

Outlineoffungi.org - Note 575 [Melanodevriesia](#)

Web-links: [Index Fungorum](#), [Facesoffungi](#), [MycoBank](#)

[Melanodevriesia](#) H.L. Si, W.Q. Cao & T. Bose

[Chang et al. \(2022\)](#) introduced [Melanodevriesia](#) within *Xenodevriesiaceae* with the type species *M. melanelixia* based on maximum likelihood analysis of the ITS-LSU nucleotide alignment. The monotypic genus was associated with medullary tissue of *Melanelixia subargentifera* (*Parmeliaceae*) as an endolichenic fungi in terrestrial habitats in Nei Mongol, China. It was described based on its two thallus morphologies, branched, septate, hyaline to brown, guttulate pseudohyphae in a yeast-like state and branched, septate, cylindrical, hyaline to pale brown hyphae and spherical to ovoid, moniloid chlamydo spores in the mycelial state. [Melanodevriesia](#) is an endolichenic, oleaginous black yeast genus that may allow lichens to flourish in harsh environments ([Crous et al. 2009](#); [Gostinčar et al. 2012](#); [Chang et al. 2022](#)). Phylogenetically, [Melanodevriesia melanelixiae](#) was allied with *Xenodevriesia strelitziicola*, isolated from a *Strelitzia* sp. (*Strelitzianaceae*) in South Africa and formed a sister group within the family *Xenodevriesiaceae* ([Crous et al. 2009, 2019](#)). The clustering demonstrated that the LSU gene was the only significant gene to delimit this family ([Chang et al. 2022](#)). However, [Melanodevriesia](#) can be distinguished by its yeast-like and mycelial morphologies and chlamydo spores produced only in [Melanodevriesia](#) ([Crous et al. 2019](#); [Chang et al. 2022](#)).

References

- Chang R, Cao WQ, Wang Y, Li S, Li X, Bose T, Si HL (2022) *Melanodevriesia*, a new genus of endolichenic oleaginous black yeast recovered from the Inner Mongolia Region of China. *Fungal Systematics and Evolution* 9: 1–9. <https://doi.org/10.3114/fuse.2022.09.01>
- Crous PW, Schoch CL, Hyde KD, Wood AR, Gueidan C, De Hoog GS, Groenewald JZ (2009) Phylogenetic lineages in the *Capnodiales*. *Studies in Mycology* 64: 17–47. <https://doi.org/10.3114/sim.2009.64.02>
- Crous PW, Schumacher RK, Akulov A, Thangavel R, Hernández-Restrepo M, Carnegie AJ, Cheewangkoon R, Wingfield MJ, Summerell BA, Quaedvlieg W, Coutinho TA (2019) New and interesting fungi. 2. *Fungal Systematics and Evolution* 3: 57–134. <https://doi.org/10.3114/fuse.2019.03.06>
- Gostinčar C, Muggia L, Grube M (2012) Polyextremotolerant black fungi: oligotrophism, adaptive potential, and a link to lichen symbioses. *Frontiers in Microbiology* 3: 390. <https://doi.org/10.3389/fmicb.2012.00390>

Entry by

Qing Tian, School of Life Science and Technology, Center for Informational Biology, University of Electronic Science and Technology of China, Chengdu 611731, People's Republic of China

(Edited by: **Chayanard Phukhamsakda**)

Published online 26 September 2022