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DISEASE NOTE

First report of leaf anthracnose caused by *Colletotrichum grossum* on mango (*Mangifera indica*) in Cuba

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Anthracnose symptoms were detected on mango (*Mangifera indica* L.) leaves cv. 'Tommy Atkins' in Artemisa Province during October 2014, with an incidence of 100% of the plants. Greyish mycelium was observed in colonies from single-spore isolations on potato-dextrose agar. Conidia were subcylindrical, with rounded ends, aseptate, and hyaline, 15–20×5–7.5μm. Based on morphological characteristics, the fungus was similar to *Colletotrichum grossum* (Diao et al. 2017). To confirm the identity at the molecular level, the Apn2-Mat1-2 intergenic spacer-partial mating type (Mat1-2) gene, internal transcribed spacer region, partial sequences of the glutamine synthetase, actin, beta-tubulin, glyceraldehyde-3-phosphate dehydrogenase and calmodulin genes were amplified and sequenced (GenBank Accession Nos. MG826119, MG812307, MG826120, MG826117, MG826118, MG826116 and MG826121 respectively). A phylogenetic analysis of sequences obtained from this study and reference sequences of *Colletotrichum* species belonging to the *C. gloeosporioides* species complex (Marin-Felix et al. 2017), was performed using Maximum Parsimony and Bayesian Inference. Results clustered the isolate INIFAT-4144 in the *C. grossum* clade. Pathogenicity tests were conducted on five healthy 6-month-old mango plants. Inoculation was performed with 30 μl droplets of a conidial suspension (10^5 spores/ml) on the surfaces of wounded leaves. Control plants were treated with sterile water. Anthracnose symptoms similar to those observed in the field, appeared on inoculated leaves after five days. Control plants remained symptomless. The fungus was re-isolated only from diseased leaves, fulfilling Koch's postulates. *Colletotrichum grossum* was previously reported causing anthracnose on chili (Diao et al. 2017). To our knowledge, this is the first report of this pathogen on mango and also the first report of *C. grossum* in Cuba.

References

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