First report of *Corynespora cassiicola* causing leaf spot on *Solanum americanum* in Brazil

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Solanum americanum Mill. is one of the most frequently and widely distributed weeds in tomato areas in Brazil. The competition for nutrients and allelopathy effect exerted by *S. americanum* on tomato plants has caused intense damage to tomato production in Brazil. In addition, *S. americanum* can serve as a host of phytopathogens. In Brazil, *Corynespora cassiicola* (Berk. & M.A. Curtis) C.T. Wei causes major diseases in tomato, soybean and coffee tree. In January 2018, leaf spots were observed in *S. americanum* in four hectares of tomato crop in São Paulo state, Brazil. *S. americanum* plants were distributed throughout the area and around 50% of the leaves were infected. The leaves had dark brown circular or irregular spots, with concentric rings and yellow halo. Isolations were performed by transferring little samples (0.5 cm²) of superficially disinfected plant tissues from symptomatic leaves onto Petri plates containing PDA (potato dextrose agar) and cultured at 25 °C with 12-h photoperiod during 14 days. From 10 samples used in the isolation, 80% provided the development of colonies in the PDA medium. The resulting colonies were deposited in the culture collection of the plant pathology laboratory of Federal University of Paraná. Those colonies were dark gray, circular, with dense and velvety mycelial growth. The conidia ($n = 50$) were straight to curved, cylindrical, 49–151 × 8–11 µm, brown, with 3 to 14 pseudosepta. The conidiophores ($n = 50$) were isolated, septate, brown, cylindrical, 98–211 × 8–10 µm. These characteristics are similar to those described for *C. cassiicola* (Ellis and Holliday 1971). To confirm the morphological identification, the internal transcribed spacer (ITS) region was amplified using the pair of primers ITS1

and ITS4 (White et al. 1990). The sequence of this region was deposited in GenBank (Accession No. MH299413.1). BLAST analysis showed 100% similarity with *C. cassiicola* sequences from American Samoa (FJ852578.1) and China (EF198116.1). The surface of twenty healthy leaves of *S. americanum* was inoculated with the spray of 1×10^4 conidia/ml or sterilized distilled water (control) until runoff and stored in a humid chamber at 25 °C with a 12-h photoperiod during 48 h. Subsequently the plants were transferred to the greenhouse and were stored at 23 °C under photoperiod of 12-h. Leaf spots similar to those observed in the field were observed in the leaves 16 days after inoculation, but not in the control leaves. The pathogen was re-isolated only on symptomatic leaves and presented the same cultural, morphological and molecular characteristics of the colony used for inoculation. To our knowledge, this is the first report of *C. cassiicola* causing leaf spot on *S. americanum* in Brazil and worldwide (Farr and Rossman 2018).

References

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