

COMMENTS

Although its native food plants were probably *Acacia* species, recorded host plants of the painted apple moth include *Geranium*, *Pelargonium*, *Rosa*, broad beans, "lawns", *Cotoneaster*, passion fruit, *Pinus radiata*, apple, apricot, willows, banana, *Dahlia*, cape weed (*Arctotheca*) and numerous others (E. D. Edwards pers. comm.). The female is flightless and larvae do not disperse from a silken thread in the wind. Dispersal occurs by means of a wandering 1st instar larva which probably accounts for the wide host tolerance. These 2 characteristics might enable this species to become temporarily established in New Zealand, but the means of dispersal would render an infestation easily isolated and controlled.

ACKNOWLEDGEMENT

I am grateful to Dr E. D. Edwards for helpful comments and to Mr D. Sanderson for the photographs.

REFERENCE

- Forster, L. M., 1982: The Australian redback spider—an unwelcome immigrant to New Zealand. *The Weta* 5: 35.

Lepidoptera light-trapped at Owaka, South Otago

B. H. PATRICK

38 St Albans Street, Bradford, Dunedin, New Zealand

R. D. ARCHIBALD*

Microbiology Department, University of Otago, Box 56, Dunedin, New Zealand

ABSTRACT

A list of 124 Lepidoptera taxa collected by light-trapping at Owaka is presented. The light-trap operated during November and December 1983, and between September 1984 and June 1985.

Keywords: Lepidoptera, light-trap, Owaka, South Otago, New Zealand.

INTRODUCTION

Owaka (46°27'S, 169°39'E) is situated in lowland pasture, 4 km from the coast, and is one of the most southerly pastoral farming areas in New Zealand. No list of Lepidoptera of this area has previously been reported.

METHOD

A light-trap was fitted with an unballasted mercury vapour bulb connected to a ballasted circuit and situated adjacent to pasture. It was operated from 7 November 1983 to 11 December 1983 (12 samplings) and from 15 September 1984 to 7 June 1985 (45 samplings).

* Present Address: Meat Industry Research Institute, P.O. Box 617, Hamilton, New Zealand.

RESULTS AND DISCUSSION

Table 1 lists the 124 taxa and the months in which they were collected. Typically for this type of light-trap the noctuids and hepialids comprise the bulk of the individuals trapped. Unlike the smaller moths which tend to be deflected by the bright bulb, noctuids and hepialids are strong fliers and so outnumber the others. The 51 species of Noctuidae collected are generally typical of southern developed pasture areas but there is a strong forest element that reflects the presence of forest remnants within a few km of the trap site. Many of the genus *Meterana* fit this category, as they have arboreal larvae.

Several species such as *Aletia cuneata*, *Ichneutica ceraunias* and *Tmetolophota alopa* were represented by only 1 individual each. These species are characteristic of upland grassland areas that are not fully developed. Such areas occur within 5 km of Owaka. An interesting find was the speckled footman moth, *Utethesia pulchelloides vaga*, a cosmopolitan species; this is the southern-most record in New Zealand.

Patrick & Archibald (in prep.) do not accept that *Wiseana mimica* (Philpott) and *W. jocos*a (Meyrick) are synonyms for *W. cervinata* (Walker) Dumbleton (1966) and so the old names have been retained in this list.

Five noctuids which have been taken at lights elsewhere in the Catlins area were not found in the Owaka light-trap. *Physetica caerulea* (Guenée) and *Meyricci pictula* (White) were taken on Tautuku Beach, *Graphania fenwicki* (Philpott) and *G. beata* (Howes) were taken in forest at Tautuku, and *Aletia* n.sp. was taken at Ajax Bog, during October 1985.

Table 1: The Lepidoptera collected from a light trap at Owaka, South Otago.

