



Culiseta (Climacura) novaezealandiae (Pillai)

No common name

NZ status: Endemic

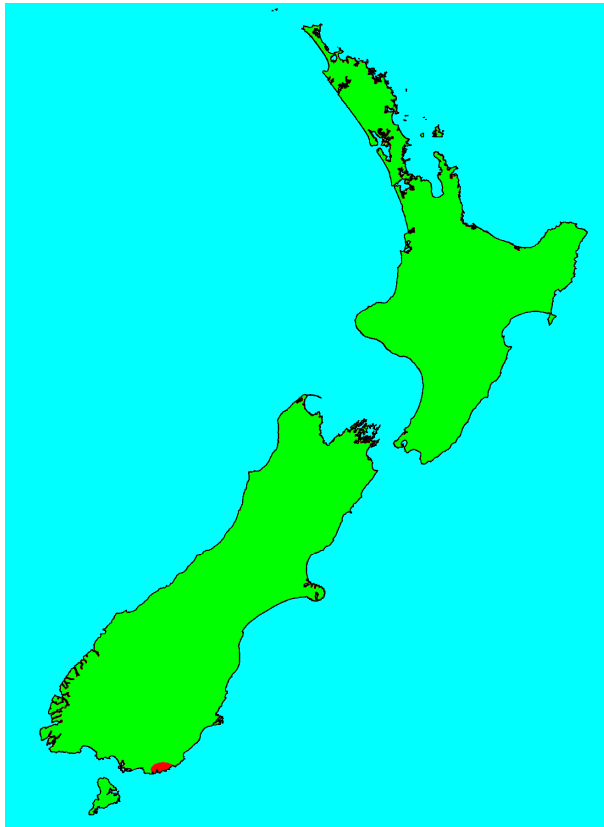


Vector and Pest Status

There are no suspected or known disease risks associated with *Culiseta novaezealandiae*. Females of this species are believed to feed on birds in their native habitat, although in the laboratory environment they were willing to feed on humans (Pillai, 1996).

Geographic Distribution

Culiseta novaezealandiae is an endemic species that has been found in only one location in the South Island of New Zealand, within the Tahakopa Scenic Reserve, south Otago (Lee *et al.*, 1988; Pillai, 1996). Specimens of this very rare species were collected last collected in January 2006 (R. Cane, New Zealand BioSecure, unpublished data, 2006).



NB. This map denotes the general areas where this species has been recorded, not actual distribution.

Taxonomy

Culiseta novaezealandiae is part of the subgenus *Climacura* which contains only four species; one in North America, one in Australia and another endemic New Zealand species *Cu. tonnoiri* (Pillai, 1966).

The adult mosquitoes of both New Zealand *Culiseta* species are easily identified by dark patches of scaling on the wings. Distinguishing between the two species is more difficult although *Cu. novaezealandiae* has a lighter coloured integument with many golden bristles down the centre of the thorax and three tarsal claws on the fore and hind legs.

Larvae are more easily distinguished; *Cu. novaezealandiae* has a single line of 25 or more combs scales while *Cu. tonnoiri* usually has 20 or less. *Cu. novaezealandiae* also has 2 or 3 basal sub teeth on the siphon and simple anal papillae.

Habits and Habitat

The habitat of *Cu. novaezealandiae* is restricted to a flax swamp sheltered by native coastal broadleaf forest.

Breeding appears to take place from January to April. In the cooler months *Cu. novaezealandiae* larvae are replaced by winter breeding mosquitoes such as *Ae. antipodeus* and *Ae. subalbirostris*. Adult behaviour and dispersal is mostly unknown (Lee *et al.*, 1988), however Pillai (1966) recorded trapping adults in the swamp and deep into the forest using traps baited with chickens, indicating that native birds are the likely source for blood meals. Adult females caught in the wild, did feed on humans under laboratory conditions (Pillai, 1966).

References

- Lee, D.J., Hicks, M.M., Debenham, M.L., Griffiths, M., Bryan, J.H., and Marks, E.N. 1988. The Culicidae of the Australasian region. Volume 10. Nomenclature, synonymy, literature, distribution, biology and relation to disease - Genera *Maorigoeldia*, *Mimomyia*, *Opifex*, *Orthopodomyia*, *Topomyia*, *Toxorhynchites*. Entomology Monograph No. 2. Vol. 10. Canberra: Australian Government Publishing Service. 105.
- Pillai, J.S. 1966. *Culiseta novaezealandiae*, a new species of the subgenus *Climacura* Felt (Diptera: Culicidae: Culicetini), with notes on its ecology and development. *Transaction of the Royal Society of New Zealand (Zoology)* 8(11): 125-133.