



# First report of brown spot disease in *Psidium guajava* caused by *Alternaria tenuissima* in China

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A new brown spot disease characterized by discontinuous brown or black lesions on branches, wilt and necrosis extending from the edge to the centre of leaves and irregular reddish-brown spots surrounded by yellow halos was recorded on 75% of guava trees (*Psidium guajava* L.) on a guava farm of 2 ha in the Nansha District of Guangzhou (113°36'18" E 22°37'12" N). Symptomatic tissues were surface-sterilized with 70% ethanol for 30 s, 2% NaClO for 2 min, dried and plated on potato dextrose agar (PDA). Colonies appeared after 3 days at 28 °C in a light-dark cycle. They were cottony, initially white and turning dark brown. Mycelium was branched, conidiophores solitary. Conidia were solitary or in short chains pear-shaped or elliptical, brownish-yellow to dark brown with 1–3 transverse and 0–2 longitudinal septa, 23.0–45.1 × 3.3–9.2 μm. ITS1/2 rDNA and RPB2 were amplified and sequenced with ITS1 and ITS4 (White et al. 1990) and rRPB2-7cR primers (Liu et al. 1999) respectively. The ITS1/2 and RPB2 sequences showed respectively 100% and 99.86% similarity to *Alternaria tenuissima* (Kunze) Wiltshire (MG211084.1 and LT707523.1). Pathogenicity was tested on guava seedlings in a glasshouse at 28 °C and 80% humidity. Wilt and necrosis appeared 10 days after wound-inoculation on stems and leaves with 5-mm-diam mycelial

discs of *A. tenuissima*. Control plants showed no symptoms. *Alternaria tenuissima* was re-isolated from the infected stems and leaves. This is the first report of brown spot disease in guava caused by *A. tenuissima* in China.

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