**Comparative genomic approaches towards the genetic basis of fungal lifestyles in *Stictidaceae***

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The *Stictidaceae* (*Ostropales*, *Lecanoromycetes*) is a group of fungi that potentially can help us in understanding fungal choices of lifestyles. In this group, closely related species are either saprotrophs, distinct lichens, or in some cases borderline lichens that optionally can live either as lichens or as saprotrophs depending on the substrate they grow on. Their symbiotic structure consist of loose mycelia interweaving algal cells representing simple mutualistic relationship between the fungal and algal partners. In this study, we aim at identifying the genetic basis of the saprotrophic and lichenized lifestyles in *Stictidaceae* through comparative genomics of closely related saprotrophic (*Stictis radiata*), lichenized (*Stictis* *urceolatum*) and optionally lichenized (*Schizoxylon albescens*) species. The whole genomes of the three fungal species were newly sequenced and the genetic characteristics were compared with two other fungal species in *Ostropales*.