



*Coquillettidia (Coquillettidia) linealis* (Skuse)

**NZ Status: Not Present – NSP Watchlist**



**Vector and Pest Status**

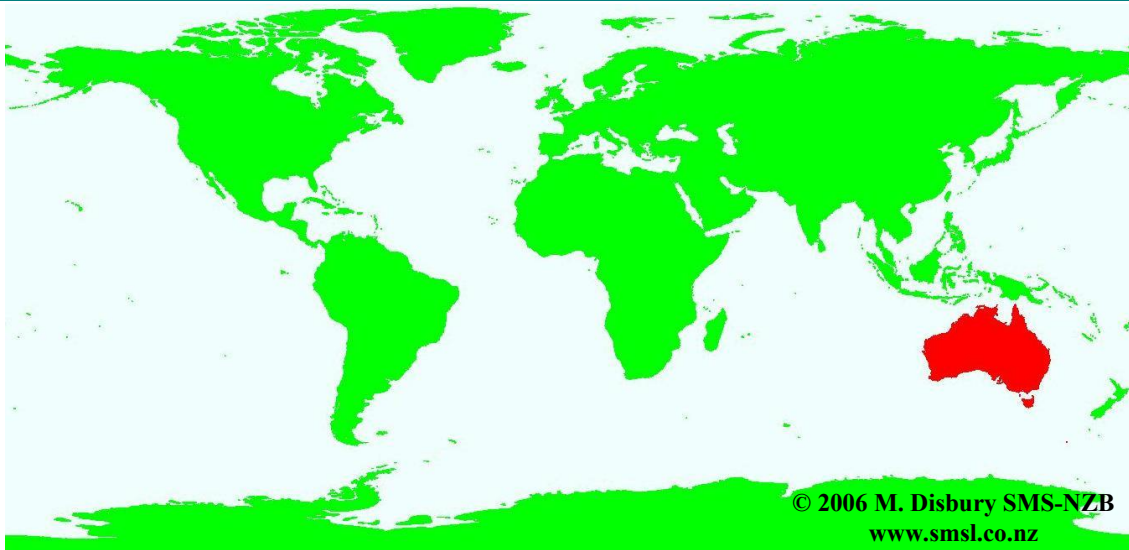
*Coquillettidia linealis* is a serious pest in Australia that bites humans and domestic animals (Lee *et al.*, 1988; Jeffery *et al.*, 2002). This species has been shown to be a highly competent vector of Ross river virus, and a moderately competent vector of Barmah Forest virus (Jeffery *et al.*, 2002). Trubanaman virus has also been isolated from this species (Lee *et al.*, 1988).

**Geographic Distribution**

This species is only present in Australia and is found in NSW, Victoria, South Australia, possibly Tasmania and Queensland. *Coquillettidia sp.* near *linealis* occurs in NSW, Victoria, South Australia, Tasmania and Western Australia (Russell, 1993).

**Incursions and Interceptions**

This species has not been intercepted in New Zealand.



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

### Taxonomy

Adult females of *Cq. linealis* are difficult to separate from an undescribed species known as *Coquillettidia* species near *linealis*, which has no basal pale patch on the second tarsus (Russell, 1993).

### Habits and Habitats

This genera of mosquito are typically associated with vegetation and are usually produced in large numbers at heavily vegetated sites ([www.arbovirus.health.nsw.gov.au](http://www.arbovirus.health.nsw.gov.au)). There is little information known about the breeding habitats and biology of *Coquillettidia linealis* (Jeffery *et al.*, 2002), however it is usually found in permanent vegetated freshwater such as billabongs (Snell, pers. ob.). Adult females lay eggs on the surface of the water and when the larvae hatch they attach to plant roots using a modified siphon to breathe.

*Coquillettidia linealis* has been observed to bite during the day (Lee *et al.*, 1988). Although this species displays a very large peak in host-seeking activity at sunset, followed by a much reduced level throughout the night and a smaller peak at sunrise (Williams, 2005). This species is known to bites humans, chickens, guinea pigs, dogs, sheep, rabbits, and marsupials (Lee *et al.*, 1988; Jeffery *et al.*, 2002).

### References

- Jeffery, J.A.L., Ryan, P.A., Lyons, S.A. and Kay, B.H. 2002. Vector competence of *Coquillettidia linealis* (Skuse) (Diptera: Culicidae) for Ross River and Barmah Forest viruses. *Australian Journal of Entomology* 41(4): 339-344.
- Lee, D. J., Hicks, M.M., Griffiths, M., Debenham, M.L., Bryan, J.H., Russell, R.C., Geary, M. and Marks, E.N. 1988. *The Culicidae of the Australasian region*. Volume 6. Canberra, Australian Government Publishing Service.
- Russell, R. C. 1993. *Mosquitoes and mosquito-borne disease in southeastern Australia: A guide to the biology, relation to disease, surveillance, control and the identification of mosquitoes in southeastern Australia*. Sydney, University of Sydney.
- Williams, C.R. 2005. Timing of host-seeking behaviour of the mosquitoes *Anopheles annulipes sensu lato* Walker and *Coquillettidia linealis* (Skuse) (Diptera: Culicidae) in the Murray River Valley, South Australia. *Australian Journal of Entomology* 44(2): 110-112.