

TAXONOMY AND ECOLOGY OF OPHIOSTOMATOID FUNGI ASSOCIATED WITH *PROTEA* INFRUCTESCENCES

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The Ophiostomatoid fungi are represented in South Africa by the distantly related genera *Ophiostoma* (*Ophiostomatales*) and *Gondwanamyces* (*Microascales*) and their anamorphs. They are commonly associated with the fruiting structures (infructescences) of serotinous members of the African endemic plant genus *Protea*. The species *G. capensis*, *G. proteae*, *O. africanum*, *O. palmiculminatum*, *O. phasma*, *O. protearum*, *O. splendens* have been collected from various *Protea* species in South Africa. Species of *Gondwanamyces* are restricted to *Protea* species occurring in the Cape Floral Kingdom. *Ophiostoma* species in this niche has a wider distribution with two species occurring in northern parts of South Africa. Surveys are leading to the discovery of new species and DNA based identification techniques are revealing cryptic taxa amongst morphologically similar species. Like other Ophiostomatoid fungi, the species occurring in *Protea* infructescences are thought to be transported by arthropod vectors. Recent studies have shown that mites are most likely the primary vectors of various members of the *Protea*-associated Ophiostomatoid fungi. This review treats the existing knowledge pertaining to the ecology and systematics of the *Protea*-associated Ophiostomatoid fungi and will provide a foundation for future studies on the Ophiostomatoid fungi found within the unusual *Protea*-infructescence niche.