# Brevipalpus californicus s.l. AS THE POSSIBLE VECTOR OF ORCHID FLECK VIRUS (OFV) IN LILYTURF (Liriope spicata) AND GREEN TI PLANT (Cordyline fruticosa) IN AUSTRALIA 

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Ornamentals lilyturf (Liriope spicata) and green Ti plant (Cordyline fruticosa) were found to be naturally infected by the dichorhavirus Orchid fleck virus (OFV), exhibiting localized chlorotic ringspots, in Brisbane, Qd, Australia. OFV infecting orchids in Japan and an isolate of OFV, able to infect several Citrus species in Mexico, are described to be transmitted by B. californicus s.l.. Survey on symptomatic lilyturf and green Ti plants revealed that these plants were infested by Brevipalpus mites. Collected samples were fixed in absolute ethanol and processed for examination by light microscopy and scanning electron microscopy. Based on the morphology of ventral and dorsal reticulation, microplate pattern and the shape of the vesicle of spermatheca, mites present in both plants were identified as B. californicus s.l. A careful comparison of these morphological features with the published description of the type species by Beard et al. revealed some slight discrepancies, suggesting that they might represent a cryptic species within B. californicus group. Indeed, such variations have been found in other B. californicus populations, and studies in progress by Ochoa and Beard must result in new species in this group. Brevipalpus californicus s.l. was the only species found infesting lilyturf and green Ti plant, but additional transmission assays are required to demonstrate that this species is the carrier of OFV.

Keywords: Dichorhavirus.
Financial support: FAPESP (2014/08458-9 and 2017/50039-1).

