

DISEASE NOTE

OCCURRENCE OF CHARCOAL ROT
ON KIWI FRUIT IN IRAN

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In July 2006 wilted kiwi fruit trees (*Actinidia chinensis* Planchon) showed severe root rotting and dry rotting of the trunks that expanded up to 30 cm above the crown in the Kordkuy area of the Golestan province (northern Iran). Numerous microsclerotia were present on rotted roots and, sometimes, the surface of rotted stems was covered with small pycnidia. Microsclerotia were black, irregular and very small (74.02×75 µm), whereas pycnidia were larger (231.6×299.2 µm), black and semi-globous. Pycnidiospores were extruded from the pycnidial pore as orange cirrhi. Conidia were hyaline, single-celled, elliptical to oval in shape and measured 5.5×13.8 µm. Culturing microsclerotia and pycnidia on potato dextrose agar (PDA) yielded colonies of a fungus identified as *Macrophomina phaseolina* (Tassi) Goid. based on morphological characteristics (Singleton *et al.*, 1993). Fungal colonies were nearly colorless at first, turning to light white during growth. Abundant microsclerotia were produced within 2-3 days of culture, which changed the colony color to black. Hyphae were mostly branched at right angle and had obvious constrictions. The toothpick method (Singleton *et al.*, 1993) was used for pathogenicity tests, following which symptoms developed which consisted of chlorosis, necrosis and shedding of the leaves, along with rotting of the stem at the inoculation points. An extensive field survey showed that most of the recently established orchards in the Kordkuy area were infected, the same as another stand in the Noshahr area of Mazandaran province. This is the first report of *M. phaseolina*-induced charcoal rot disease of kiwi fruit in Iran.

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FIRST REPORT OF STEM NECROSIS
OF OKRA BY *CORYNESPORA CASSIICOLA*
IN BANGLADESH

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In spring 2003-2005, plants with stem necrosis were observed in okra [*Abelmoschus esculentus* (L.) Moench.] fields at Savar (Dhaka, Bangladesh). Average temperature in the surveyed region ranged between 25-28°C and the average yearly rainfall was 2430-3980 mm. Symptoms on the stem first appeared as very minute, dark, water-soaked, circular spots that later coalesced forming a large necrotic sub-circular to irregular area with dark grey to black coloured lesion. A fungus isolated from the transitional zone between healthy and diseased tissue on potato dextrose agar (PDA), was identified as *Corynespora cassiicola* (Berk. et M.A. Curtis) C.T. Wei on the basis of microscopic characters and cultural behaviour (Ellis, 1971; Subramanian, 1971; Kwon *et al.*, 2003). This fungus is a well known seed-borne pathogen of okra plants. Stems of okra seedlings, grown under greenhouse condition, were surface sterilized with 0.5% NaOCl then washed with sterilized distilled water. Pathogenicity tests were performed by pricking three successive internodes, up to a depth of 0.5 mm, of each of 25 test plants, on which a mycelium plug (2.0 mm in diameter) cut from the edge of a 7-day-old monosporic fungal cultures was placed. In control plants a sterile PDA plug was placed on each wound. Symptoms similar to those shown by naturally infected plants developed on the wounded stems 6 days after inoculation. The fungus was successfully reisolated from inoculated plants. This is the first report of *C. cassiicola* causing stem necrosis on okra in Bangladesh.

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