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Stemphylium botryosum and Cladosporium cucumerinum: A new challenge in watermelon production in Egypt

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In February 2017, a severe disease with typical symptoms of small brown spots (1 to 2 mm in diameter) was observed on the leaves of watermelon. On the other hand, different lesions were observed on leaves and petioles brown to dark brown in color with or without a chlorotic halo. Shape of lesions was circular to oval and on leaves they were generally 1 to 14 mm in diameter in Minia County, Egypt. The pathogens were consistently isolated from leaf lesions on Potato Dextrose Agar (PDA) incubated at 25 °C for 7 days. Identification of the isolated fungi was verified at Assiut University Mycological Center based on their morphological characteristics. Microscopic observations revealed that conidia of *Stemphylium botryosum* were muriform, mostly oblong to ovoid but occasionally nearly globose, subhyline to variant shades of brown, mostly constricted at the median septum and measured 12 to 14×8 to 10 µm (average 13.4×8.9 µm). On the other hand, *Cladosporium cucumerinum* conidia measured 2 to 8 × 1 to 3 µm (average 4.94×1.94 µm). Pathogenicity tests were performed by spraying a conidial suspension (10⁵ conidia ml⁻¹) on healthy watermelon (cv. Giza 1), plants, at the 5-true-leaf stage. Disease symptoms appeared on watermelon, which were similar to those observed under natural infection conditions. *S. botryosum* and *C. cucumerinum* were consistently re-isolated from artificially infected watermelon tissues, thus confirming Koch's postulates. For the diseases reported here, we suggest the name *Stemphylium* leaf spots and *Cladosporium* leaf spots and *Cladosporium* leaf

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