

Peri-urban mosquitoes (Diptera: culicidae) in the Concepción and adjacent coastal area of central Chile: some similarities and contrast with New Zealand.

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Chile, like NZ (& unlike Argentina or Australia) has a small known mosquito fauna and no indigenous mosquito-borne disease on the mainland. There has accordingly been only sporadic scientific interest in this field. Nevertheless and also as in NZ, there is a significant seasonal biting nuisance in some areas and there are some species present which transmit virus diseases elsewhere. There are also local species of unknown vector ability. We sampled mosquito species around Concepción and the adjacent south coastal region of central Chile, in similar latitudes and environment to parts of NZ, as part of a wider project. Adults were obtained using CO₂-baited light traps in built, wetland and remnant forest areas around Concepción city during February-March 2012. Weather information was obtained from on-site loggers and the Chilean Meteorological Service. Larvae were obtained by dipper from standing water and link-reared to obtain males for identification. Disease associations are reviewed from the literature for species in these samples and in collections of larvae made in late 2006. Some similarities with the situation in NZ and incipient concerns for human health and biosecurity are noted. It is interesting that NZ has higher reported levels of non-indigenous disease.

