First report of leaf spot on *Prunus salicina* caused by *Alternaria alternata* in China

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During summer-autumn of 2019, leaf spot symptoms were observed on Japanese plum (*Prunus salicina* Lindl.) plants in Huishui county, Guizhou province, China. Subcircular brown spots evolved in leaf discoloration and necrosis. The disease affected 50% of the plants, and the estimated yield reduction was 10 to 15% for each field. Symptomatic tissues were surface disinfected with 70% ethanol for 45 s and rinsed with sterile distilled water three times. Small pieces of diseased tissues were transferred to potato dextrose agar (PDA) plates and incubated at 25 °C. The colonies initially appeared grayish white and then turned dark brown. Five single-spore isolates produced conidia with 0 to 2 longitudinal or plagiotropous and 1 to 3 transverse septa, conidia were ovoid or ellipsoidal, measuring 22.1 to 46.5 × 9.2 to 13.5 µm (average 11.1 × 31.3 µm, $n = 50$). Based on the morphological characters, the isolates were identified as *Alternaria alternata* (Fr.) Keissl (Simmons 2007). To confirm the morphological identification, the DNA of the representative isolate HJHB1022 was extracted and the internal transcribed spacer (ITS), the translation elongation factor 1- α (TEF-1 α), and the RNA polymerase II (*RPB2*) regions were sequenced (GenBank accession Nos. MW048743, MW145536, MW145537, respectively). A BLASTn analysis exhibited 100% identity with *A. alternata* in ITS and *RPB2* (MH879767.1, MN593335.1, MN660291.1, MK605877.1, respectively), 98.93% identity in TEF-1 α region (GenBank accession Nos. MK637432.1 and MN046379.1). To confirm pathogenicity, leaves were stab inoculated by piercing into 1-mm using a sterile needle and applying mycelial disks (5 mm) with conidia of HJHB1022 on the surface of the

wounded area. The control leaves were mock inoculated with sterile PDA. After 7 days, leaf spots were observed on inoculated plants and *A. alternata* was re-isolated about a frequency of 90%, while the controls showed no symptoms. To our knowledge, this is the first report of *A. alternata* causing leaf spots on *Prunus salicina* in China and worldwide (Farr and Rossman 2020).

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Declarations

Conflicts of interest The authors declare that they have no conflict of interest.

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