

TAXI! HITCH A RIDE TO *PROTEA* VALLEY?

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The genus *Protea*, the largest genus in the *Proteaceae*, contains 136 species world-wide, with 117 of these native to the African continent. There are 90 species of *Protea* in South Africa, of which most are confined to the Fynbos Floristic Region. Recent studies indicated that a large diversity of mites is associated with *Protea*. Most of these studies focused on the description of mutualistic associations between certain fungal groups and mites, such as between *Tarsonemus* mites and *Ophiostomatoid* fungi. Spore-carrying mites feed on the fungus and are transported between *Protea* plants by pollinating beetles whilst vectoring the fungus.



On-going investigation of these symbiotic interactions indicated that a variety of insects, possibly birds as well, act as potential “taxi” for mites between *Protea* plants. These mites attach themselves to the body of insects such as *Protea* beetles, flies and even larger mites. The larger mites, in turn, are known to climb onto nectar feeding birds. Present investigations focus on the potential pollen and pathogen vectoring abilities of these mites between *Protea* plants. With the potential of bird-mite-fungi symbiotic interactions within these *Protea* communities, mites may prove to play a much more important role in the ecology of proteas than previously assumed.

(Hitchhiking mites are shown in circles on the photos)