HEPIALIDAE

Aoraia n.sp. nr *aurimaculata* (Philpott) Jan-Feb
Cladoxycanus minos (Hudson) May
Wiseana copularis (Meyrick) Nov-Jan
*W. jocos*a (Meyrick) Oct-Nov
W. mimica (Philpott) early Oct
W. umbraculata (Guenée) Oct-Jan

TORTRICIDAE

Epiphyas postvittana (Walker) 1 spec. mid Nov,
 1 spec. May
Planotortrix conditana (Walker) 1 spec. late Nov
P. notophaea (Turner) 1 spec. May
P. excessana (Walker) Nov, May
Pyrgotis plagiatana (Walker) 1 spec. Nov
Strepsicrates ejectana (Walker) 1 spec. Jun

PSYCHIDAE

Liothula omnivora 1 spec. Oct

TINEIDAE

Archyala terranea (Butler) 1 spec. mid Nov

CARPOSINIDAE

Heterocrossa adreptella (Walker) Nov

OECOPHORIDAE

Barea exarcha (Meyrick) 1 spec. late Nov
Endrosia sarcitrella (Linnaeus) Oct
Gymnobathra sarcozantha Meyrick Nov
Izatha peroneanella (Walker) Nov
I. teras (Walker) Nov
Parocystola acrozantha (Meyrick) 1 spec. mid Nov
Phaeosaces apocrypta Meyrick Oct-Nov
Tingena opertella (Meyrick) 1 spec. mid Nov

ARCTIIDAE

Utethesia pulchelloides vaga Jordan 1 spec. Jan, 1
 spec. Mar
Nyctemera annulata (Boisduval) Nov-Dec, Mar

NOCTUIDAE

Agrotis ipsilon anietuma (Walker) 1 spec. mid Nov,
 Jan-Jun
Aletia cuneata Philpott 1 spec. early Dec 1983
A. moderata (Walker) Sep-May
A. obscata Meyrick 1 spec. early Dec 1983
Bityla defigurata (Walker) Feb, Apr-Jun
Diarsia intermixta (Guenée) 1 spec. Apr-May
Dipaustica epiastrea (Meyrick) Nov-Jan
Feredayia graminosa (Walker) 1 spec. mid Dec
Graphania agorastis (Meyrick) Dec-Feb
G. averilla (Hudson) Nov, Feb, May
G. disjungens (Walker) Dec
G. infensa (Walker) Oct-Dec
G. insignis (Walker) Sep-Dec, Apr-May
G. lignana (Walker) Mar-May
G. mollis (Howes) Nov-Jan
G. morosa (Butler) Jan-May
G. mutans (Walker) Sep-Jun
G. nullifera (Walker) Dec-Feb
G. omoplaca (Meyrick) Oct-Feb
G. paracausta (Meyrick) Oct-Nov
G. plena (Walker) Sep-Jun
G. rubescens (Butler) Nov-Mar
G. ustistriga (Walker) Sep-May
Heliothis armigera conferta Walker Nov, Feb-May
Ichneutica ceraunias Meyrick 1 spec. Jan
Meterana alcione (Hudson) Sep-Nov
M. decorata (Philpott) Sep-Jan, Mar-May
M. diatmeta (Hudson) Nov 1983

