



***Nysius caledoniae* Distant, 1920 (Hemiptera: Heteroptera: Orsillidae) a recent introduction into New Zealand, and keys to the species of *Nysius*, and genera of Orsillidae, in New Zealand**

A. C. EYLES¹ & M. B. MALIPATIL²

¹30 Mahana Rd, Paraparaumu Beach 5032, New Zealand. E-mail: alan.pat@xtra.co.nz

Research Associate, Landcare Research, Auckland.

²Department of Primary Industries, Knoxfield, Private Mail Bag 15, Ferntree Gully Delivery Centre, Vic. 3156, Australia.

mallik.malipatil@dpi.vic.gov.au

Abstract

Nysius caledoniae Distant, 1920 is recorded for the first time as an alien introduced species in New Zealand. Collection with young stages indicates that it may already have established itself in Auckland. Characters of the species enabling its identification are presented. The pest-status of *N. caledoniae*, *N. vinitor* Bergroth, 1891, and *N. huttoni* White, 1878, is reviewed. A key to the genera of Orsillidae in New Zealand is provided, along with a revised key to the species of *Nysius* in that country.

Key words: Lygaeoidea; identity; description; diagnosis; nymph; distribution; economic importance; review of pest-status; *Nysius huttoni*

Introduction

In May 2006 we were sent a photo of a species of *Nysius* Dallas, 1852 collected in Auckland on a lettuce crop in Pukekohe. In February 2007 a pair, killed in copulation, of the same species collected in Auckland Botanic Gardens, was sent to A.C.E. In December 2007, when in Auckland, he collected a male at the Botanic Gardens, plus a series of each sex (some caught and killed in copulation) and a fifth instar at Bastion Point.

In late May 2008 dissection of a male revealed a distinct difference in shape of the paramere from that of *N. huttoni* White, 1878. The specimens mentioned above represent a recently introduced species of *Nysius*. The series from Bastion Point is from a breeding population, indicating that the species has already established itself in Auckland. This introduced species is identical to a series collected by A.C.E. on Lord Howe Island in 2002, and it has, along with *N. huttoni*, a full double row of punctures following the claval suture.

This species belongs in a complex group of species from Australia and the South West Pacific which was in need of taxonomic revision (Malipatil 2005). This revision has now been completed (Malipatil 2010), and we can now refer to this introduced species under its correct name *Nysius caledoniae* Distant, 1920.

There are now four species of *Nysius* in New Zealand, *Nysius huttoni*, *Nysius convexus* (Usinger, 1942), *Nysius liliputanus* Eyles & Ashlock, 1969 (all endemic to New Zealand), and the very recently discovered introduced species *Nysius caledoniae* from Lord Howe Island, Australia or Tasmania.

There are three genera of Orsillidae in New Zealand, *Nysius*, *Rhypodes* Stål, 1868, and *Lepiorsillus* Malipatil, 1979, all in the tribe Nysiini. A key to the genera of Orsillidae in New Zealand, and a revised key to the species of *Nysius* in New Zealand, are provided. The Orsillinae (formerly a subfamily of the Lygaeidae) was raised to family status by Sweet (2000).