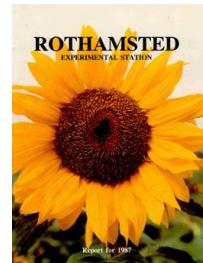


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Rothamsted Experimental Station Report for 1987

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Rothamsted Insect Survey, Nineteenth Annual Summary

I. P. Woiwod, G. M. Tatchell, Maureen J. Dupuch, E. D. M. Macaulay, Susan J. Parker, A. M. Riley and M. S. Taylor

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Rothamsted Insect Survey

Nineteenth Annual Summary

I.P. WOIWOD, G.M. TATCHELL, MAUREEN J DUPUCH,
E.D.M. MACAULAY, SUSAN J. PARKER, A.M. RILEY and M.S. TAYLOR

Suction traps 1987

Samples were collected daily from 6 April to 11 November 1987, and weekly for the remainder of the year. These data were included in the *Aphid Bulletin*, which was issued weekly from 13 April (Bulletin No. 1) to 8 November (Bulletin No. 30). The 33 aphid taxa listed in Table 1 (a-i) are those in the *Aphid Bulletin*. The *Aphid Commentary* was issued with the *Aphid Bulletin* on 16 occasions during 1987. The Commentary provided regional interpretations of current trap samples for eight of the aphid pests of cereals, potatoes, sugar beet, field beans, hops, apples and peas. These interpretations were also made available via Prestel Farmlink and Agviser, two agricultural viewdata services.

The *Aphid Bulletin* and *Aphid Commentary* despatched each Friday, provided information on aphids sampled between 5 and 12 days earlier. This timing is dictated by the postal services.

The *Aphid Bulletin* and *Aphid Commentary* cover the working week Monday to Sunday. Table 1 is for standard four-week periods constant from year to year (see *Rothamsted Report for 1972*, Part 2, 211, Table 4). *Aphid Bulletin* and standard weeks do not correspond in 1987.

The suction traps in Scotland at Elgin (916), Dundee (907), East Craigs (912), Pathhead (931), Auchincruive, Ayr (923), and also at Stirling (925) were operated and samples identified by Dr K.F.A. Walters and colleagues at the Department of Agriculture and Fisheries for Scotland (DAFS), East Craigs.

The trap at Belfast (927) was operated and insect samples sorted by Dr A.C. Bell and colleagues of the Department of Agriculture for Northern Ireland.

The trap at Aberystwyth (911), operated from 6 April to 17 December, except the period 25 June to 16 July when it was out of order.

The trap at Headley Hall, Tadcaster (937), only operated from 1 August to 11 November 1987. The results from this trap appear in neither Table 1 nor the *Aphid Bulletin* during 1987.

Suction traps sampling at 5ft (1.5m) were operating at East Craigs (954) and Rothamsted Tower (951) in 1987. Records for these do not appear in the *Aphid Bulletin*.

Sample volumes were halved at various sites as follows:- Preston (922) from 13 July to 13 October, Kirton (934) from 21 September to 11 October, Shardlow (919) from 13 July to 9 August and from 21 September to 11 October, Aberystwyth (911) from 21 September to 13 October, Hereford (917) from 13 July to 9 August and from 21 September to 12 October, Rothamsted Tower (901) from 10 July to 3 August and from 21 September to 11 October, Writtle (924) from 13 July to 11 October, Long Ashton (936) from 13 July to 9 August and from 21 September to 12 October, Silwood Park (908) from 13 July to 13 October, Wye (903) from 13 July to 3 August and 24 September to 11 October, Littlehampton (933) from 13 July to 3 August and from 21 September to 11 October, Starcross (913) from 21 September to 11 October, Tadcaster (937) from 21 September to 13 October. The weekly *Bulletins* and Table 1 are corrected to full volume sample.

In Table 1 there are no missing values, a blank records a zero catch.

Aphid samples were identified at Rothamsted by Maureen Dupuch, Mark Taylor, Susan Parker, Debbie Riley, Janice Payne and Lynda Alderson; at East Craigs by Dr K.F.A. Walters, Mr D.G. Marr and Mr F.G. Doyle of DAFS; at Broom's Barn by Mr W.A. Thornhill and Dr A.M. Dewar. We appreciate their co-operation in providing information for the weekly *Aphid Bulletin* and *Aphid Commentary* and for Table 1.

ROTHAMSTED REPORT FOR 1987, PART 2

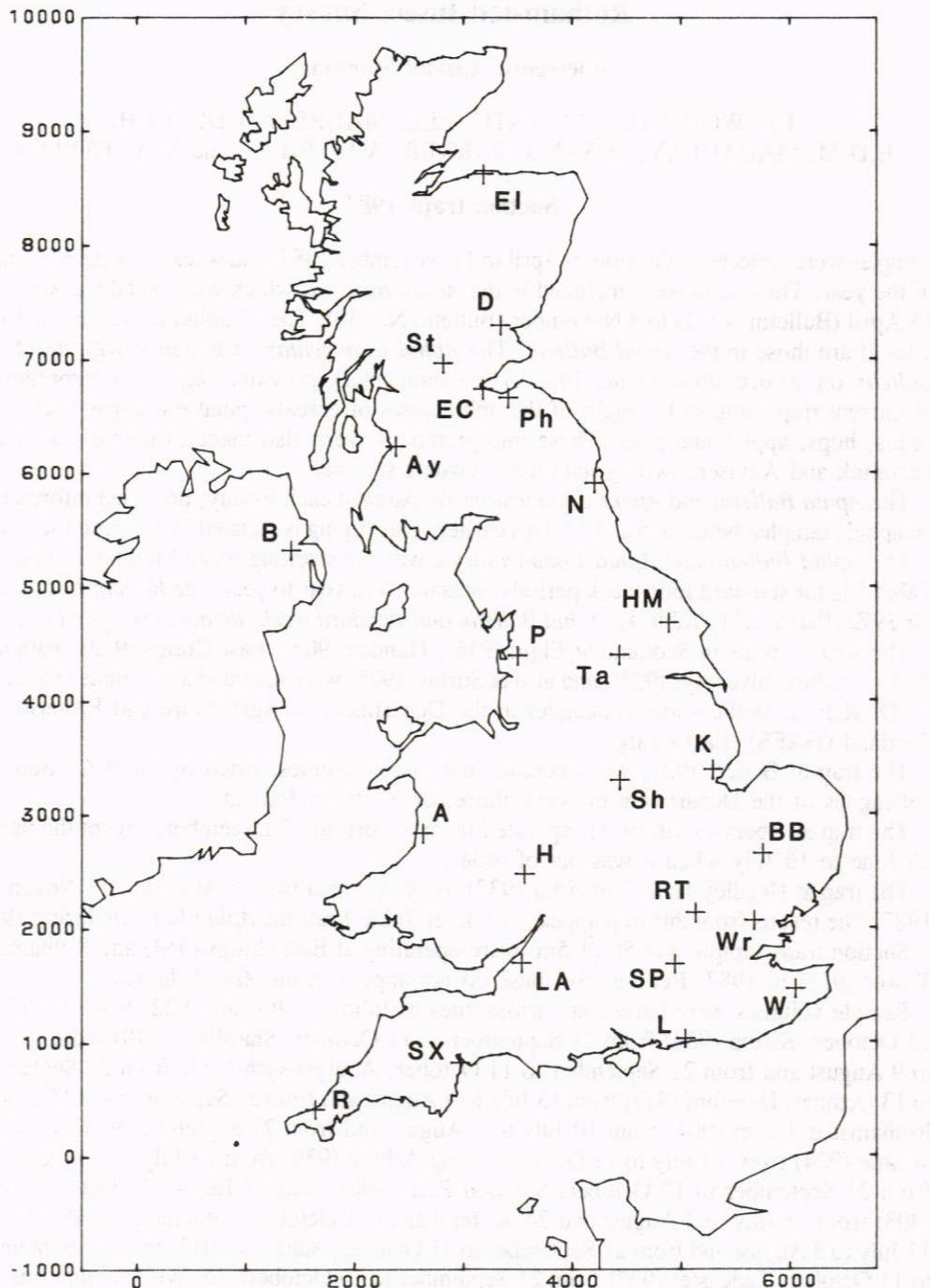


Fig. 1(a) Distribution of 24 12.2 metre suction trap sites operating during 1987

+ indicate suction trap sites which are: El, Elgin; D, Dundee; St, Stirling; EC, East Craigs; Ph, Pathhead; Ay, Ayr; N, Newcastle; B, Belfast; HM, High Mowthorpe; Ta, Tadcaster; P, Preston; K, Kirton; Sh, Shardlow; A, Aberystwyth; BB, Broom's Barn; H, Hereford; RT, Rothamsted Tower; Wr, Writtle; LA, Long Ashton; SP, Silwood Park; W, Wye; L, Littlehampton; SX, Starcross; R, Rosewarne.

