

Outlineoffungi.org - Note 1099 *Heteromicrosphaeropsis*

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Heteromicrosphaeropsis M. Mehrabi-Koushki, K.D. Hyde & Jayaward.

Heteromicrosphaeropsis was proposed by Artand et al. (2022) to accommodate *Heteromicrosphaeropsis ononidicola* (Thambug., Camporesi & K.D. Hyde) M. Mehrabi, K.D. Hyde & Jayaward as the type species based on the morphological characteristics and phylogenetic analysis of ITS, LSU, TUB2, and rpb2 sequence data. Artand et al. (2022) classifying it as a monotypic entity within the *Didymellaceae* (*Pleosporales*, *Dothideomycetes*). This genus was designated to encompass the species *Heteromicrosphaeropsis ononidicola*, which was previously identified as *Microsphaeropsis*. The fungal species was isolated as a saprophytic organism on the deceased aerial stem of *Ononis spinosa*, a member of the Fabaceae family, in Italy (Thambugala et al. 2018). Through molecular phylogenetic examination using LSU-ITS-*tub2-rpb2* gene sequences, Artand et al. (2022) demonstrated that this particular species diverged from the *Microsphaeropsis* lineage as well as other genera that form part of the *Microsphaeropsis* complex. Consequently, to reflect this phylogenetic distinction, the genus *Heteromicrosphaeropsis* was proposed. To date, the sexual morph of this genus remains undescribed. The asexual morph displays morphological similarities to the genus *Microsphaeropsis*. *Heteromicrosphaeropsis* is characterized by pycnidial, immersed to erumpent, globose to subglobose conidiomata, which can either be solitary or confluent, with uni-to bi-loculate chambers and an ostiole. The pycnidial wall is composed of a light to dark brown textura angularis. The conidiogenesis process is phialidic, producing hyaline, cylindrical conidiogenous cells that may be discrete or integrated. The resulting conidia exhibit a thin, smooth wall, with a coloration ranging from hyaline to yellowish brown. These aseptate conidia are obovoid to ellipsoidal, remain straight, and occasionally display guttulation.

References

- Artand S, Mehrabi-Koushki M, Tabein S, Hyde KD et al, 2022 – Revision of the *Microsphaeropsis* complex with addition of four new *Paramicrosphaeropsis* L.W.Hou, L.Cai & Crous species from Zagrosian forest trees in Iran. *Cryptogamie Mycologie* 43 (7), 159–175. <https://doi.org/10.5252/cryptogamie-mycologie2022v43a7>
- ThamBugala LM, Hyde KD, CamporeSi E, Liu ZY. 2018 – *Microsphaeropsis ononidicola* sp. nov. (*Microsphaeropsidaceae*, *Pleosporales*) from *Ononis spinosa* L. *Current Research in Environmental & Applied Mycology (Journal of Fungal Biology)* 8, 217–223. <https://doi.org/10.5943/cream/8/2/6>

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Published online 15 May 2023

