Differences in arthropods found in flowers versus trapped in plant resins on Haplopappus platylepis Phil. (Asteraceae): Can the plant discriminate between pollinators and herbivores?

Villagra, Cristian A.

Meza, Alvaro Astudillo

Urzúa, Alejandro

 Plants produce secondary metabolites related to ecologically relevant processes. These compounds include surface secretions such as latex, mucilage and resins that help plants face abiotic and biotic environmental threats such as drought, nutrient deficiency, extreme temperatures and UV radiation, as well as herbivory, pathogenic microorganisms and other natural enemies. We studied the resinous coating found on involucral bracts of Haplopappus platylepis Phil. (Asteraceae). This plant belongs to a speciose genus widely distributed in South America (Lane and Hartman in Am J Bot 83:356, 1996). H.platylepis is characterized by resinous fragrant leaves. In this species, resins cover the involucral bracts as well as young leaves and are also secreted on reproductive stalks in smaller amounts. We carried out chemical analysis and natural history observations in order to identify whether arthropods caught in inflorescence resin differed from