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DISEASE NOTE

First report of *Curvularia hominis* inciting fruit rot of ridge gourd (*Luffa acutangula*) in Tamil Nadu, India

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Ridge or ribbed gourd (*Luffa acutangula* Roxb L.) of Cucurbitaceae is cultivated throughout India. In September 2017, severe rot symptom was observed on fruits (cv. Mahyco) in a grove of Madurai, Tamil Nadu, India. Symptoms initiated as small water soaked spots at the distal-end of fruit which later extended upwards, turned dark brown that eventually led to rot within two weeks. To determine etiology, pieces of surface-disinfected discoloured fruit-core were placed on potato dextrose agar for isolation of causal organism. Fungus thus obtained was purified by mono-sporidial culturing on ridge gourd dextrose agar (Peeled and sliced ridge gourd fruit, 250 g L^{-1}; Dextrose, 20 g L^{-1}; Agar, 17 g L^{-1}; pH 7.0). Mycelium was initially white and turned grey later. Conidia (48.8 × 19.7 μm) were brown, fusiform, tri-transverse septate with two dark large central cells capped by two small hyaline terminal cells on both ends which revealed its identity as *Curvularia* sp. (Boedijin) (Wonglom et al. 2018). The identity was further confirmed by sequence analysis of internal transcribed spacer (ITS-MK737953); translation elongation factor (*tef1α*-MK737949) and glyceraldehyde 3-phosphate dehydrogenase (*gapdh*-MK737951) (Manamgoda et al. 2012). The nucleotide sequences shared identity with ITS (99.8%), *tef1α* (99.9%) and *gapdh* (99.6%) of other *C. hominis* entries including UTHSC_09464 for ITS and *gapdh* in NCBI database (Madrid et al. 2014). Pathogenicity assay was performed by spraying of conidial suspension (1x10^6 conidia/ml) of the fungus on surface-disinfected ridged gourd (cv. CO-1) fruits and incubated at 28 ± 2 °C with 80% relative humidity under glasshouse conditions. Sterile water sprayed fruits were kept as control. Rot symptoms on fruit were observed 12 days post inoculation and further led to complete rot of fruit in 15 days. Uninoculated fruits remained asymptomatic, and re-isolated fungus shared all phenotypic characters and *gapdh* nucleotide sequence identity with *C. hominis*. The fungus is deposited with accession number 3033 in NFCCI, Pune, India (http://nfcci.aripune.org). Perusal of records revealed that this is the first report of *C. hominis* causing fruit rot of ridge gourd in Tamil Nadu, India.

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