First report of *Colletotrichum siamense* causing anthracnose on banana fruits in Turkey

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Banana (*Musa acuminata* L.) is a desirable crop in Turkey, with a total production of 852,000 t in 2018. Recently, losses associated with fruit anthracnose were observed on ripening rooms and markets in Hatay province of Turkey. Symptoms included black and sunken lesions with spore masses or acervuli. Anthracnose incidence ranged from 41 to 53%. Three single-spored isolates of *Colletotrichum* spp. on PDA were first microscopically identified. White to grey coloured cultures having concentric rings of salmon acervuli produced conidia (3.5 to 5 × 10 to 18 µm) formed in masses, hyaline, and fusiform with obtuse ends. These were consistent with the description of Weir et al. (2012). To confirm morphology, glyceraldehyde-3-phosphate dehydrogenase (GAPDH) gene, a partial sequence of the actin (ACT) gene, and CHS-1 gene of 3 isolates were amplified with the primer pairs GDF1/GDR1, ACT-512F/ACT-783R, and CHS-79F/CHS-345R, respectively (Weir et al. 2012), and the obtained sequences deposited in GenBank [accession Nos. MF480749, MG951799, MG951810 (isolate BC2); MF480750, MG951800, MG951811 (isolate BC3) and MF480751, MG951801, MG951812 (isolate BC4) for ACT, GAPDH, and CHS-1, respectively]. BLASTn analysis of these se-

quences showed a 100% homology to *Colletotrichum siamense* strains. For pathogenicity, banana plants (cv. Anamur) were inoculated by spraying with 10 µl of a 10⁶ conidia per ml suspension of isolate BC4 on fruits wounded and disinfested by immersion in 1.5% NaOCl. Control fruits were treated with sterile distilled water. Fruits were maintained in a moist chamber at 25 °C with a 12-h photoperiod for 2 days. In 63% of 30 fruits, anthracnose symptoms appeared between 9 and 15 days later. Control banana fruits remained symptomless. The pathogen has previously been reported from India (Kumar et al. 2017) and Brazil (Vieira et al. 2017). To our knowledge, this is the first report of *C. siamense* causing anthracnose of banana in Turkey.

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