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DISEASE NOTE

First report of *Neoscytalidium novaehollandiae* associated with canker and branch dieback on cherry trees in Turkey

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Turkey is the largest cherry (*Prunus avium* L.) producer in the world. In the summer of 2020, symptoms of shoot blight, branch canker, dieback and dark wood discoloration were observed on about 8 % of cherry trees in a commercial cherry orchard established in Sur county of Diyarbakir province, Turkey. Small pieces of symptomatic tissues from branches were surface-disinfected in 2% NaOCl for 2 min, rinsed in sterile distilled water twice, and placed on Petri dishes containing potato dextrose agar (PDA) to isolate the causal fungal pathogens. The cultures were incubated for 10 days at 25 °C under dark conditions and twelve isolates were obtained from symptomatic tissues. The isolates formed dark gray to black aerial mycelia, containing abundant arthroconidia chains. Arthroconidia were 0 to 1 septate dark brown, thick-walled, disarticulating, cylindrical to oblong, 9.09-4.58 × 4.22-3.25 µm (n=30). Pycniospores produced on pine needles were 0–1-septate, hyaline, ellipsoidal, 3.3 to 4.2 × 10.7 to 14.2 µm (n=30). These coincided with the description of *Neoscytalidium novaehollandiae* by Phillips et al. (2013). The internal transcribed spacer (ITS) and translation elongation factor 1-α (EF1-α) gene of the representative isolate M3 was sequenced and deposited in GenBank (Accession Nos. MZ566846 for ITS, MZ576212 for EF1-α). Blast analysis showed 99.65-100 % sequence homology to that of *Neoscytalidium novaehollandiae* strain WAC12691 (EF1-α: EF585574.1, ITS: EF585543.1), respectively. To confirm Koch's postulates, six branch segments at 30 cm in length from 8-year-old healthy trees were wounded with a cork borer 4 mm and inoculated by mycelial plugs from 10-day culture. Inoculation sites were wrapped with parafilm and maintained at 25 °C in moist chambers for six weeks. Controls were inoculated with sterile PDA plugs. The pathogen caused dark brown necrotic lesions on inoculation point of all branch segments and re-isolated from inoculated tissues. Control plants remained symptomless. To our knowledge, this is the first report of *N. novaehollandiae* associated with cherry dieback and canker in Turkey (Farr and Rossman 2021).

Declarations

Ethical statement This article does not contain any studies with human participants or animals.

Conflict of interest All authors declare that they have no confict of interests.

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