ROTHAMSTED INSECT SURVEY

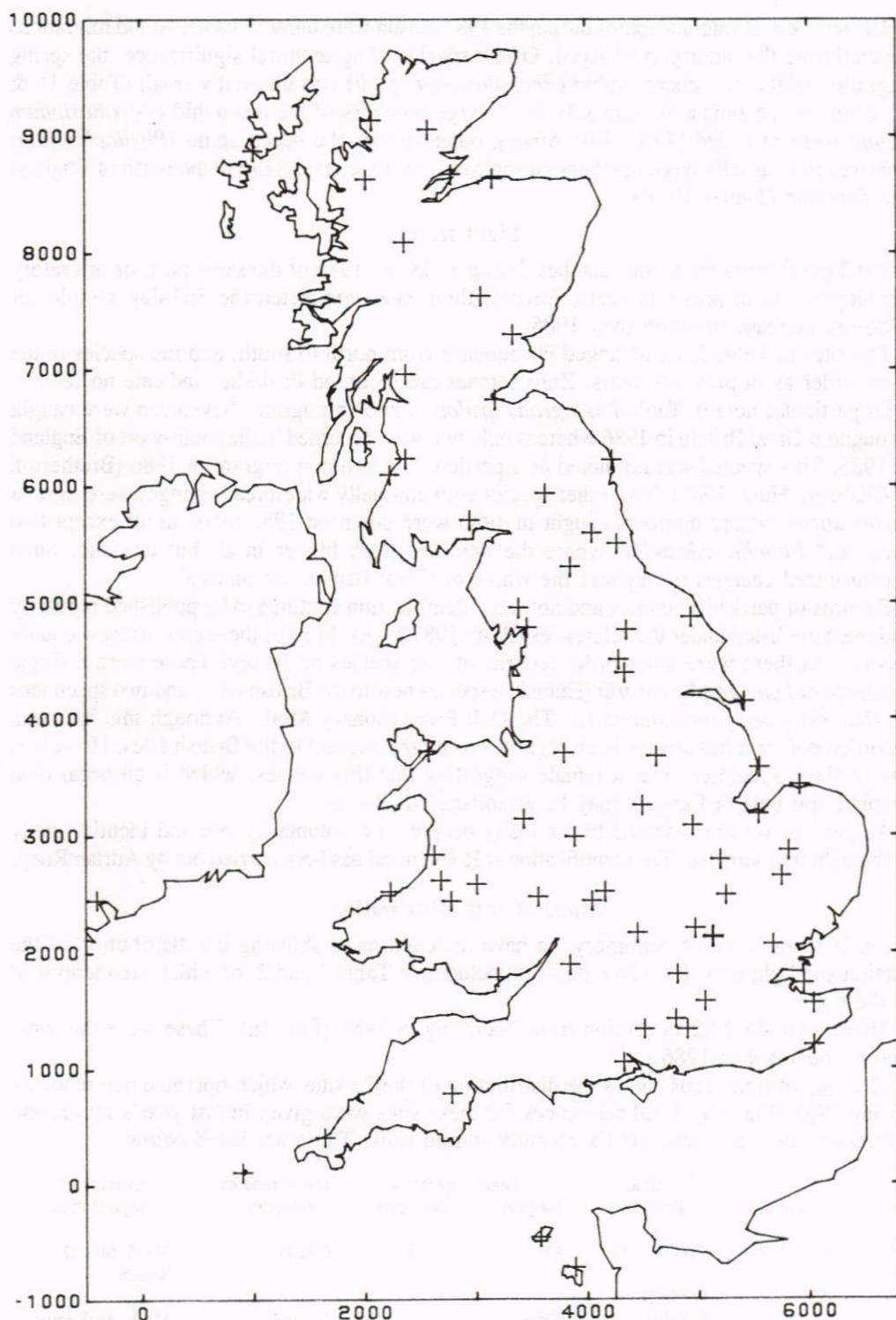


Fig. 1(b) Distribution of the 73 light trap sites in continuous operation during 1986

ROTHAMSTED REPORT FOR 1987, PART 2

The numbers of migrant aphids during the 1987 season were unremarkable. Aphid migrations began during the latter part of April. Of the species of agricultural significance, the spring migration of the bird cherry aphid (*Rhopalosiphum padi*) was unusually small (Table 1b & c), while in late June and early July fairly large numbers of the pea aphid (*Acyrtosiphum pisum*) were recorded (Table 1d). Among other species the beech aphid (*Phyllaphis fagi*) occurred in unusually large numbers during May and June, especially in the north of England and Scotland (Tables 1b-d).

Light traps

Table 2 (a-f) gives the annual catches during 1985 and 1986 of the same pest, or migratory Lepidoptera as in previous years. Seventy-three sites completed the 364-day sample for 1986—an increase of seven over 1985.

The sites in Table 2 are arranged in sequence from north to south, and the species in the same order as in previous years. Zero catches are recorded 0; dashes indicate no record.

Of particular note in Table 2 is *Agrotis epsilon*, a known migrant. Seventeen were caught throughout Great Britain in 1986 whereas only two were recorded in the south-west of England in 1985. This species was not noted as a particularly common migrant in 1986 (Bretherton & Chalmers-Hunt, 1987). Two other species with unusually widespread changes were *Agrotis exclamationis* where numbers caught in 1986 were down on 1985 totals in all except two sites, and *Plutella xylostella*, where the numbers were higher in all but one site. Such synchronized changes throughout the whole of Great Britain are unusual.

Records of particular interest and notes on identification continue to be published regularly and these are listed under the references (Riley 1987 a-m). Most of these concern new county records but there were noteworthy records of two species on Jersey. These were a single specimen of *Lomographa cararia* (Hübn.), a species new to the British Isles, and two specimens of *Thaumetopoea processionea* L., The Oak Processionary Moth. Although this has been recorded before it has always been regarded as a rare migrant to the British Isles. However, one of these specimens was a female suggesting that this species, which is an occasional horticultural pest in Europe, may be established on Jersey.

As always, we are indebted to the many people who voluntarily run and identify many of the light trap samples. The identification at Rothamsted has been carried out by Adrian Riley.

Maps of trap distribution

As in last year's annual summary we have included maps showing the distribution of the suction and light traps for which data are included in Table 1 and 2, or which are mentioned in the text.

There were 24 12.2 m suction traps operating in 1987 (Fig. 1a). These were the same sites as operated in 1986.

The map of light traps shows the distribution of the 73 sites which operated continuously during 1986 (Fig. 1b). Grid references for these sites were given in last year's report and references therein except for six recently started sites. These are listed below.

No.	Name	Grid Reference	Years operating 1st year	No.years	Environmental category	Operator or Organization
450	Isles of Scilly	SV 901 104	1985	1	Coastal	Mr & Mrs D. Knight
459	Cork	51°54'N 8°19'W	1986	1	Coastal	Mr S. McKeown
462	Lydd IV	TR 044 203	1986	1	Farmland	Mr A. Heath
463	Luddington III	SP 162 523	1986	1	Farmland	Mrs K. Littlewood
464	Embleton	NU 232 227	1986	1	Mixed	Mrs B. Dodd
465	Shadwell	SE 343 394	1986	1	Farmland	Dr S.L. Sutton

ROTHAMSTED INSECT SURVEY

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ROTHAMSTED REPORT FOR 1987, PART 2

INSECT SURVEY

which was applied to non-aphidical foliage (Table 1). The total number of aphids recorded at Rothamsted during the four-week period was 1,281. The highest numbers were taken at Pathhead (A) (578), M.A. (411)

TABLE
The Rothamsted Insect Survey—Suction Traps: four-weekly total catches
Week Nos 13 to 16—
1987. The total number of aphids taken at Rothamsted during the four-week period was 1,281. The highest numbers were taken at Pathhead (A) (578), M.A. (411), Elgin (916), Dundee (907), Edinburgh (912), Pathhead (931), Auchincruive (923), Newcastle (906), Belfast (927), High Mowthorpe (905), Preston (922), Kirton (934) and Shardlow (919).

