

Mansonia (Mansonioides) uniformis (Theobald)

NZ Status: Not Present – NSP Watchlist



Vector and Pest Status

Mansonia uniformis is a pest species in some northern areas of Australia (Russell, 1993) although rarely poses a problem in areas such as the southeast. This species is a potential vector of Ross River virus, Murray Valley encephalitis, Kunjin viruses (Russell, 1993) and Edge Hill virus (Doherty *et al.*, 1968 in Lee *et al.*, 1988).

In Irian Jaya this species is a vector of *Wuchereria bancrofti*, the agent which causes Bancroftian filariasis and has a high natural infection rate (de Rook, 1957, in Lee *et al.*, 1988).

Geographic Distribution

Mansonia uniformis is widespread in its distribution. It is present in the Afrotropical Region (Lee *et al.*, 1988), including Africa, Angola, Bangladesh, Botswana, Cambodia, China, Comoros, Ethiopia, Gambia, Ghana, India, Japan, Kenya, Korea, Madagascar, Malaysia, Mozambique, Myanmar (Burma), Nepal, Nigeria, Pakistan, Papua New Guinea, Philippines, Senegal, Sierra Leone, Sri Lanka, Sudan, Taiwan, Tanzania, Thailand and Uganda (www.wrbu.org).

It is also present in the Australasian Region including Indonesia, Papua New Guinea, Solomon Islands and Solomon Islands and Australia. In Australia it is present in New South Wales, Victoria, Queensland, Northern Territory and Western Australia (Lee *et al.* 1993; Russell, 1993).



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

Incursions and Interceptions

This species has not been intercepted in New Zealand.

Taxonomy

Adult female may be confused with *Ae. alternans*, and other species with similar broad scales on wings e.g. *Ae. kochi*, *Ae. theobaldi* and *Ae. flavifrons*.

Habits and Habitat

Mansonia eggs are laid in a cluster on or under the surface of floating leaves of aquatic plants (Marks, 1967 in Lee *et al.*, 1988). Larvae are found in association with many types of water plants, both floating and fixed to the bottom (Bonne-Wepster, 1954a; b, in Lee *et al.*, 1988). Larvae attach to roots of plants and do not free swim as other larvae do. Larval habitats are usually permanent and semi permanent swamps and waterholes (Marks, 1967 in Lee *et al.*, 1988).

Adults appear to be active only during the summer and autumn months. They can disperse up to a few kilometres from breeding habitats. The female of this species is an aggressive biter and will readily attack during any time of the day or night (van den Assem and Bonne-Wepster, 1964 in Lee *et al.*, 1988), indoors or outdoors (Peters and Christian, 1963 in Lee *et al.*, 1988) if the humidity is high enough. They readily attack humans and other animals including cattle, sheep, pigs, dogs, fowls, kangaroos, marsupials, cats, horses, and birds (Lee *et al.*, 1988).

References

- Assem, J. van den and Bonne-Wepster, J. 1964. New Guinea Culicidae, a synopsis of vectors, pests, and common species. *Zool. Bijdr* 6: 1-136.
- Bonne-Wepster, J. 1954a. Synopsis of a hundred common non-anopheline mosquitoes of the Greater and Lesser Sundas, the Moluccas and New Guinea. *Documenta Med. Geogr. Trop.* 6: 1-29; Part II, 162-190; Part III, 208-246; Part IV, 347-394.
- Bonne-Wepster, J. 1954b. Synopsis of a hundred common non-anopheline mosquitoes of the Greater and Lesser Sundas, the Moluccas and New Guinea. *Spec. Pub. R. trop. Inst. Amsterdam* III: 1-147.
- De Rook, H. 1957. An investigation on filariasis in the Berau Region. *Tech. Pap. S. Pacif. Commn.* 105: 1-19.
- Doherty, R.L., Carley, J.G., Barrow, G.J., Symons, M.H., Standfast, H.A. and Kammen, A. Van. 1968. Epidemiological studies of arboviruses. Isolation and

identification of viruses. Annual Report of the Queensland Institute of Medical Research 23: 4-5.

- 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 9. Canberra, Australian Government Publishing Service.
- Marks, E.N. 1967. An atlas of common Queensland mosquitoes; with a guide to common Queensland biting midges by E.J. Reye. Revised edn, University of Queensland bookshop, St Lucia pp. 91.
- Peters, W. and Christian, S.H. 1963. The bionomics, ecology and distribution of some mosquitoes (Diptera: Culicidae) in the Territory of Papua and New Guinea. *Acta Tropica 20*: 35-79.
- 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.