

## Outlineoffungi.org - Note 1443 *Fuscocatenula*

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***Fuscocatenula*** Réblová & A.N. Mill.

*Fuscocatenula* was erected by Réblová et al. (2021) to accommodate *Fuscocatenula submersa* (Z.L. Luo, K.D. Hyde & H.Y. Su) Réblová & A.N. Mill. as the type species by phylogeny (based on the combined ITS and 28S sequences) and morphology. In *Fuscocatenula*, colonies are effuse, hairy, brown-colored, with mycelium partly immersed and partly superficial. In the asexual morph, conidiophores are macronematous, mononematous, solitary, erect, and unbranched. Conidiogenous cells are integrated, terminal, monophialidic, cylindrical to lageniform, and brown-colored. Conidia are cuneiform to obovoid, aseptate, and produced in a basipetal chain. The collarettes are funnel and brown. The sexual morph has not been observed (Réblová et al. 2021). *Fuscocatenula* is classified under *Chaetosphaeriaceae* (*Chaetosphaeriales*, *Sordariomycetes*, *Pezizomycotina*, *Ascomycota*). Five species are accepted in *Fuscocatenula*, namely *F. bambusicola*, *F. chinensis*, *F. nabanhensis*, *F. submersa*, and *F. variegata* (Réblová et al. 2021; Wu & Diao, 2022; Liu et al. 2023). The type species was found on the submerged decaying wood in a stream in China (Réblová et al. 2021). All species are found in China (Réblová et al. 2021; Wu & Diao, 2022; Liu et al. 2023). Phylogenetically (based on the combined ITS and 28S sequences), formed a sister clade with *Chaetosphaeria* (Réblová et al. 2021; Wu & Diao, 2022). Despite their morphological similarities, *Fuscocatenula* is being proposed as a separate genus from *Catenularia*. The conidia of *Fuscocatenula* are obovoid and possess distinct characteristics that set them apart from those of *Catenularia*. *Fuscocatenula* conidia lack the angular shapes seen in *Catenularia* and instead feature small, circular, thin-walled pale areas at the corners. During their maturation process, *Fuscocatenula* conidia start as hyaline and gradually turn pale brown while still in a chain. This is different from *Catenularia*, where conidia mature quickly and are usually pigmented when released. Although capitate hyphae are a distinguishing feature in *Catenularia*, they are not reliable for differentiating between *Fuscocatenula* and *Catenularia* (Réblová et al. 2021; Wu & Diao, 2022). Based on the study by Réblová et al. (2021), *Chaetosphaeria submersa* Z.L. Luo, K.D. Hyde & H.Y. Su and *Catenularia variegata* H.H. Li & X.G. Zhang have been reclassified as *Fuscocatenula submersa* and *Fuscocatenula variegata*, respectively.

### References

- Liu JW, Hu YF, Cui RQ, Castañeda-Ruiz RF et al. 2023 – New species of *Catenularia* and *Fuscocatenula* from Xishuangbanna, China. *Mycotaxon* 137(4), 669–77.
- Réblová M, Nekvindová J, Miller AN. 2021 – Phylogeny and taxonomy of *Catenularia* and similar fungi with catenate conidia. *MycKeys* 81, 1.
- Wu W, Diao Y. 2022 – Anamorphic chaetosphaeriaceous fungi from China. *Fungal Diversity*. 116(1), 1–546.

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Published online 21 June 2024