Parasarocladium debruynii
Sarocladiaceae L. Lombard, fam. nov.

Classification — Sarocladiaceae, Hypocreales, Sordariales, Sordariomycetes.

Vegetative hyphae septate, hyaline, smooth- and thin-walled. Conidiophores erect, arising directly from vegetative hyphae, simple or branched, straight, hyaline, smooth-walled, aseptate or with basal septum. Conidiogenous cells phialidic, arising laterally from hyphae or in terminal pairs, or verticils of three, or small monopodially branched tufts of up to four from conidiophores, monopodial, aseptate, elongate-ampulliform to subcylindrical, thin- and smooth-walled, hyaline with inconspicuous collarettes and periclinal thickening; adelophialides and schizophialides present or absent. Conidia unicellular, ellipsoidal, bacilliform to fusiform, sometimes slightly curved, hyaline to subhyaline, thin- and smooth-walled, forming slimy heads on the phialides or produced in chains.

Type genus. Sarocladium W. Gams & D. Hawksw. MycoBank MB828245

Notes — The family Sarocladiaceae presently includes Parasarocladium and Sarocladium.

Parasarocladium debruynii L. Lombard, sp. nov.

Etymology. Named for Remco de Bruyn, who collected the sample. This species was discovered during a Citizen Science project in the Netherlands, ‘Wereldfaam, een schimmel met je eigen naam’, describing novel fungal species isolated from Dutch soils.

Colonies on OA at 25 °C attaining 45–55 mm in 7 d, salmon due to abundant sporulation on medium surface giving a wet and slimy appearance, effuse, with edge entire surrounded by a light cyan blue halo; reverse salmon. On MEA at 25 °C attaining 38–50 mm in 7 d, rosy buff, effuse, with strong folds into the medium with edge entire; reverse rosy buff. Vegetative hyphae septate, hyaline, smooth- and thin-walled, 1–2.5 µm wide. Conidiophores erect, arising directly from vegetative hyphae, simple or rarely branched, straight, hyaline, smooth-walled, aseptate or with basal septum, up to 75 µm long. Conidiogenous cells phialidic, arising laterally from hyphae or in terminal pairs, or verticils of three, or small monopodially branched tufts of up to four from conidiophores, monopodial, aseptate, elongate-ampulliform to subcylindrical, 13–27 µm long, 1–3 µm wide at the base, thin- and smooth-walled, hyaline with inconspicuous collarettes and periclinal thickening. Conidia unicellular, ellipsoidal, bacilliform to fusiform, sometimes slightly curved, 3–5 × 1–2 µm (av. 4 × 2 µm), hyaline, thin- and smooth-walled, forming slimy heads on the phialides. Chlamydospores not seen.


Notes — The genus Parasarocladium was recently introduced by Summerbell et al. (2018) and included three species, P. breve, P. gamsii and P. radiatum. Conidia of P. debruynii (3–5 × 1–2 µm) are smooth-walled compared to the chromophilic roughened conidia of P. breve (Gams 1971) and smaller than those of P. gamsii ((4–)5–7(–12) × 0.5–1 µm; Tichelaar 1972). Furthermore, the phialides of P. debruynii lack any septation, distinguishing it from P. radiatum (Gams 1971). Additionally, ribosomal DNA sequences resolved P. debruynii as a distinct lineage within the genus Parasarocladium.