



Fungal Planet 1169 – 19 December 2020

Pseudopyricularia javanii A. Pordel & G. Ghorbani, *sp. nov.*

Etymology. The species name is proposed in honour of Professor Mohammad Javan-Nikkhah, Iranian mycologist.

Classification — *Pyriculariaceae*, *Magnaporthales*, *Sordariomycetes*.

Mycelium on synthetic nutrient-poor agar (SNA), water agar (WA) supplemented with *Cyperus* leaves, and oatmeal agar (OA), consisting of smooth, hyaline, branched, septate hyphae. **Conidiophores** scattered, solitary, erect, pale brown, swollen at the base, macronematous, mononematous, typically unbranched, sometimes branched, straight, typically consisting of 0–5-septate, 35–85(–112) × 3–5 µm. **Conidiogenous cells** integrated, terminal, intercalary, sympodial, cylindrical, geniculate, denticulate; denticles cylindrical, thin-walled, pale brown. **Conidia** solitary, dry, obclavate, hyaline, (20–)25–35(–40) × 6–7 µm, 2-septate, hilum often protuberant. **Sexual morph** unknown.

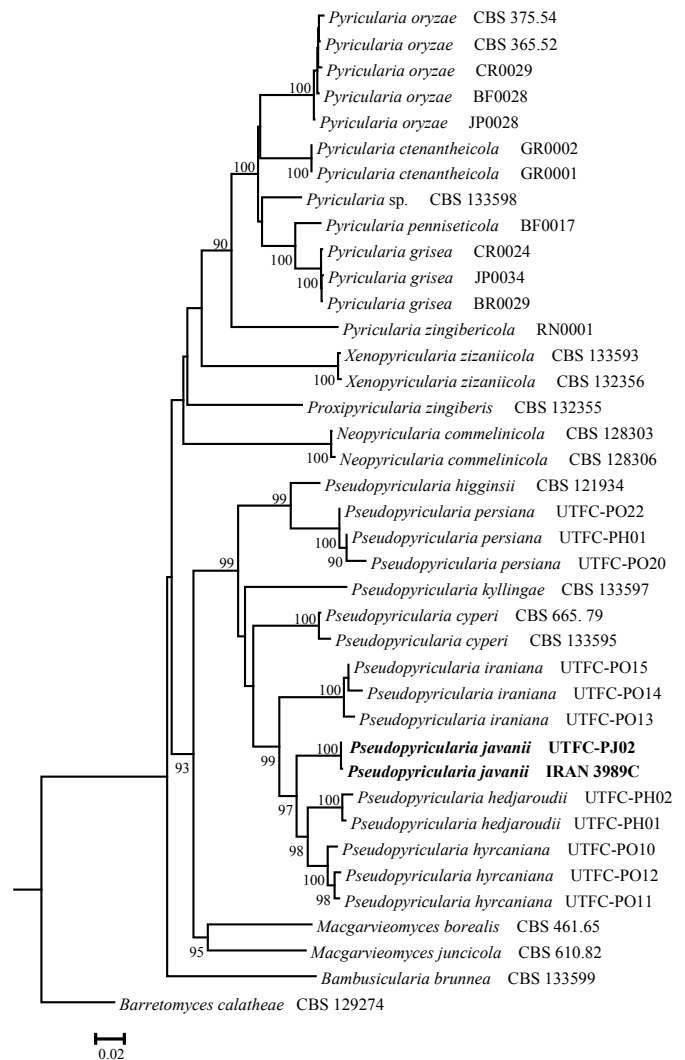
Culture characteristics — Colonies on OA transparent, greenish olivaceous, reaching 34 mm diam after 1 wk at 23–25 °C; on potato dextrose agar (PDA) transparent, grey, and black reverse, reaching 37 mm diam after 1 wk at 23–25 °C.

Typus. IRAN, Gilan Province, Someh Sara region, on infected leaves of *Cyperus* sp. (*Cyperaceae*), 15 Nov. 2018, A. Pordel (holotype in Iranian Research Institute of Plant Protection, IRAN 18060F, ex-type culture IRAN 3989C; ITS, LSU, *CAL*, *RPB1* sequences GenBank MT472570, MT472574, MT472593 and MT472595, MycoBank MB837644).

Additional material examined. IRAN, Gilan Province, Someh Sara region, on infected leaves of *Cyperus* sp. (*Cyperaceae*), 15 Nov. 2018, A. Pordel (UTFC-PJ02; ITS, *CAL*, *RPB1* sequences GenBank MT472569, MT472594 and MT472596).

Notes — *Pseudopyricularia javanii* is similar to *Ps. higginsii*, *Ps. cyperi*, *Ps. iraniana*, *Ps. kyllingae*, *Ps. persiana*, and *Ps. hagahagae* in having 2-septate conidia (Klaubauf et al. 2014, Pordel et al. 2017, Crous et al. 2018a). However, the conidia of *Pseudopyricularia javanii* are larger than those of *Ps. higginsii*, *Ps. cyperi*, *Ps. kyllingae*, and shorter than *Ps. persiana*, and *Ps. hagahagae*. It differs from *Ps. iraniana* in conidial shape, and size. To clarify the phylogeny of *Ps. javanii* within *Pseudopyricularia*, sequence data of *CAL*/*ITS*/*RPB1* were combined. In the multi-gene analyses (gene boundaries of *CAL*: 1–723, *ITS*: 724–1263, *RPB1* 1264–2265) of 39 isolates (37 taxa from NCBI and two sequenced specimens

of new taxa), 2978 characters including the alignment gaps were used. The phylogenetic tree suggested phylogenetic relatedness of the taxa from Iran to *Pseudopyricularia* with high statistical support (MLBP = 99 %). In the LSU sequences, the highest level of similarity (99.15 %; 819/826) was to *Ps. bo- thriochloae* (reference sequence accession NG_058051.1), and *Ps. hyrcaniana* (99.27 %; 820/826, GenBank KY457267), although the conidia in the new species is 2-septate. In species with 2-septate conidia, *Ps. hagahagae* has the highest level of similarity (98.87 %; 790/799; reference sequence accession NG_059616), although the conidia of *Ps. javanii* are smaller than *Ps. hagahagae* (conidial size; (38–)41–45(–49) × (7–)8(–9) µm).



Colour illustrations. *Cyperus* growing in Iran. Solitary, erect, unbranched conidiophore; obclavate conidia. Scale bars = 10 µm.