

Outlineoffungi.org – Note 1556 *Clavatospora*

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Clavatospora Sv. Nilsson ex Marvanová & Sv. Nilsson

Clavatospora was established to accommodate two species: *Heliscus longibrachiatus* and *Heliscus stellatus* (Nilsson 1964). This segregation was previously proposed by Ingold & Cox (1957) due to the distinct characteristics of the culture of the two *Heliscus* species compared to others in this genus. *Clavatospora* was delineated from other *Heliscus* species based on: 1) appendage:axis length ratio which is nearly one in *Clavatospora* and significantly different from 1 in *Heliscus*; and 2) the aseptate axis of *Clavatospora* (Nilsson 1964). Upon its introduction, no type species was designated, so this was later validated with *Clavatospora longibrachiata* being designated as the type species (Marvanová & Nilsson 1971). The genus was redescribed to further distinguish it from other genera, leading to the reclassification of some species into other genera such as *Alatospora*, *Heliscella*, and *Nawawia* (Marvanova 1980). According to the redescription of Marvanova (1980), *Clavatospora* species form black colonies in culture with grey aerial mycelium. The morphology of the conidiophores, conidiogenous cells and conidia differs depending on whether they are submerged or aerial. Submerged conidiophores are hyaline, simple or poorly branched at the apex while aerial conidiophores are short, simple or branched. In submerged conditions, conidiogenous cells are discrete, fusiform, proliferating sympodially or rarely percurrently whereas aerial conidiogenous cells are integrated, definite and holoblastic. Submerged conidia are tetradiate with clavate axis and three, thin, divergent apical appendages while the aerial conidia are cylindrical to fusiform, one to two-celled, occasionally produced in branched chains. For nearly 20 years now, no new species has been added to this genus. Although there are seven species with the genus name *Clavatospora* on record, four of these have been reclassified to other genera and two have been synonymized with species in *Clavariopsis* and *Heliscus*, thus only *C. longibrachiata* remains in this genus ([Index Fungorum 2024](#), [Mycobank 2024](#)). With only ITS sequences available, phylogenetic analysis showed that *C. longibrachiata* formed a distinct, well-supported clade separate from other genera, supporting the classification of this genus previously based solely on morphological characteristics ([Franco-Duarte et al. 2022](#)). The same analysis also included the ITS sequences of *Heliscella stellata* (\equiv *Clavatospora stellata*), which formed a clade distinct from *Clavatospora*, thereby validating the reclassification of this species into a different genus (Marvanova 1980, [Franco-Duarte et al. 2022](#)). Additional sequences of other loci may further confirm the phylogenetic positions, however, these are not currently available. *Clavatospora longibrachiata* (\equiv *Heliscus longibrachiatus*) was first isolated as a saprobe in decaying *Alnus* leaves submerged in freshwater and is commonly reported as a freshwater hyphomycete ([Ingold 1942](#), [Marvanova 1980](#), [Franco-Duarte et al. 2022](#)). *Clavatospora* is classified in *Halosphaeriaceae* (*Microascales*, *Sordariomycetes*) based on [Index Fungorum \(2024\)](#) and [Mycobank \(2024\)](#) records.

References

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