



First report of shoot blight of Japanese maple caused by *Diaporthe eres* in China

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Japanese maple (*Acer palmatum* Thunb.) nursery plants in Nanjing, exhibiting shoot blight were observed from 2014 to 2017, with an incidence of up to 20%. To determine the causal agent of the disease, small fragments (5 × 5 mm) of symptomatic twigs were surface-sterilized with 0.5% NaOCl, washed in sterile distilled water, placed on potato dextrose agar (PDA) plates and incubated at 24 °C for eight days in the dark. Globose to subglobose pycnidia, 330 to 370 µm in diameter formed and released two types of hyaline, aseptate conidia, alpha (8.8 to 9.2 × 2.1 to 2.9 µm) and beta (17.8 to 30.9 × 1.6 to 2.1 µm). The fungus identified as causal agent of the disease could be related to *Diaporthe eres* (Udayanga et al. 2014). To confirm the identity at the molecular level, the internal transcribed spacer region, translation elongation factor 1-alpha, and actin were amplified using the respective primers (Carbone and Kohn 1999; White et al. 1990). The sequences (GenBank accession Nos. MG767199-MG767201) matched those of *D. eres* in BLAST and molecular phylogenetic tree analyses. Pathogenicity was confirmed by scratch inoculation of Japanese maple twigs (2 cm in diameter, *n* = 3) removed

from a tree with sterilized knife and covered with 5-mm mycelial discs. Control plants were covered with empty PDA discs. The same symptoms seen in the field were shown after 14 days by inoculated plants only, from which *D. eres* was isolated. To our knowledge, this is the first report of shoot blight of Japanese maple caused by *D. eres* in China.

References

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