First report of *Curvularia* leaf spot caused by *Curvularia muehlenbeckiae* on *Zizania latifolia* in China

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*Zizania latifolia*, a perennial aquatic vegetable, has a long history of cultivation in China (Guo et al. 2007). A leaf spot, observed on *Z. latifolia* with 70% incidence in fields of Jiangsu Province in July 2018, caused a 20%-30% loss of production. Initial disease symptoms were small brown flecks on the adaxial side of leaf, which later developed into brown spots (0.2–0.5 × 0.8–1.5 cm) with an ashen center and a brown extension line along the leaf veins. When the spot coverage rate exceeded 90%, the infected plant died. ZLC1 strain was isolated from an infected leaf sterilized with 2% chloros by single-spore isolation. The colony, composed of septahyphae, was dark gray on PDA and its diameter reached 7.92 ± 0.08 cm in 6 days. Conidia were ellipsoidal, tri-septate, smooth, 9.75–14.01 × 18.39–25.93 μm, and dissymmetrically curved at the third cell from the base. Conidiophores were geniculate, septate, brown, and smooth. Molecular identification was performed by analysis of the ITS, *GAPDH* and *EF1α* sequences (Tan et al. 2014). The nucleotide sequences of ZLC1 (GenBank accession Nos. MW928429, MZ157282, MZ073340) had a very high identity exceeding 99.13% with the sequences of *Curvularia muehlenbeckiae* isolates from *Muehlenbeckia* from India (HG799002, LT715806) and *Saccharum officinarum* from China (MN263973). Phylogenetic analysis confirmed the identification as *C. muehlenbeckiae*. Pathogenicity tests were performed twice by spraying a spore suspension (10⁶ spores/mL) on 10 pricked leaves of *Z. latifolia* with three replicates in vitro. At room temperature and 90% RH, lesions developed on the 4th day, and all the inoculated leaves were severely infected after 7 days (Online Resources 1). All the re-isolated cultures identified by morphology were from *C. muehlenbeckiae*. Previously, *C. muehlenbeckiae* has been reported as a pathogen of *Cunninghamia lanceolate* (Cui et al. 2020). To our knowledge, this is the first report of *C. muehlenbeckiae* on *Z. latifolia*.

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**Declarations**

**Conflict of interest** The authors declare no conflict of interest.

**References**

Cui WL, Lu XQ, Bian JY, Qi XL, Li DW, Huang L (2020) *Curvularia spicifera* and *Curvularia muehlenbeckiae* causing leaf blight on *Cunninghamia lanceolate*. Plant Pathol 69(6):1139–1147

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