

OPHIOSTOMA SPLENDENS AND HONEYMOON

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My research involves the understanding of the role mites play within *Protea* communities. Part of my study is to investigate the role of mites in vectoring fungal spores. We know that certain *Protea*-associated mites e.g. *Proctolaelaps*, are the primary vectors of *Ophiostoma* and *Knoxdaviesia* and move around between *Protea* flowers by phoresy on *Protea*-associated insects e.g. *Genuchushottentottus*.

Current research investigated the genetic diversity of *Knoxdaviesia* over a distance of more than 200 km and found panmixia, signifying that this fungus is being vectored over relatively long distances. This finding, in addition to bird-associated mites found within *Protea* infructescences previously, led to the hypothesis of *Protea*-associated birds being able to assist with mite vectoring, such as in insects.

To address this question *Protea*-associated mites were collected from Cape Sugarbirds within *Protea* populations in the Western Cape. These mites specimens were then plated onto Malt Agar as well as Malt Agar with added Streptomycin and Cycloheximide. Fungal growths were replated out individually with a few samples sent for sequencing to establish the species.

Ophiostoma splendens was identified and confirms that *Protea*-associated mites do climb onto *Protea*-associated birds and carry *Protea*-associated fungi such as *Ophiostoma splendens*.

I am currently in the process of identifying Ophiostomatoid fungi sampled from mites collected from *Protea neriifolia* inflorescences. I am also busy with my last experiment where I will be looking at mite feeding preferences to establish what these *Protea* mites feed on within the inflorescences and infructescences. I was recently also blessed to marry my best friend, who understood and even assisted with feeding trails during our honeymoon.