Sites	Species	Elgin (916)	Dundee (907)	Edinburgh (912)	Pathhead (931)	Auchincruive (923)	Newcastle (906)	Belfast (927)	High Mowthorpe (905)	Preston (922)	Kirton (934)	Shardlow (919)
	<i>Acyrtosiphon pisum</i>											
	<i>Amphorophora rubi</i>											
	<i>Aphis fabae</i> grp.											
	<i>Aphis</i> spp.											
	<i>Aulacorthum solani</i>											
	<i>Brachycaudus helichrysi</i>											
	<i>Brevicoryne brassicae</i>											
	<i>Cavariella aegopodii</i>											
	<i>Chaetosiphon fragaefolii</i>											
	<i>Cinara</i> spp.											
	<i>Drepanosiphum platanoidis</i>											
	<i>Dysaphis plantaginea</i>											
	<i>Elatobium abietinum</i>											
	<i>Eriosoma ulmi</i>											
	<i>Hyalopterus pruni</i>											
	<i>Hyperomyzus lactucae</i>											
	<i>Macrosiphum euphorbiae</i>											
	<i>Megoura viciae</i>											
	<i>Metopolophium dirhodum</i>											
	<i>Metopolophium festucae</i> s.l.											
	<i>Myzus ascalonicus</i>											
	<i>Myzus certus</i>											
	<i>Myzus ornatus</i>											
	<i>Myzus persicae</i> grp.											
	<i>Nasonovia ribisnigri</i>											
	<i>Pemphigus</i> spp.											
	<i>Phorodon humuli</i>											
	<i>Phyllaphis fagi</i>											
	<i>Rhopalosiphum insertum</i>											
	<i>Rhopalosiphum maidis</i>											
	<i>Rhopalosiphum padi</i>											
	<i>Sitobion avenae</i>											
	<i>Sitobion fragariae</i>											

First aphid caught

Rosewarne 29 January–4 February, 1 *Sitobion fragariae*

ROTHAMSTED INSECT SURVEY

1(a)

*of aphids of economic, or other, interest reported in the Weekly Bulletin 1987
26 March to 22 April 1987*

ROTHAMSTED REPORT FOR 1987, PART 2

TABLE

*The Rothamsted Insect Survey—Suction Traps: four-weekly total catches
Week Nos 17 to 20—*

Species	Sites										
	Elgin (916)	Dundee (907)	Edinburgh (912)	Pathhead (931)	Auchincruive (923)	Newcastle (906)	Belfast (927)	High Mowthorpe (905)	Preston (922)	Kirton (934)	Shardlow (919)
<i>Acyrtosiphon pisum</i>										1	
<i>Amphorophora rubi</i>										2	
<i>Aphis fabae</i> grp.											
<i>Aphis</i> spp.											
<i>Aulacorthum solani</i>											
<i>Brachycaudus helichrysi</i>		1									
<i>Brevicoryne brassicae</i>											
<i>Cavariella aegopodii</i>											
<i>Chaetosiphon fragaefolii</i>											
<i>Cinara</i> spp.											
<i>Drepanosiphum platanoidis</i>	109	156	6788	1960	792	2399	808	410	2257	168	5632
<i>Dysaphis plantaginis</i>											
<i>Elatobium abietinum</i>	1		14	27	23	40	19		9	1	10
<i>Eriosoma ulmi</i>											
<i>Hyalopterus pruni</i>											
<i>Hyperomyzus lactucae</i>					1		2			3	
<i>Macrosiphum euphorbiae</i>							2				
<i>Megoura viciae</i>											
<i>Metopolophium dirhodum</i>					1		8				3
<i>Metopolophium festucae</i> s.l.							5				39
<i>Myzus ascalonicus</i>						3	24	2	1	12	19
<i>Myzus certus</i>											1
<i>Myzus ornatus</i>							2				
<i>Myzus persicae</i> grp.									1		
<i>Nasonovia ribisnigri</i>											
<i>Pemphigus</i> spp.											
<i>Phorodon humuli</i>											
<i>Phyllaphis fagi</i>	3	11	105	48	55	15	18		17	1	22
<i>Rhopalosiphum insertum</i>				1	2		11		7		34
<i>Rhopalosiphum maidis</i>											
<i>Rhopalosiphum padi</i>			2		1		6				
<i>Sitobion avenae</i>								7			
<i>Sitobion fragariae</i>											
First aphid caught	May 7	April 30	April 25	April 24	April 24	May 7	April 24	April 30	April 24	April 27	April 23-26

ROTHAMSTED INSECT SURVEY

1(b)

*of aphids of economic, or other, interest reported in the Weekly Bulletin 1987
23 April to 20 May 1987*

ROTHAMSTED REPORT FOR 1987, PART 2

TABLE

*The Rothamsted Insect Survey—Suction Traps: four-weekly total catches
Week Nos 21 to 24—*

Species	Sites										
	Elgin (916)	Dundee (907)	Edinburgh (912)	Pathhead (931)	Auchincruive (923)	Newcastle (906)	Belfast (927)	High Mowthorpe (905)	Preston (922)	Kirton (934)	Shardlow (919)
<i>Acyrthosiphon pisum</i>											
<i>Amphorophora rubi</i>											
<i>Aphis fabae</i> grp.	1	18	1	1							
<i>Aphis</i> spp.		3	1								
<i>Aulacorthum solani</i>			1								
<i>Brachycaudus helichrysi</i>	3	33	13	4	6	115	11	25	39	203	
<i>Brevicoryne brassicae</i>											
<i>Cavariella aegopodii</i>		10	3	1		18	1	7	15	101	
<i>Chaetosiphon fragaefolii</i>											
<i>Cinara</i> spp.	1	3	3								
<i>Drepanosiphum platanoidis</i>	528	105	1106	906	730	507	123	706	2084	127	663
<i>Dysaphis plantaginea</i>											
<i>Elatobium abietinum</i>	92	10	101	489	166	213	35	32	90	4	17
<i>Eriosoma ulmi</i>							7		29	1	14
<i>Hyalopterus pruni</i>					1					1	2
<i>Hyperomyzus lactucae</i>			9	1	3		6	1	4	1	15
<i>Macrosiphum euphorbiae</i>			10	1	1	3	18		6	5	10
<i>Megoura viciae</i>											1
<i>Metopolophium dirhodum</i>			3		1		10		11		5
<i>Metopolophium festucae</i> s.l.			24	8	9	6	34	4	52	18	144
<i>Myzus ascalonicus</i>	1	14	17	5	19	63	15		30	22	56
<i>Myzus cerasif</i>			2	4	1					1	1
<i>Myzus ornatus</i>						3					1
<i>Myzus persicae</i> grp.			1								5
<i>Nasonovia ribisnigri</i>			2				3		1	2	1
<i>Pemphigus</i> spp.	1										
<i>Phorodon humuli</i>								1		6	26
<i>Phyllaphis fagi</i>	826	216	714	835	370	145	154	335	121	9	90
<i>Rhopalosiphum insertum</i>		2	123	119	16	25	176	73	69	31	96
<i>Rhopalosiphum maidis</i>											
<i>Rhopalosiphum padi</i>	1	2	179	56	53		10	1	3		
<i>Sitobion avenae</i>				1	2		13	1	4	8	11
<i>Sitobion fragariae</i>				1	2		14	2	2		3

ROTHAMSTED INSECT SURVEY

1(c)

of aphids of economic, or other, interest reported in the Weekly Bulletin 1987.
21 May to 17 June 1987

Sites										Species
Aberystwyth (911)	Broom's Barn (904)	Hereford (917)	Rothamsted Tower (901)	Writtle (924)	Long Ashton II (936)	Silwood Park (908)	Wye, Kent (903)	Littlehampton (933)	Starcross (913)	
1	1	1	4	19	1	5	6	3	4	<i>Acyrthosiphon pisum</i>
			1	1	2	5		1	1	<i>Amphorophora rubi</i>
2	4	3	8	14	15	23	2	11	14	<i>Aphis fabae</i> grp.
1	1	7		3	3	1	2	7	8	<i>Aphis</i> spp.
10	47	195	223	461	128	186	53	140	81	<i>Aulacorthum solani</i>
										<i>Brachycaudus helichrysi</i>
	59	47	92	117	25	323	23	26	46	<i>Brevicoryne brassicae</i>
			1			2				<i>Cavariella aegopodii</i>
	2		5	2	2	11		3	1	<i>Chaetosiphon fragaefolii</i>
186	253	206	262	152	216	209	51	111	63	<i>Cinara</i> spp.
	1									<i>Drepanosiphum platanoidis</i>
262	33	93	89	68	30	108	39	11	62	<i>Dysaphis plantaginea</i>
	3	83	13	10	33	15	8	7	5	<i>Elatobium abietinum</i>
			4	4	1	4	14	1	4	<i>Eriosoma ulmi</i>
2		9	10	4	7		3	4	3	<i>Hyalopterus pruni</i>
1		9	7	11	12	11	8	12	7	<i>Hyperomyzus lactucae</i>
				2	3					<i>Macrosiphum euphorbiae</i>
	2	2	3	5	39	7	3	4	91	<i>Megoura viciae</i>
9	30	231	37	54	38	112	72	35	31	<i>Metopolophium dirhodum</i>
5	15	28	70	60	16	38	17	16	15	<i>Metopolophium festucae</i> s.l.
			1	4	1	4		1	1	<i>Myzus ascalonicus</i>
1	1		2	5	2	2	2	3	1	<i>Myzus certus</i>
			5	9	4	5	3	7	4	<i>Myzus ornatus</i>
			3	1	1	1				<i>Myzus persicae</i> grp.
	27	33	57	131	16	197	63	7	17	<i>Nasonovia ribisnigri</i>
23	103	10	53	12	21	120	7	4	17	<i>Pemphigus</i> spp.
17	10	40	52	32	24	15	12	27	64	<i>Phorodon humuli</i>
							1	1		<i>Phyllaphis fagi</i>
2	10	2	3	8		6	4	2	1	<i>Rhopalosiphum insertum</i>
3	8	26	27	59	20	43	53	21	21	<i>Rhopalosiphum maidis</i>
3	6	5	9	15	23	5	14	39	3	<i>Rhopalosiphum padi</i>
										<i>Sitobion avenae</i>
										<i>Sitobion fragariae</i>

