

## Outlineoffungi.org - Note 1445 *Lasiosphaeridaceae*

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### *Lasiosphaeridaceae* S.K. Huang, Maharachch. & K.D. Hyde

Huang et al. (2021) introduced *Lasiosphaeridaceae* under *Sordariales* (*Sordariomycetes*, *Pezizomycotina*, *Ascomycota*) to accommodate *Lasiosphaeris* Clem., Gen. fung. as a monotypic genus based on morphology and phylogenetic analyses using a combined LSU, ITS, TUB and RPB2 sequence data. The type species is *Lasiosphaeris hispida* (Tode) Clem., and three species erected in the genus *Lasiosphaeris*, namely *L. arenicola*, *L. hirsuta*, and *L. hispida*. The type species was found on dead wood in Germany and USA. *L. arenicola* (R. Hilber) S.K. Huang & K.D. Hyde is a new combination of *Cercophora arenicola* R. Hilber, in Hilber & Hilber (Huang et al. 2021). In the sexual morph, ascomata are perithecial, solitary, subglobose to obpyriform-shaped, black, ostiolate, tuberculate, or/and enclosed by brown-colored, septate setae or hairs. Asci are eight-spored, unitunicate, and cylindrical-shaped. Ascospores are cylindrical to geniculate or sigmoid, and aseptate to multi-septate. The asexual morph is hyphomycetous and phialophora-like. Conidia are oval to globose-shaped and hyaline. The families *Lasiosphaeridaceae* and *Zygospermellaceae*, which were established for only one and two genera, respectively, have been a subject of debate due to limited sampling and inadequate taxonomic practices. Recent phylogenetic studies by Kruijs et al. (2015) and Marin-Felix et al. (2020) have shown that both clades, which were previously considered independent families by Huang et al. (2021), are closely related. Huang et al. (2021) prematurely classified these families as separate lineages in their study, but Marin-Felix and Miller (2022) included them in the *Schizotheciaceae* clade in their Bayesian analysis. It is necessary to include more taxa and sequences in future studies to confirm if *Lasiosphaeridaceae* and *Zygospermellaceae* are truly independent lineages within *Schizotheciaceae*. Therefore, Marin-Felix and Miller (2022) have chosen to reject these families for now and refer to them collectively as *Lasiosphaeriaceae* s. lato until further research can provide more data for analysis.

### References

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- Marin-Felix Y, Miller AN, Cano-Lira JF, Guarro J, et al. 2020 – Re-evaluation of the order *Sordariales*: Delimitation of *Lasiosphaeriaceae* s. str., and introduction of the new families *Diplogelasinosporaceae*, *Naviculisporaceae*, and *Schizotheciaceae*. *Microorganisms* 8(9), 1430.
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