First report of leaf blight caused by *Fusarium proliferatum* on *Polygonatum cyrtoneura* in China

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Polygonatum cyrtoneura Hua is an important perennial medicinal herb plant. From March 2015 to September 2019, leaf blight symptoms were observed on *P. cyrtoneura* plants in the planting regions in Chongren, Kekeng and Gulin Villages, Guangze County, China, with disease incidence of approximately 20–35% in the above district. The colonies were white to light pink with woolly purple aerial mycelium on potato dextrose agar (PDA), the plate reverses of the colonies were purple. Microscopic observations showed hyaline and septate hyphae, slightly curved macroconidia with three to four septa measuring 18.5 to 36.5×2.5 to 4.0 μm ($n = 20$), and microconidia measuring 7.8 to 11.5×2.5 to 3.5 μm ($n = 50$). These morphological characteristics were consistent with the description of *Fusarium* genus (Leslie and Summerell 2006). To confirm the identity of isolates (DHHJYK1 and DHHJYK2), the rDNA internal transcribed spacer region (ITS) and translation elongation factor 1 alpha gene (EF-1 α) gene were amplified using primers ITS1 / ITS4 (White et al. 1990) and EF-1 / EF-2 (O'Donnell et al. 1998), respectively. The resulting sequences for ITS and EF-1 α were submitted to GenBank with accession numbers (MN461564, MN461565,

MT265244 and MT265245). The ITS sequences of the two isolates showed 100.0% similarity with ITS sequence of *F. proliferatum* in GenBank (KU891521.1). The EF-1 α sequences of the two isolates showed 99.7% similarity with EF-1 α sequence of *F. proliferatum* in GenBank (AF160280). Leaves from 3-year-old healthy plants of *P. cyrtoneura* were wounded by a sterilised needle and inoculated by 5 mm mycelial plugs of the two isolates grown for 5 days on PDA. Control leaves were inoculated by sterile PDA plugs. There were six leaves for each replicates. The leaves were incubated at 12 h light/dark, 20–25 °C, and 80% relative humidity. Blight symptoms were observed on all inoculated leaves after four days, but no symptoms were seen on control leaves. Koch's postulates were fulfilled by re-isolation of *F. proliferatum* from diseased leaves. This is first report of *F. proliferatum* as a pathogen of *P. cyrtoneura* in North Fujian, China.

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