ROTHAMSTED REPORT FOR 1987, PART 2

TABLE
*The Rothamsted Insect Survey—Suction Traps: four-weekly total catches
 Week Nos 25 to 28—*

Species	Sites										
	Elgin (916)	Dundee (907)	Edinburgh (912)	Pathhead (931)	Auchincruive (923)	Newcastle (906)	Belfast (927)	High Mowthorpe (905)	Preston (922)	Kirton (934)	Shardlow (919)
<i>Acyrthosiphon pisum</i>	4	9	30	20	1	7	1	55	21	330	329
<i>Amphorophora rubi</i>	1	1					1				3
<i>Aphis fabae</i> grp.		2	14	1	3		1	2	32	6	27
<i>Aphis</i> spp.	1	3	53	7	2	6	42	8	33	25	76
<i>Aulacorthum solani</i>			1	1				2	2	4	3
<i>Brachycaudus helichrysi</i>	4	1	18	16	11	20	66	49	19	160	160
<i>Brevicoryne brassicae</i>										3	1
<i>Cavariella aegopodii</i>	4		32	8	2	8	62	12	13	65	110
<i>Chaetosiphon fragaefolii</i>						1					
<i>Cinara</i> spp.	2	18	26	42	24	27	26	7	8	3	17
<i>Drepanosiphum platanoidis</i>	70	40	154	57	76	124	37	38	574	12	53
<i>Dysaphis plantaginea</i>										1	
<i>Elatobium abietinum</i>	38	8	16	79	11	43	22	10	7		
<i>Eriosoma ulmi</i>	21	47	51	43	18	55	28	10	63	10	44
<i>Hyalopterus pruni</i>		1	9	15	6	7	19	56	130	129	231
<i>Hyperomyzus lactucae</i>	1	4	10		2		2		4	6	9
<i>Macrosiphum euphorbiae</i>	2	1	33	22	8	11	11	4	15	162	39
<i>Megoura viciae</i>			13	3	4	1	12		5	2	17
<i>Metopolophium dirhodum</i>	1	9	118	60	37	42	4	200	142	486	1549
<i>Metopolophium festucae</i> s.l.	4	3	78	44	27	55	3	138	30	103	82
<i>Myzus ascalonicus</i>	1		5	14	1	5	2	8		1	2
<i>Myzus certus</i>			3	3			2				1
<i>Myzus ornatus</i>				1		1	2				1
<i>Myzus persicae</i> grp.					3		6	3	5	7	131
<i>Nasonovia ribisnigri</i>						1				2	
<i>Pemphigus</i> spp.			2	1	3	1	1	4	25	37	69
<i>Phorodon humuli</i>			2			2	6	6		37	92
<i>Phylloxaphis fagi</i>	347	516	1117	1308	128	304	187	110	26	16	54
<i>Rhopalosiphum insertum</i>	2	4	47	15	33	1	29	9	12	44	28
<i>Rhopalosiphum maidis</i>			2			12	17	10	9	27	2
<i>Rhopalosiphum padi</i>	4	13	11	12	21	47	5	79	28	393	94
<i>Sitobion avenae</i>	3		51	25	422	40	29	183	380	1255	855
<i>Sitobion fragariae</i>			1	6	2	1	1	5	9	18	19

ROTHAMSTED INSECT SURVEY

1(d)

of aphids of economic, or other, interest reported in the Weekly Bulletin 1987
18 June to 15 July 1987

Trap not operating	Sites										Species
	Aberystwyth (911)	Broom's Barn (904)	Hereford (917)	Rothamsted Tower (901)	Writtle (924)	Long Ashton II (936)	Silwood Park (908)	Wye, Kent (903)	Littlehampton (933)	Starcross (913)	
349	102	351	596	79	76	399	276	93	17		<i>Acyrthosiphon pisum</i>
7	8	7	3	3	8						<i>Amphorophora rubi</i>
35	12	37	19	10	17	31	35	84	29		<i>Aphis fabae</i> grp.
42	15	81	76	75	82	72	72	83	20		<i>Aphis</i> spp.
13	6	1	4	1	3	3	2	6	13		<i>Aulacorthum solani</i>
97	80	93	106	41	20	54	32	44	6		<i>Brachycaudus helichrysi</i>
1	12	1	20		11	2	3	15			<i>Brevicoryne brassicae</i>
83	24	77	76	11	31	46	18	17	1		<i>Cavariella aegopodii</i>
	1										<i>Chaetosiphon fragaefolii</i>
5	14	6	16	8	9	11	7	3	1		<i>Cinara</i> spp.
62	32	26	36	45	22	5	30	17	28		<i>Drepanosiphum platanoidis</i>
3		5	1	2	1	1	2	3			<i>Dysaphis plantaginea</i>
	33	2		1	1			2			<i>Elatobium abietinum</i>
14	58	20	17	13	5	7	2	3	2		<i>Eriosoma ulmi</i>
272	96	608	1374	173	360	2222	134	242	7		<i>Hyalopterus pruni</i>
3	4	7	11	17	2	12	11	10			<i>Hyperomyzus lactucae</i>
14	17	48	68	18	10	92	40	37	25		<i>Macrosiphum euphorbiae</i>
	5	7	8	18	23	7	3	3	3		<i>Megoura viciae</i>
621	201	424	334	246	115	199	264	220	16		<i>Metopolophium dirhodum</i>
174	89	102	67	6	34	135	13	5	1		<i>Metopolophium festucae</i> s.l.
4	2	3	1			1		1			<i>Myzus ascalonicus</i>
		4	1		2	1	1	4	1		<i>Myzus certus</i>
	50	6	42	170	18	10	140	34	2	6	<i>Myzus ornatus</i>
				6	1	2	3	1	3	1	<i>Myzus persicae</i> grp.
13	28	23	34	28	24	23	9	17			<i>Nasonovia ribisnigri</i>
258	61	104	464	66	60	267	18	28			<i>Pemphigus</i> spp.
53	14	66	14	15	63	6	1	8			<i>Phorodon humuli</i>
19	21	104	69	16	66	42	11	48	28		<i>Phyllaphis fagi</i>
16	5	4	9	8	2	27	16	18	12		<i>Rhopalosiphum insertum</i>
1269	137	271	491	128	237	303	156	1081	42		<i>Rhopalosiphum maidis</i>
828	1088	1005	1558	754	973	2585	1111	506	147		<i>Rhopalosiphum padi</i>
17	34	23	44	16	20	64	35	21	2		<i>Sitobion avenae</i>
											<i>Sitobion fragariae</i>

ROTHAMSTED REPORT FOR 1987, PART 2

TABLE

*The Rothamsted Insect Survey—Suction Traps: four-weekly total catches
Week Nos 29 to 32—*

