepted May 16, 2012