

## ‘AERIAL DISPERSAL’ OF *AGROTIS INFUSA* (LEPIDOPTERA: NOCTUIDAE) TO NEW ZEALAND

M.S. BULLIANS<sup>1</sup>, G.P. WALKER<sup>2</sup>, S. WINKLER<sup>2</sup>, G.S.C. GILL<sup>3</sup>  
and J.E. RICHMOND<sup>1</sup>

<sup>1</sup>*Biosecurity New Zealand, PO Box 2095, Auckland, New Zealand*

<sup>2</sup>*Crop & Food Research, Private Bag 92169, Auckland, New Zealand*

<sup>3</sup>*Biosecurity New Zealand, PO Box 2526, Wellington, New Zealand*

*Corresponding author: Mark.Bullians@maf.govt.nz*

The bogong moth, *Agrotis infusa* (Lepidoptera: Noctuidae), is used as an example of aerial dispersal of a potential plant pest from Australia that is often collected during spring and summer months of the year in New Zealand. Adult male and female bogong moths arrive from Australia on westerly blown winds, and have been identified in collections from light traps in 4 out of 13 years of continuous trapping in the 1980s and 1990s at Pukekohe. Bogong moth larvae have not been known to survive a winter in New Zealand although live *A. infusa* larvae were collected from lettuce at Pukekohe, New Zealand, in February 2005 indicating that females had migrated from Australia and laid eggs. Synoptic maps were examined for spring/summer 2004/05. These illustrated that prevailing winds at Pukekohe were from the northwest quarter during spring/summer 2004/05. No *A. infusa* were found infesting leafy vegetable trap crops or identified from a light trap monitored in the same area in 2005/06. Notes are given on some recent pests and diseases that may have arrived to New Zealand via wind assisted dispersal.

## OCCURRENCE AND DIVERSITY OF PESTS FOUND IN ASSOCIATION WITH IMPORTED USED VEHICLES

M.F.S.W. FERNANDO, M.S. BULLIANS, H.G. PEARSON, C.A. MUIR,  
D. VOICE, B.J.T. MCCARTHY and D. GUNAWARDANA

*Ministry of Agriculture and Forestry, PO Box 2095, Auckland, New Zealand*

*Corresponding author: sydney.fernando@maf.govt.nz*

All used vehicles entering New Zealand are required to be inspected for biosecurity risks, and cleaned if necessary, prior to release by MAF Quarantine Service. The inspection includes the internal and external surfaces to determine whether soil, plant material, insects or other contaminants are present. The risk associated with this import pathway is highlighted by recent post border interceptions of live red back spiders (*Latrodectus hasselti*), carpenter ants (*Camponotus* sp.), cockroaches (e.g. *Supella longipalpa*), mantid egg masses and other insects and plant products. The volume of used motor vehicle imports into New Zealand has almost doubled in ten years from 88,029 in 1995 to 163,253 in 2005. Of the used cars imported in 2005, 155,028 came from Japan, 4550 from Singapore, 1543 from USA and 1149 from Australia. Investigation and Diagnostic Centre (IDC) data from 2004 show that post border interceptions have also increased in frequency. From November 2004 to April 2005, six used vehicle post border detections were reported to IDC, while from May 2005 to October 2005 there were 8 cases, and from November 2005 to April 2006 14 cases were reported. The majority of notifications made to IDC were via members of the public who purchased the vehicles.