Species	Sites										
	Elgin (916)	Dundee (907)	Edinburgh (912)	Pathhead (931)	Auchincruive (923)	Newcastle (906)	Belfast (927)	High Mowthorpe (905)	Preston (922)	Kirton (934)	Shardlow (919)
<i>Acyrthosiphon pisum</i>	26	137	66	91	9	54		29	14	342	14
<i>Amphorophora rubi</i>		1									
<i>Aphis fabae</i> grp.	2	3	24	15	25	2	1	3	16	57	41
<i>Aphis</i> spp.		1	42	1	12	18	39	6	12	75	66
<i>Aulacorthum solani</i>	1	6	2	2	1	1	1	1		3	
<i>Brachycaudus helichrysi</i>	2	1	1	3	9	5		10	2	18	9
<i>Brevicoryne brassicae</i>			1								10
<i>Cavariella aegopodii</i>	3	2	1	1		2			2	5	8
<i>Chaetosiphon fragaefolii</i>									2		
<i>Cinara</i> spp.	2	6	8	11	40	10	2		18	2	5
<i>Drepanosiphum platanoidis</i>	6	11	8	9	6	10	9	5	124	2	13
<i>Dysaphis plantaginea</i>											
<i>Elatobium abietinum</i>		1				1					
<i>Eriosoma ulmi</i>		3	4	2	3	1			2		2
<i>Hyalopterus pruni</i>	1	3	5	2	8	15	5	31	56	153	160
<i>Hyperomyzus lactucae</i>		2	2	1	1					5	
<i>Macrosiphum euphorbiae</i>	24	53	51	37	11	10	2	11	2	100	10
<i>Megoura viciae</i>			1		2	3					
<i>Metopolophium dirhodum</i>	171	431	185	354	190	135	6	180	18	562	205
<i>Metopolophium festucae</i> s.l.	12	4	9	58	6	33		51		36	2
<i>Myzus ascalonicus</i>			1	2							
<i>Myzus cerasus</i>										1	
<i>Myzus ornatus</i>											
<i>Myzus persicae</i> grp.											
<i>Nasonovia ribisnigri</i>	1			1		3		2	2	16	26
<i>Pemphigus</i> spp.		6	9	2	4	6	3	2	6	42	14
<i>Phorodon humuli</i>								1		17	4
<i>Phylloxaphis fagi</i>	5	6	5	20	4			1			
<i>Rhopalosiphum insertum</i>	5	53	480	357	255	95	182	62	88	119	128
<i>Rhopalosiphum maidis</i>	1		1	1	1	1	1	4	2	12	
<i>Rhopalosiphum padi</i>	29	69	155	112	21	42	9	85	18	1257	47
<i>Sitobion avenae</i>	77	225	93	127	214	148	29	386	184	3054	463
<i>Sitobion fragariae</i>		4	8	10		9	2	5	8	7	13

ROTHAMSTED INSECT SURVEY

1(e)

of aphids of economic, or other, interest reported in the Weekly Bulletin 1987
16 July to 12 August 1987

	Aberystwyth (911)	Broom's Barn (904)	Hereford (917)	Rothamsted Tower (901)	Writtle (924)	Long Ashton II (936)	Silwood Park (908)	Wye, Kent (903)	Littlehampton (923)	Starcross (913)	Rosewarne (910)	Sites	Species
4	137			24	46	8	6	33	69	13	6		<i>Acyrtosiphon pisum</i>
3	176	27	71	74	22	22	13	51	64	12			<i>Amphorophora rubi</i>
7	60	31	99	68	46	62	86	144	71	9			<i>Aphis fabae</i> grp.
1	1			6	2								<i>Aphis</i> spp.
	15	6	4	10	4	4			4	15			<i>Aulacorthum solani</i>
	1	17		10	4	4			1	24			<i>Brachycaudus helichrysi</i>
	7	2	2	4	2	6	5	2	4				<i>Brevicoryne brassicae</i>
						2							<i>Cavariella aegopodii</i>
													<i>Chaetosiphon fragaefolii</i>
													<i>Cinara</i> spp.
2	2	5		2	2	2	1	2	7		1		<i>Drepanosiphum platanoidis</i>
7	4	6	2	2	31	8		2	4		21		<i>Dysaphis plantaginea</i>
1	1			2					2				<i>Elatobium abietinum</i>
		2											<i>Eriosoma ulmi</i>
3	620	30	584	992	96	222	824	182	73	8			<i>Hyalopterus pruni</i>
		5	2	2		2	8	4	1				<i>Hyperomyzus lactucae</i>
. 3	17	9	5	8	2	8	5	16	6	20			<i>Macrosiphum euphorbiae</i>
		2	2	2	4	8		1		2			<i>Megoura viciae</i>
1	680	31	44	92	13	4	33	49	52	14			<i>Metopolophium dirhodum</i>
2	49		6	4	2	2		2	1	3			<i>Metopolophium festucae</i> s.l.
													<i>Myzus ascalonicus</i>
													<i>Myzus certus</i>
2	31		14	56	4	6	15	17	4		1		<i>Myzus ornatus</i>
2	1									1			<i>Myzus persicae</i> grp.
6	9	6	2	2		2	2	2	3				<i>Nasonovia ribisnigri</i>
	260	13	23	148	4	12	15	2	3				<i>Pemphigus</i> spp.
					4	2							<i>Phorodon humuli</i>
43	65	134	196	194	41	180	74	76	207	117			<i>Phyllaphis fagi</i>
2	6		4			4	13	6	1	1			<i>Rhopalosiphum insertum</i>
32	4465	53	349	914	54	168	1089	296	199	297			<i>Rhopalosiphum maidis</i>
72	2254	414	692	1158	242	338	1088	546	166	62			<i>Rhopalosiphum padi</i>
1	14	44	12	6	7	16	20	36	9	10			<i>Sitobion avenae</i>
													<i>Sitobion fragariae</i>

ROTHAMSTED REPORT FOR 1987, PART 2

TABLE

*The Rothamsted Insect Survey—Suction Traps: four-weekly total catches
Week Nos 33 to 36—*

Species	Sites										
	Elgin (916)	Dundee (907)	Edinburgh (912)	Pathhead (931)	Auchincruive (923)	Newcastle (906)	Belfast (927)	High Mowthorpe (905)	Preston (922)	Kirton (934)	Shardlow (919)
<i>Acyrthosiphon pisum</i>	18	63			5	1					
<i>Amphorophora rubi</i>		2				1					
<i>Aphis fabae</i> grp.	15	129	12	20	14	36	5	9	16	232	10
<i>Aphis</i> spp.		1	3			17	5	11	18	180	21
<i>Aulacorthum solani</i>	4	3							2		
<i>Brachycaudus helichrysi</i>	3	18	10	11	4	3	6	1	6	12	22
<i>Brevicoryne brassicae</i>									2	2	1
<i>Cavariella aegopodii</i>	15					1			2		
<i>Chaetosiphon fragaefolii</i>											
<i>Cinara</i> spp.		1	1						2		1
<i>Drepanosiphum platanoidis</i>	7	9	5	1	14	6	1	2	238	2	8
<i>Dysaphis plantaginis</i>											
<i>Elatobium abietinum</i>											
<i>Eriosoma ulmi</i>		2	10	1	1		1				
<i>Hyalopterus pruni</i>		44	8	2	5	9	15	12	54	62	71
<i>Hyperomyzus lactucae</i>											
<i>Macrosiphum euphorbiae</i>	119	93	3	1	2	1	5		2		
<i>Megoura viciae</i>											
<i>Metopolophium dirhodum</i>	101	103	1	10		17	1		6	10	1
<i>Metopolophium festucae</i> s.l.	19	19				18	1	1	2		
<i>Myzus ascalonicus</i>											
<i>Myzus certus</i>										1	
<i>Myzus ornatus</i>											
<i>Myzus persicae</i> grp.	3	2			1	5	4		4	1	1
<i>Nasonovia ribisnigri</i>											1
<i>Pemphigus</i> spp.	13	12	18	17	32	12	5	8	60	28	66
<i>Phorodon humuli</i>										2	2
<i>Phylaphis fagi</i>		3	2								
<i>Rhopalosiphum insertum</i>	42	186	832	418	225	191	139	73	216	182	148
<i>Rhopalosiphum maidis</i>						4	1			4	
<i>Rhopalosiphum padi</i>	593	676	388	458	96	397	95	173	864	2218	341
<i>Sitobion avenae</i>	376	711	107	78	19	105	32	70	64	132	89
<i>Sitobion fragariae</i>	3	5	1	1	2	7	1		2	1	2

ROTHAMSTED INSECT SURVEY

1(f)

of aphids of economic, or other, interest reported in the Weekly Bulletin 1987
13 August to 9 September 1987

