

# Host preference of a temperate mistletoe: Disproportional infection on three co-occurring host species influenced by differential success

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The mistletoe *Tristerix verticillatus* (Loranthaceae) parasitizes within a small area of the Yerba Loca Nature Sanctuary near Santiago, Chile, three co-occurring hosts: *Schinus montanus* (Anacardiaceae), *Fabiana imbricata* (Solanaceae) and *Berberis montana* (Berberidaceae). Previous studies suggest that *T.verticillatus* may be favoured when parasitizing *S.montanus* relative to the other two host species. We hypothesize that infection of *S.montanus* is not proportional to its local abundance or appearance, that *S.montanus* is more intensively parasitized than other available hosts, and that host provenance is a determinant of the fate of the infecting seed. We compare the incidence of infection of *T.verticillatus* in relation to local availability and appearance variables, and the intensity of infection of *T.verticillatus*, on the three co-occurring host species. We then test the effects of host provenance on mistletoe seed establishment success with a seed cross inoculation experiment varying th