First report of leaf blight of Turkish oregano (*Origanum onites*) caused by *Neoscytalidium dimidiatum* in Turkey

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In July 2020, a leaf blight disease with intense defoliation on Turkish oregano (*Origanum onites* L.) plants was observed in a pilot experiment field in Akçakale and a commercial field in Haliliye with an incidence of 5.4 and 11.7%, respectively, in Şanlıurfa province. After a surface-sterilization for 1 min with 1% NaOCl, isolations from symptomatic tissues of six affected plants for each field consistently yielded a fungus with the same colony morphology on potato dextrose agar. Cultures were powdery with a thick aerial mycelium, initially white that changed from olive green to black within 10 days. All 12 isolates, each obtained from a different plant, produced dark-brown, thick-walled, cylindrical to oblong, zero to one-septa, and $9.7 \times 4.6 \mu\text{m}$ ($n=30$) arthroconidia, both singly and in arthric chains. Pycnidia formed on pine needle agar were black, stromatic, and semi-immersed, with a mean diameter of $415 \mu\text{m}$. Conidia formed in pycnidia were hyaline, oblong to globose, zero to one-septa, and $11.4 \times 4.8 \mu\text{m}$ in length ($n=30$). These characteristics were consistent with those of *Neoscytalidium* spp. (Phillips et al. 2013). The ITS and EF1- α loci of the isolate Nd01Tv were sequenced using primers ITS1/ITS4 (White et al. 1990) and EF1-728F/EF1-986R (Carbone and Kohn 1999), respectively. A BLASTn search of the sequences (GenBank Accessions Nos. MZ576552 and MZ593904) showed 99.87 and 100.00% identity with the ITS (MH861121) and EF1- α (KF531795) sequences of strain

CBS 145.78 of *N. dimidiatum*. Phylogenetic analysis by the maximum likelihood method confirmed the identification. To establish the pathogenicity, the conidial suspension (10^6 conidia/mL) of Nd01Tv was sprayed to leaves of 5 healthy 2-year-old *O. onites* cv. Oğuz plants. Five plants sprayed with sterile distilled water served as controls. All plants were maintained at 25 °C with a 16-h light/dark photoperiod. Two weeks after inoculation, leaf blight symptoms were observed on inoculated plants, whereas all control plants remained healthy. The pathogen was re-isolated from leaves of all inoculated plants and identified by morphological features, fulfilling Koch's postulates. To the best of our knowledge, this is the first report of leaf blight of Turkish oregano caused by *N. dimidiatum* in Turkey.

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