Aberystwyth (911)	Broom's Barn (904)	Hereford (917)	Rothamsted Tower (901)	Writtle (924)	Long Ashton II (936)	Silwood Park (908)	Wye, Kent (903)	Littlehampton (933)	Starcross (913)	Rosewarne (910)	Sites		Species
6		8	1	2	13	4	8	6	11	9			<i>Acyrtosiphon pisum</i>
38	39	90	1	4	17	4	3	6	45	12			<i>Amphorophora rubi</i>
28	8	51	11	30	41	6	27	22	250	31			<i>Aphis fabae</i> grp.
2				6	1								<i>Aphis</i> spp.
8	15	36	176	14	10	6	26	19	108	4			<i>Aulacorthum solani</i>
1	1	35	2		10		2	46	328				<i>Brachycaudus helichrysi</i>
2	1	1				2	2						<i>Brevicoryne brassicae</i>
													<i>Cavariella aegopodii</i>
													<i>Chaetosiphon fragaefoliae</i>
1	1			2			1	2	4				<i>Cinara</i> spp.
33	2	1	5	14	17	2	3	24	52	23			<i>Drepanosiphum platanoidis</i>
	1		1						1				<i>Dysaphis plantaginea</i>
1													<i>Elatobium abietinum</i>
14	101	31	53	126	36	14	99	62	100	5			<i>Eriosoma ulmi</i>
3		1			3			3	3	2			<i>Hyalopterus pruni</i>
2		3						1	5	16			<i>Hyperomyzus lactucae</i>
	4	1	3	10		5		1	1	31			<i>Macrosiphum euphorbiae</i>
5		2	2			7		2	6	7			<i>Megoura viciae</i>
2		2											<i>Metopolophium dirhodium</i>
													<i>Metopolophium festucae</i> s.l.
													<i>Myzus ascalonicus</i>
													<i>Myzus certus</i>
12	1	5	2	2	10	2	3	8	31	11			<i>Myzus ornatus</i>
1		1											<i>Myzus persicae</i> grp.
376	18	43	13	12	24	14	16	15	70	18			<i>Nasonovia ribisnigri</i>
		159	1				5						<i>Pemphigus</i> spp.
			1										<i>Phorodon humuli</i>
92	120	759	231	154	283	208	56	101	1247	266			<i>Phyllaphis fagi</i>
4		1		2	3		2	3	5	2			<i>Rhopalosiphum insertum</i>
305	825	1569	385	452	1142	464	1051	702	1723	680			<i>Rhopalosiphum maidis</i>
72	46	143	40	50	88	26	61	47	116	130			<i>Rhopalosiphum padi</i>
5		7	1	2	9	8	2	2	8	12			<i>Sitobion avenae</i>
													<i>Sitobion fragariae</i>

ROTHAMSTED REPORT FOR 1987, PART 2

TABLE

*The Rothamsted Insect Survey—Suction Traps: four-weekly total catches
Week Nos 37 to 40—*

Species	Sites										
	Elgin (916)	Dundee (907)	Edinburgh (912)	Pathhead (931)	Auchincruive (923)	Newcastle (906)	Belfast (927)	High Mowthorpe (905)	Preston (922)	Kirton (934)	Shardlow (919)
<i>Acyrthosiphon pisum</i>		1									4
<i>Amphorophora rubi</i>		1									
<i>Aphis fabae</i> grp.	1	14			1	2	19	2	8	10	208
<i>Aphis</i> spp.		1					8	8	12	30	260
<i>Aulacorthum solani</i>			1								26
<i>Brachycaudus helichrysi</i>	22	12	42	40	14	12	16	14	16	15	38
<i>Brevicoryne brassicae</i>		1	2							6	6
<i>Caviariella aegopodii</i>	6		1	3							
<i>Chaetosiphon fragaefolii</i>											
<i>Cinara</i> spp.			1			1					
<i>Drepanosiphum platanoidis</i>	3	7	14	2	6	4		3	90	11	4
<i>Dysaphis plantaginea</i>								1	2		
<i>Elatobium abietinum</i>											
<i>Eriosoma ulmi</i>	2	4	23	3	2	1		3		2	
<i>Hyalopterus pruni</i>	1	58		1			1		4	10	4
<i>Hyperomyzus lactucae</i>			1		2		2		2		6
<i>Macrosiphum euphorbiae</i>	1								2		
<i>Megoura viciae</i>											
<i>Metopolophium dirhodum</i>	13	2	2		2	2	3	2	28		6
<i>Metopolophium festucae</i> s.l.		1			2		3	1			
<i>Myzus ascalonicus</i>											
<i>Myzus certus</i>											1
<i>Myzus ornatus</i>			1								
<i>Myzus persicae</i> grp.					1	1	8		12		
<i>Nasonovia ribisnigri</i>	1										3
<i>Pemphigus</i> spp.	210	52	336	106	118	70	24	33	90	108	70
<i>Phorodon humuli</i>											
<i>Phyllaphis fagi</i>											
<i>Rhopalosiphum insertum</i>	291	462	2437	2675	1136	1268	1274	439	4948	277	971
<i>Rhopalosiphum maidis</i>								1	2	3	
<i>Rhopalosiphum padi</i>	3433	2070	3957	2270	2058	2135	2172	1102	16144	1362	4223
<i>Sitobion avenae</i>	3	1	1	1	2	1	3	7	2	5	6
<i>Sitobion fragariae</i>	1		1								1

ROTHAMSTED INSECT SURVEY

1(g)

of aphids of economic, or other, interest reported in the Weekly Bulletin 1987
10 September to 7 October 1987

Sites										
Aberystwyth (911)	Broom's Barn (904)	Hereford (917)	Rothamsted Tower (901)	Writtle (924)	Long Ashton II (936)	Silwood Park (908)	Wye, Kent (903)	Littlehampton (933)	Starcross (913)	Rosewarne (910)
Species										
1	1	6	1		9	2	2	3		
39	60	12		12	1		8	15	1	
74	4	6		12	5		13	15	5	1
		1								
19	43	40	48	20	4	8	37	35	9	6
		25	9		2	2		3	10	
		1	1					2		
14	1		6	10	65		17	22	29	43
	2	2	2	4	8	2		4	4	
1										
3	2	1	1		2	2	2	2		
2		6		6	4	8		1	3	
		1		2			7	4	1	
13	2			2	5		2	2		
					3					
7	3	15	2	10	6	6	20	36	12	7
4		4					2	2		2
3331	71	69	33	58	75	20	25	49	45	9
		507				704		2		
5600	296	1034	280	218	129	110	171	76	251	475
		4		2	3		1			
3966	948	3892	562	934	1458	528	1480	728	602	85
10	4	14	5	16	4	4	10	5	14	9
4					6			2	1	

ROTHAMSTED REPORT FOR 1987, PART 2

TABLE

*The Rothamsted Insect Survey—Suction Traps: four-weekly total catches
Week Nos 41 to 44—*

Species	Sites										
	Elgin (916)	Dundee (907)	Edinburgh (912)	Pathhead (931)	Auchincruive (923)	Newcastle (906)	Belfast (927)	High Mowthorpe (905)	Preston (922)	Kirton (934)	Shardlow (919)
<i>Acyrthosiphon pisum</i>						2	4	2	1	1	1
<i>Amphorophora rubi</i>								9	3		
<i>Aphis fabae</i> grp.									1		
<i>Aphis</i> spp.								1			
<i>Aulacorthum solani</i>								3			
<i>Brachycaudus helichrysi</i>	2	1	2	1	1		1				
<i>Brevicoryne brassicae</i>								6			
<i>Cavariella aegopodii</i>						1					
<i>Chaetosiphon fragaefolii</i>											
<i>Cinara</i> spp.											
<i>Drepanosiphum platanoidis</i>	1	8	3	4	5	10	18	4	221	9	13
<i>Dysaphis plantaginis</i>											
<i>Elatobium abietinum</i>											
<i>Eriosoma ulmi</i>							1	2	4	9	4
<i>Hyalopterus pruni</i>	4										
<i>Hyperomyzus lactucae</i>	1	1	1	1	1		1	1	2	2	3
<i>Macrosiphum euphorbiae</i>							1				
<i>Megoura viciae</i>							1				
<i>Metopolophium dirhodum</i>	5	10	1	9	5	2	3	2	72	1	2
<i>Metopolophium festucae</i> s.l.	1		1				1	1	2		
<i>Myzus ascalonicus</i>			1	1				1		1	
<i>Myzus certus</i>											
<i>Myzus ornatus</i>				1			2	1	4		1
<i>Myzus persicae</i> grp.					1				8	1	5
<i>Nasonovia ribisnigri</i>										1	
<i>Pemphigus</i> spp.	13	8	20	4	2	18	14	7	84	58	21
<i>Phorodon humuli</i>											
<i>Phylloxaphis fagi</i>	1						3		2		
<i>Rhopalosiphum insertum</i>	141	240	214	389	335	480	843	185	4191	356	654
<i>Rhopalosiphum maidis</i>						2				1	1
<i>Rhopalosiphum padi</i>	235	500	544	368	577	437	232	297	4122	1134	1405
<i>Sitobion avenae</i>		1		2		3	4	1	8	7	7
<i>Sitobion fragariae</i>											

