

Insect Visitation to the Native New Zealand Orchid, *Corybas cheesemanii*

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Flowers often attract their pollinators by advertising rewards. These interactions are not always mutually beneficial because some plants have evolved mechanisms to cheat them. Deception is primarily found in the Orchidaceae, which can be food deceptive, sexually deceptive, or, less commonly, brood-site deceptive. The New Zealand endemic orchid, *Corybas cheesemanii* has been hypothesized to be brood-site deceptive. It is thought to mimic mushrooms and get pollinated by female fungus gnats seeking an oviposition site. I surveyed insects visiting *C. cheesemanii* orchids and leaves and co-occurring mushrooms every few days before, during and after the orchid's entire flowering season. Several fungus gnat species do indeed visit these flowers and mushrooms, however, there was also a number of other fly families especially Lauxaniidae, Anisopodidae, and Tipulidae, which are typically associated with fungi and rotting vegetation. This suggests *C. cheesemanii* possesses a more generalist strategy of insect attraction than previously thought. Although female fungus gnats were previously predicted to be the major visitor to these orchids, male fungus gnats were found more frequently, suggesting *C. cheesemanii* attracts and possibly uses both sexes as pollinators by mimicking a mating or 'rendezvous' site, rather than just an oviposition site.

