

# Conservation of South Florida Orchid Mycorrhiza

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Starting in the late 1800's orchids were heavily poached, leading many species to reach critically low populations. *Oncidium ensatum* is an endangered orchid species native to south Florida. In nature, orchids have a low germination rate because of their reliance on species-specific mycorrhiza fungi for nutrients to enable growth and development. To identify the specific mycorrhiza species that have a symbiotic relationship with *Oncidium ensatum*, I will use molecular DNA extraction techniques, PCR, and peloton isolation followed by culturing of the fungi from orchid root samples. Phenotypic data will also be collected to investigate the effect of mycorrhizal diversity on orchid plant health and survivorship. The data collected will enable proper conservation policy management of orchid habitat in nature as well as provide guidance for successful breeding and reintroduction programs.