Table 1:—continued

<i>M. dotata</i> (Walker) Feb-Apr	<i>Epyaxa rosearia</i> (Doubleday) Sep-Oct, Mar-Jun
<i>M. inchoata</i> (Philpott) Sep-Nov	<i>Helastia cinerearia</i> (Doubleday) Oct-Nov, May
<i>M. levis</i> (Philpott) Oct	<i>H. semifissata</i> (Walker) Sep-May
<i>M. ochthistis</i> (Meyrick) Oct-Nov, Jan, Mar-Jun	<i>H. corcularia</i> (Guenée) Oct-Nov, Jan-Mar
<i>M. pansicolor</i> (Howes) Oct-Nov	<i>Hydriomena rixata</i> (Felder & Rogenhofer) Jan-Feb
<i>M. pascoi</i> (Howes) Oct-Nov	<i>Ischalis fortinatala</i> (Guenée) Oct-Nov, Mar
<i>M. praesignis</i> (Howes) Sep-Dec	<i>Orthoclydon praefectata</i> (Walker) Oct-Nov, Feb,
<i>M. stipata</i> (Walker) Sep-Jun	Apr-May
<i>M. tartarea</i> (Butler) 1 spec. Apr-May	<i>Pasiphila muscosata</i> (Walker) 1 spec. Oct
<i>M. vitiosa</i> (Butler) 1 spec. Apr-May	<i>Phrissogonus testulata</i> (Guenée) 1 spec. Jun
<i>Persectania aversa</i> (Walker) Sep-Jun	<i>Pseudocoremia fascialata</i> (Philpott) 1 spec. Feb
<i>Rhapha scotosialis</i> Walker Oct-Nov, Apr-Mar	<i>P. rudisata</i> (Walker) Oct-Nov
<i>Rictonis comma</i> (Walker) Nov-Jan, Mar	<i>P. leucelaea</i> (Meyrick) Sep-Nov, Apr-May
<i>Tmetolophota acontistis</i> (Meyrick) Nov 1983	<i>Tatosoma tipulata</i> (Walker) Oct, Feb
<i>T. alopa</i> (Meyrick) 1 spec. Mar	<i>"Xanthorrhoe" occulta</i> Philpott Nov
<i>T. arotis</i> (Meyrick) Sep-Nov	<i>Xyridacma veronicae</i> Prout Sep-Oct, Jun
<i>T. atristriga</i> (Walker) Oct-May	<i>X. ustaria</i> (Walker) Oct-Nov, Feb-May
<i>T. phaula</i> (Meyrick) Nov-Dec	
<i>T. purdii</i> (Fereday) 1 spec. Dec	
<i>T. semivittata</i> (Meyrick) Oct-May	
<i>T. steropastis</i> (Meyrick) Nov-Feb	
<i>T. sulcana</i> (Fereday) Feb-May	
<i>T. unica</i> (Walker) Nov-Dec	
GEOMETRIDAE	
<i>Asaphodes aegrota</i> (Butler) Oct-Nov, Feb-May	
<i>A. abrogata</i> (Walker) 2 specs mid Mar	
<i>A. chlamydota</i> (Meyrick) 1 spec. mid Nov	
<i>Austrocidaria simulata</i> (Walker) 1 spec. mid Nov,	
1 spec. mid Feb	
<i>Chlororclystis inductata</i> (Walker) 1 spec. Nov	
<i>Declana egregia</i> (Felder & Rogenhofer) 1 spec.	
early Oct	
<i>D. feredayi</i> (Butler) Nov	
<i>D. floccosa</i> Walker Oct-Feb, Apr-May	
<i>D. griseata</i> Hudson 1 spec. mid Oct	
<i>D. juncitilinea</i> (Walker) 1 spec. mid Nov	
<i>D. leptomera</i> (Walker) Sep-Nov, Feb, May	
<i>D. niveata</i> Butler Dec, Jan-Feb	
<i>Epiphryne undosata</i> (Felder & Rogenhofer) 1 spec.	
late Jan	
<i>E. verriculata</i> (Felder & Rogenhofer) Oct, Jan-Feb	
	PYRALIDAE
	<i>Antiscopa elaphra</i> (Meyrick) 2 specs Jun, Oct
	<i>Eudonia psammitis</i> (Meyrick) Sep-Nov, May
	<i>Deana hybreasalis</i> (Walker) Oct-Nov, Feb,
	Apr-May
	<i>Mnesictena flavidalis</i> (Doubleday) Oct-Nov, Feb,
	Apr-May
	<i>M. notata</i> (Butler) Nov, Apr-May
	<i>Orocrambus flexuosellus</i> (Doubleday) Nov,
	May-Jun
	<i>O. melitastes</i> (Meyrick) Nov
	<i>Patagoniodes farinaria</i> (Turner) 1 spec. mid Feb
	<i>Scoparia atmogramma</i> Meyrick Oct
	<i>S. petrina</i> (Meyrick) Nov
	<i>S. aspidota</i> (Meyrick) Nov
	<i>S. feredayi</i> Knaggs Oct-Nov
	<i>S. halopis</i> Meyrick Oct-Nov, May
	<i>S. octophora</i> (Meyrick) Oct-Nov
	<i>S. philerga</i> Meyrick 1 spec. Oct
	<i>S. rotuella</i> (Felder & Rogenhofer) Oct-Nov,
	Jan-Feb
	<i>S. ustimacula</i> (Felder & Rogenhofer) Oct
	<i>Uresiphita polygonalis maorialis</i> (Felder &
	Rogenhofer) 1 spec. Nov

ACKNOWLEDGEMENTS

We are grateful to Mr W. Mannix and Mrs S. Lind for emptying the light-trap at Owaka and to the 21st Anniversary Research Fund, Entomological Society of New Zealand (Inc.), for financial support.

REFERENCE

- Dumbleton, L. J., 1966: Genitalia, classification and zoogeography of the New Zealand Hepialidae (Lepidoptera). *New Zealand journal of science* 9: 920-981.