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[Longinectria](#) O. Savary, M. Coton, E. Coton & J.L. Jany

Longinectria (*Nectriaceae*, *Hypocreales*) was introduced and typified by *L. lagenoides* (Savary et al. 2021). Currently, there are two species listed in this genus with *Longinectria verticilliformis* O. Savary, M. Coton, E. Coton & J.L. Jany as the second one (Savary et al. 2021). No teleomorphs have been reported for this genus and it is described by only its anamorphs. A multi-gene phylogenetic analysis, based on ten loci (large subunit of the ATP citrate lyase (*acl1*), alpha-actin (*act*), calmodulin (*cmdA*), histone H3 (*his3*), the internal transcribed spacer region and intervening 5.8S nrRNA (ITS), 28S large subunit (LSU), RNA polymerase II largest subunit (*rpb1*), RNA polymerase II second largest subunit (*rpb2*), translation elongation factor 1-alpha (*tef1- α*) and β -tubulin (*tub2*)) revealed that *Longinectria* forms a distinct subclade which is basal to *Albonectria*, *Cyanonectria*, *Fusarium*, *Geejayessia* and *Neocosmospora* and also a sister clade to *Bisifusarium* (Savary et al. 2021). This genus is distinguished from other closely related genera in *Nectriaceae* by its extremely long, phialidic, lateral, verticillate conidiophores with blunt to papillate apical cell and notched basal cell, 0–3 septate macroconidia and ovoid, ellipsoid to allantoid, 0–1 septate microconidia (Savary et al. 2021).

Species in *Longinectria* were isolated in France from Swiss and Italian cheese. *Longinectria* species cease its growth on culture media when the temperature increases more than 30°C (Dugat-Bony et al. 2016). This indicates that *Longinectria* species are not human pathogens as they cannot survive at human body temperature. No known mycotoxins are produced by *Longinectria* species and most detected secondary metabolites belonged to 38 chromophore families viz. chromophore, extra-nonpolar free fatty acids, mid-cyclic lipopeptides, indole alkaloids, 2-pyruvoylaminobenzamide-like molecules, alkylphenone chromophore and atrovnetin chromophore (Bodinaku et al. 2019).

The genus and the species of *Longinectria* were mentioned invalid due to their preservation in a metabolically inactive state (Art. 40.1 Shenzhen). Later, the genus and all the species were validated in Index Fungorum (2021) but the type species of the genus was not indicated, thus the genus and all species were considered invalidly published [Art. 35.1, Art. 40.1 (Shenzhen)]. The genus and species were validated in Crous et al. (2022).

References

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