



NEW ZEALAND BIOSECURE
Entomology Laboratory



Aedes (Ochlerotatus) subalbirostris Klein and Marks

No common name

NZ Status: endemic



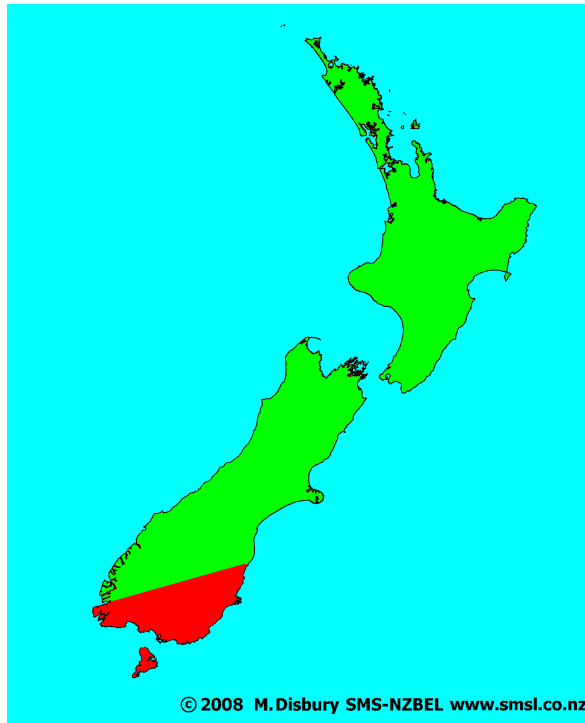
© 2008 R.Cane SMS-NZB www.smsl.co.nz

Vector and Pest Status

The vector status of *Aedes subalbirostris* is not currently known. It may bite humans, there have been a couple of unverified reports, and appears to be attracted to livestock but has not been recorded biting them (Holder, *et al.* 1999).

Geographic Distribution

Ae. subalbirostris is an endemic species first collected by W. Wesché in Invercargill in 1906 (Dumbleton, 1963). It is only known to be present on the southeast coast of the South Island (Pillai, 1966) including Otago, Southland, Invercargill (Marks & Nye, 1963) and also Stewart Island (Belkin, 1968).



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

Incursions and Interceptions

Aedes subalbirostris has not been intercepted at New Zealand's borders.

Taxonomy

Originally described and named *Aedes albirostris* by Edwards in 1924, it was renamed *Ae. subalbirostris* and further described in 1960 by Klein and Marks. It belongs to the subgenus *Ochlerotatus* and was moved to the genus *Ochlerotatus* when it was elevated by Reinert (2000) and Reinert *et al.* (2004). Controversy with the name change has seen all species placed back into the genus *Aedes*, pending further research.

Within New Zealand, the subgenus *Ochlerotatus* contains two members, *Ae. antipodeus* and *Ae. subalbirostris* (Marks and Nye, 1963). Adult females of *Ae. subalbirostris* can be distinguished from *Ae. antipodeus* by having a mottled femora (Klein & Marks, 1960), a proboscis with extensive pale scaling especially on the basal $\frac{3}{4}$ (Belkin, 1968), and a mainly golden scaled scutum, lacking longitudinal lines along the thorax (Marks and Nye, 1963).

Although the larvae of both members of subgenus *Ochlerotatus* share many features in common (Nye & McGregor, 1964), *Ae. subalbirostris* larvae may be easily separated from *Ae. antipodeus* by their lack of any spine like comb scales (Marks & Nye, 1963).

Habits and Habitat

Aedes subalbirostris like *Ae. antipodeus*, breeds in winter in freshwater ground pools (Pillai, 1966; Belkin, 1968). In most instances, larvae are found sharing the same pools as *Ae. antipodeus* (Marks & Nye, 1963; Belkin, 1968). Occasionally larvae have been found in roadside and field drainage ditches (Marks & Nye, 1963) and once in a horse drinking trough (Belkin, 1968).

Adults are attracted to and may bite humans but have only been trapped and recorded in low numbers (Belkin, 1968) suggesting they are not likely to be a pest. Dispersal habits are unknown.

References

- Belkin, J.N. 1968. Mosquito studies (Diptera, Culicidae). VII. The Culicidae of New Zealand. *Contributions of the American Entomological Institute* 3(1): 1-28
- Dumbleton, L.J. 1963. Rediscovery of the mosquito *Aedes subalbirostris* Klein and Marks. *New Zealand Entomologist* 3(2): 26-27
- Edwards, F.W. 1924. A synopsis of the adult mosquitos of the Australasian Region. *Bulletin of Entomological Research* 14: 351-401
- Holder, P., Browne, G. and Bullians, M. 1999. The mosquitoes of New Zealand and their animal disease significance. *Surveillance* 26(4): 12-15
- Klein, J.M. & E.N. Marks. 1960. Australian mosquitoes described by Macquart. I. Species in the Paris Museum, *Aedes (Finlaya) alboannulatus* (Macquart), *Aedes (Finlaya) rubithorax* (Macquart), *Aedes (Ochlerotatus) albirostris* (Macquart), new synonymy and a new species from New Zealand. *Proceedings of the Linnean Society of New South Wales* 85(1):107-116
- Marks, E.N. and Nye, E.R. 1963. The subgenus *Ochlerotatus* in the Australian region (Diptera: Culicidae) VI. - The New Zealand species. *Royal Society of New Zealand* 4(2):49-60
- Nye, E.R. and McGregor, D.D. 1964. Mosquitoes of Otago. *Records of the Otago Museum – Zoology* 1:1-23
- Pillai, J.S. 1966. *Culiseta novaezealandiae*, a new species of the subgenus *Climacura* Felt (Diptera: Culicidae: Culisetini), with notes on its ecology and development. *Transactions of the Royal Society of New Zealand (Zoology)* 8(11):125-133
- Reinert, J.F. 2000. New classification for the composite genus *Aedes* (Diptera: Culicidae: Aedini), elevation of subgenus *Ochlerotatus* to generic rank, reclassification of the other subgenera, and notes on certain subgenera and species. *Journal of the American Mosquito Control Association* 16(3):175-188
- Reinert, J.F., Harbach, R.E. and Kitching, I.J. 2004. Phylogeny and classification of Aedini (Diptera: Culicidae), based on morphological characters of all life stages. *Zoological Journal of the Linnean Society* 142: 289-368
- Snell, A. 2005. Identification keys to larval and adult female mosquitoes (Diptera: Culicidae) of New Zealand. *New Zealand Journal of Zoology* 32:99-110