First Report of Fusarium Wilt of Colchicum kotschyi Caused by Fusarium proliferatum in Iran

A. Habibi and B. Safaiefarahani

Affiliations \(\square\)

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Colchicum kotschyi (Colchicaceae) is a species native to Iran, Iraq, and Turkey and is a known medicinal plant and a source of therapeutically active alkaloids called colchicinoids. In April 2017, symptoms of wilting and leaf yellowing were observed on C. kotschyi plants in rangelands of Kerman province (N 29°45'34.92"; E 56°27'22.93"). In nearly half of the collected samples, bulbs were discolored and rotted. Visits to the area showed that symptomatic plants eventually collapsed and desiccated. Samples were collected from six different locations of natural rangelands (three plants per location). Small pieces of symptomatic tissues of roots and stems were surface disinfested with 10% sodium hypochlorite for 1 min followed by three rinses with sterile distilled water and placed on three potato dextrose agar (PDA) plates per sample. After 5 days of incubation at 25°C, colonies with similar cultural morphology to Fusarium spp. were observed and transferred to fresh PDA plates and purified by the single-spore isolation method (Leslie and Summerell 2006). Five isolates were cultured on PDA, carnation leaf agar (CLA), and Spezieller Nährstoffarmer agar and incubated at 22 to 25°C in the dark for morphological identification. On PDA plates, colonies were light to dark purple in color. On CLA, macroconidia were 3 to 5 septate, with a distinct basal foot cell (33.4 \times 4.3 μ m, n = 30). Microconidia were 0 to 1 septate in chains (6.6 \times 2.2 μ m, n = 30). No chlamydospores were observed. Morphological



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Green mottle mosaic and leaf deformation syn watermelon (Sui, Li, Shamimuzzaman, Wu, and I credit: K.-S. Ling. Postharvest rot on cucumber

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