ROTHAMSTED INSECT SURVEY

1(h)

of aphids of economic, or other, interest reported in the Weekly Bulletin 1987
8 October to 4 November 1987

										Sites	
											Species
	Aberystwyth (911)	Broom's Barn (904)	Hereford (917)	Rothamsted Tower (901)	Writtle (924)	Long Ashton II (936)	Silwood Park (908)	Wye, Kent (903)	Littlehampton (933)	Starcross (913)	
		1									
2	10	2									<i>Acyrtosiphon pisum</i>
7	14	4									<i>Amphorophora rubi</i>
	1										<i>Aphis fabae</i> grp.
	2	1	4		2	2		2	2		<i>Aphis</i> spp.
				1	1						<i>Aulacorthum solani</i>
3	8				1	1		1	1		<i>Brachycaudus helichrysi</i>
											<i>Brevicoryne brassicae</i>
											<i>Cavariella aegopodii</i>
											<i>Chaetosiphon fragaefolii</i>
											<i>Cinara</i> spp.
30	1	16	5		6	38		3	4	14	<i>Drepanosiphum platanoidis</i>
	1									2	<i>Dysaphis plantaginea</i>
2											<i>Elatobium abietinum</i>
3	6	3		11			8	15	2		<i>Eriosoma ulmi</i>
				1							<i>Hyalopterus pruni</i>
1	2			1	1			1	1		<i>Hyperomyzus lactucae</i>
				1							<i>Macrosiphum euphorbiae</i>
											<i>Megoura viciae</i>
6	3	1	2		2	1		3	4		<i>Metopolophium dirhodum</i>
	2	1			1						<i>Metopolophium festucae s.l.</i>
	1							1			<i>Myzus ascalonicus</i>
											<i>Myzus certus</i>
											<i>Myzus ornatus</i>
3	25	1		3		1		1	3	3	<i>Myzus persicae</i> grp.
292	44	38	7	27	76	14	28	11	11	16	<i>Nasonovia ribisnigri</i>
		28			1		11				<i>Pemphigus</i> spp.
3					2						<i>Phorodon humuli</i>
4154	649	347	624	512	399	442	644	612	455	1018	<i>Phyllaphis fagi</i>
1	1		1		2						<i>Rhopalosiphum insertum</i>
365	1059	669	445	1211	747	356	925	516	335	24	<i>Rhopalosiphum maidis</i>
1	4	2	1		2	1	1	1			<i>Rhopalosiphum padi</i>
5		1	7	5	9	5	5	5	4	1	<i>Sitobion avenae</i>
											<i>Sitobion fragariae</i>

ROTHAMSTED REPORT FOR 1987, PART 2

TABLE

*The Rothamsted Insect Survey—Suction Traps: four-weekly total catches
Week Nos 45 to 48—*

Sites	Elgin (916)	Dundee (907)	Edinburgh (912)	Pathhead (931)	Auchincruive (923)	Newcastle (906)	Belfast (927)	High Mowthorpe (905)	Preston (922)	Kirton (934)	Shardlow (919)
Species											
<i>Acyrtosiphon pisum</i>											
<i>Amphorophora rubi</i>											
<i>Aphis fabae</i> grp.											
<i>Aphis</i> spp.											
<i>Aulacorthum solani</i>											
<i>Brachycaudus helichrysi</i>											
<i>Brevicoryne brassicae</i>											
<i>Cavariella aegopodii</i>											
<i>Chaetosiphon fragaefolii</i>											
<i>Cinara</i> spp.											
<i>Drepanosiphum platanoidis</i>	2				1	2	1	3	4	2	1
<i>Dysaphis plantaginea</i>					1		1				
<i>Elatobium abietinum</i>											
<i>Eriosoma ulmi</i>											
<i>Hyalopterus pruni</i>											
<i>Hyperomyzus lactucae</i>											
<i>Macrosiphum euphorbiae</i>											
<i>Megoura viciae</i>											
<i>Metopolophium dirhodum</i>	1	1		1			2		4		1
<i>Metopolophium festucae</i> s.l.											
<i>Myzus ascalonicus</i>											
<i>Myzus certus</i>											
<i>Myzus ornatus</i>							2				
<i>Myzus persicae</i> grp.											
<i>Nasonovia ribisnigri</i>											
<i>Pemphigus</i> spp.	1	1								5	
<i>Phorodon humuli</i>											
<i>Phyllaphis fagi</i>											
<i>Rhopalosiphum insertum</i>	14	24	1		15	1	25	1	43	33	17
<i>Rhopalosiphum maidis</i>											
<i>Rhopalosiphum padi</i>	21	32	2	1	9	4	10	9	39	71	61
<i>Sitobion avenae</i>					1			5		2	
<i>Sitobion fragariae</i>										2	1

ROTHAMSTED INSECT SURVEY

1(i)

*of aphids of economic, or other, interest reported in the Weekly Bulletin 1987.
5 November to 2 December 1987*

ROTHAMSTED REPORT FOR 1987, PART 2

TABLE

The Rothamsted Insect Survey—Light Traps: annual records

Pest Species	Year	—	352	Inverpoly	456	Lairg	349	Harris	398	Cromarty	457	Newton, Elgin	350	Beinn Eighe	49	Fort Augustus	48	Kindrogan	47	Dundee	97	Rowardennan	261	East Craigs	446	Brodick
<i>Hydraecia micacea</i>	1985	—	2	12	34	36	38	22	13	2	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	
Rosy Rustic	1986	6	1	11	19	46	27	16	15	1	7	7	1	0	0	0	0	0	0	0	0	1	1	7	8	
<i>Bupalus piniaria</i>	1985	—	0	0	0	4	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bordered White	1986	0	2	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
<i>Panolis flammea</i>	1985	—	0	0	1	0	8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pine Beauty	1986	0	1	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Cerapteryx graminis</i>	1985	—	1	118	3	12	38	8	90	0	6	1	1	0	7	0	46	1	1	15	0	0	0	0		
Antler Moth	1986	36	44	52	1	25	24	7	37	2	2	2	10	38	0	16	0	0	1	1	5	0	0	0	0	
<i>Agriopis aurantiaria</i>	1985	—	1	0	11	1	0	3	32	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	11	
Scarce Umber	1986	7	1	0	8	1	1	10	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
<i>Operophtera fagata</i>	1985	—	0	0	19	6	0	15	55	0	46	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
Northern Winter Moth	1986	9	0	0	17	4	0	12	69	0	29	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
<i>Apamea sordens</i>	1985	—	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Rustic Shoulder-knot	1986	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Gortyna flavago</i>	1985	—	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Frosted Orange	1986	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Mamestra brassicae</i>	1985	—	0	0	0	2	0	1	0	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cabbage Moth	1986	0	0	0	0	1	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Noctua pronuba</i>	1985	—	5	2	33	6	3	2	4	1	2	12	0	1	2	1	2	12	10	0	0	0	0	0		
Large Yellow Underwing	1986	1	4	1	15	5	4	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	
<i>Lacanobia oleracea</i>	1985	—	2	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bright-line Brown-eye	1986	3	0	0	1	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Euxoa nigricans</i>	1985	—	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Garden Dart	1986	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Mesapamea secalis</i>	1985	—	4	1	36	65	6	9	2	25	3	49	0	0	0	0	0	0	0	0	0	0	0	0	12	
Common Rustic	1986	4	4	1	12	35	2	3	1	4	0	26	0	0	0	0	0	0	0	0	0	0	0	0	6	
<i>Melanchra persicariae</i>	1985	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Dot Moth	1986	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Operophtera brumata</i>	1985	—	0	0	24	11	20	10	127	1	2286	0	0	0	0	0	0	0	0	0	0	0	0	0	12	
Winter Moth	1986	8	12	0	8	1	16	7	174	1	3386	0	0	0	0	0	0	0	0	0	0	0	0	0	10	

