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DISEASE NOTE

First report of *Coniella granati* associated with dieback and fruit rot of pomegranate (*Punica granatum* L.) in India

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Pomegranate (*Punica granatum* L.) is an important horticultural crop grown in northern arid regions of Karnataka (India). Field survey conducted in Karnataka state during 2015–16 revealed the dieback and fruit rot diseases on pomegranate responsible for greater yield loss with an incidence of 24% and 18% respectively. Dieback disease was characterized by sudden death with necrosis and drying of young shoots with disease progress downwardly. Fruit rot was identified by the appearance of tan lesions (2–4 mm) which later enlarged to form larger necrotic spots (2–3 cm) and complete rotten as the disease progressed. The associated pathogen was isolated on Potato Dextrose Agar (PDA) medium. The colonies produced aerial mycelium with production of many pycnidia (90–160 μm in diameter) after 10 days of incubation (26 ± 2 °C). The mycelium was hyaline, septate, branched with pycnidia forming all over the surface concentrically. Pycnidia were solitary, globose and black with thin membranous walls. Conidia were hyaline, single celled, ellipsoid to fusiform (14–18 × 2.8–5.4 μm). Based on the micro-morphological and cultural characteristics, the fungal pathogen was identified as *Coniella granati* (Sacc.) Petr. & Syd. (syn. *Pilidiella granati*) (Van Niekerk et al. 2004; Cintora-Martinez et al. 2017). Further, the Internal Transcribed Spacer (ITS) region was amplified using ITS1-ITS4 primers and nBLAST analysis revealed 100% similarity with the reference sequences of *P. granati*. Two representative sequences were deposited in GenBank with the accession numbers MF067427.1 and MF067428.1. Pathogenicity tests were conducted on 60-day-old healthy saplings (whole plant inoculation with conidial suspension) and 20 healthy mature fruits (prick inoculation) with a conidial suspension of *C. granati* (3×10^6 conidia mL^{-1}). Characteristic dieback and fruit rot symptoms were recorded 15 and 10 days post-inoculation. Non-inoculated saplings and fruits remained asymptomatic. The pathogen was re-isolated and its identity was established. According to Farr and Rossman (2018), *C. granati* was reported on *P. granatum* worldwide, but this is the first report of this pathogen in India.

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