ROTHAMSTED INSECT SURVEY

2(a)

of moths of economic, or other importance for 1985 and 1986

	293	Auchincruive	264	Culzean Castle	296	Kielder	454	Mabie	362	Stocksfeld	39	Chester-le-Street	416	Forest-in-Teesdale	323	Windermere	187	Wykeham	453	Arnside	315	Baldersby	410	Harrogate	Year	Pest Species
0	—	36	34	42	30	9	17	—	1	0	0	0	0	22	12	15	4	1985	<i>Hydraecia micacea</i>							
1	—	—	—	—	—	—	—	—	1	1	0	0	0	24	11	69	4	1986	Rosy Rustic							
0	—	0	7	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1985	<i>Bupalus piniaria</i>							
0	0	0	2	0	0	0	0	0	0	0	0	0	4	0	0	0	0	1986	Bordered white							
0	—	0	1	0	0	0	—	0	0	0	0	0	1	0	0	0	0	1985	<i>Panolis flammea</i>							
0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	1986	Pine Beauty							
0	—	0	2	14	8	—	—	0	1	13	1	1	15	2	1	1	1	1985	<i>Cerapteryx graminis</i>							
0	0	0	0	12	7	0	0	0	0	3	0	0	13	0	0	0	0	1986	Antler Moth							
0	—	0	0	14	—	—	—	0	0	0	0	0	4	1	0	0	2	1985	<i>Agriopis aurantiaria</i>							
0	0	0	29	0	0	0	0	0	0	0	0	0	37	2	0	0	11	1986	Scarce Umber							
0	—	0	1	21	—	—	—	0	0	0	2	9	0	0	0	3	1985	<i>Operophtera fagata</i>								
0	3	0	36	0	0	1	2	0	0	2	37	2	0	0	0	22	1986	Northern Winter Moth								
1	—	3	0	0	2	0	—	0	1	0	0	0	0	0	1	15	0	1985	<i>Apamea sordens</i>							
3	—	0	0	0	0	0	0	0	0	0	0	0	0	1	6	0	0	1986	Rustic Shoulder-knot							
0	—	0	0	0	0	—	—	2	0	0	0	0	0	0	0	3	1985	<i>Gortyna flavago</i>								
0	8	0	0	0	0	0	0	1	0	0	0	0	0	3	3	7	1986	Frosted Orange								
0	—	0	1	0	2	—	—	5	0	0	0	0	0	3	14	0	1985	<i>Mamestra brassicae</i>								
0	4	0	0	0	0	0	0	6	0	0	1	0	0	1	17	0	1986	Cabbage Moth								
4	—	10	26	19	8	31	—	—	16	9	11	8	37	14	6	3	1985	<i>Noctua pronuba</i>								
10	—	9	6	4	0	0	—	7	0	0	0	5	1	36	0	0	1986	Large Yellow Underwing								
10	—	9	0	1	0	0	0	3	0	0	0	4	13	42	0	0	1985	<i>Lacanobia oleracea</i>								
0	—	0	0	0	1	—	—	8	0	0	0	0	0	0	0	0	1986	Bright-line Brown-eye								
0	—	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	1985	<i>Euxoa nigricans</i>								
0	—	0	0	0	0	—	—	8	0	0	0	0	0	0	0	0	1986	Garden Dart								
29	—	23	55	17	19	29	65	—	26	1	12	62	89	169	75	—	1985	<i>Mesapamea secalis</i>								
23	—	55	17	6	15	7	36	0	0	17	15	30	82	21	—	1986	Common Rustic									
0	—	0	0	0	0	—	—	0	0	2	0	1	7	0	0	0	1985	<i>Melanchra persicariae</i>								
0	—	0	0	0	0	0	0	0	0	7	0	2	8	0	0	0	1986	Dot Moth								
0	—	1	5	0	2	42	—	—	4	0	254	28	23	0	54	—	1985	<i>Operophtera brumata</i>								
1	—	5	0	60	0	0	0	0	0	0	31	34	11	2	79	—	1986	Winter Moth								

ROTHAMSTED REPORT FOR 1987, PART 2

TABLE

The Rothamsted Insect Survey—Light Traps: annual records

Pest Species	Year	465 Shadwell	131 Spurn Head	35 Bangor	337 Jodrell Bank	439 Sherwood Forest	223 Gibraltar Point	274 Wells-next-the-Sea	168 Sutton Bonington	381 Terrington	382 Preston Montford	280 Empingham	424 Compton Park
<i>Hydraecia micacea</i> Rosy Rustic	1985	—	54	0	3	4	23	0	4	9	10	1	19
	1986	3	116	0	14	5	41	0	7	19	9	3	7
<i>Bupalus piniaria</i> Bordered White	1985	—	0	0	0	0	0	0	0	6	0	0	0
	1986	0	0	0	0	0	0	0	0	0	0	3	0
<i>Panolis flammea</i> Pine Beauty	1985	—	0	0	1	0	0	0	0	0	0	0	0
	1986	0	0	0	1	0	0	0	0	0	0	0	0
<i>Cerapteryx graminis</i> Antler Moth	1985	—	6	0	8	29	1	0	0	0	0	0	1
	1986	4	5	0	10	24	8	0	0	0	0	1	0
<i>Agriopis aurantiaaria</i> Scarce Umber	1985	—	0	0	1	4	0	0	0	0	5	0	0
	1986	2	0	0	2	7	—	0	1	0	1	0	—
<i>Operophtera fagata</i> Northern Winter Moth	1985	—	0	0	8	3	0	0	0	0	2	0	0
	1986	0	0	0	14	19	—	0	0	0	1	0	—
<i>Apamea sordens</i> Rustic Shoulder-knot	1985	—	12	0	0	0	8	0	2	3	0	0	5
	1986	4	12	1	0	2	0	0	1	2	0	2	11
<i>Gortyna flavago</i> Frosted Orange	1985	—	1	0	0	0	0	0	1	4	1	0	0
	1986	0	1	0	2	0	1	4	1	5	2	0	0
<i>Mamestra brassicae</i> Cabbage Moth	1985	—	0	1	0	1	0	0	0	5	1	4	1
	1986	0	1	9	0	0	0	10	2	14	2	3	2
<i>Noctua pronuba</i> Large Yellow Underwing	1985	—	107	6	6	2	8	4	15	6	10	24	32
	1986	15	54	19	9	3	5	2	45	3	9	19	27
<i>Lacanobia oleracea</i> Bright-line Brown-eye	1985	—	21	0	0	1	1	1	8	34	2	2	3
	1986	3	12	0	1	2	15	4	5	6	0	5	3
<i>Euxoa nigricans</i> Garden Dart	1985	—	0	0	9	0	0	0	0	0	0	0	0
	1986	0	0	0	2	0	0	0	0	0	0	0	0
<i>Mesapamea secalis</i> Common Rustic	1985	—	47	14	18	4	3	6	44	83	95	11	19
	1986	29	21	8	13	3	39	5	74	93	72	30	12
<i>Melanchra persicariae</i> Dot Moth	1985	—	1	0	0	1	0	1	5	3	0	6	2
	1986	0	0	0	0	0	0	0	2	3	0	12	1
<i>Operophtera brumata</i> Winter Moth	1985	—	0	0	32	1	3	0	6	0	8	15	0
	1986	58	1	0	160	9	—	0	6	6	0	19	11

ROTHAMSTED INSECT SURVEY

2(b)

of moths of economic, or other importance for 1985 and 1986

ROTHAMSTED REPORT FOR 1987, PART 2

TABLE

The Rothamsted Insect Survey—Light Traps: annual records

Pest Species	Year	346	Rhandirmwyn	412	Eaton Bray	182	Woodstock	1	Rothamsted (Barnfield)	34	Rothamsted (Allotments)	22	Rothamsted (Geescroft I)	99	Rothamsted (Geescroft II)	87	Writtle	292	Westonbirt	180	Hurley	347	Cardiff	370	Sheppen
<i>Hydraecia micacea</i>	1985	4	6	—	8	17	3	1	0	3	1	1	3	6	1	1	1	1	1	1	1	1	1	1	1
Rosy Rustic	1986	2	4	0	20	19	1	3	0	6	10	0	0	10	0	0	0	0	0	0	0	0	0	0	0
<i>Bupalus piniaria</i>	1985	0	0	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bordered White	1986	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Panolis flammea</i>	1985	0	0	—	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Pine Beauty	1986	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Cerapteryx graminis</i>	1985	10	0	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Antler Moth	1986	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Agriopsis aurantiaria</i>	1985	13	0	—	0	0	0	17	4	0	9	1	0	0	5	0	0	0	0	0	0	0	0	0	0
Scarce Umber	1986	11	3	0	0	0	0	15	4	0	5	0	0	5	5	0	0	0	0	0	0	0	0	0	0
<i>Operophtera fagata</i>	1985	1	0	—	0	0	0	0	1	0	9	1	0	9	5	5	0	0	0	0	0	0	0	0	0
Northern Winter Moth	1986	3	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
<i>Apamea sordens</i>	1985	0	0	—	2	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Rustic Shoulder-knot	1986	0	3	0	7	2	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0
<i>Gortyna flavago</i>	1985	2	2	—	0	0	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Frosted Orange	1986	0	8	0	1	0	1	1	2	4	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0
<i>Mamestra brassicae</i>	1985	1	1	—	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
Cabbage Moth	1986	0	0	0	0	0	0	0	0	18	0	0	0	0	1	1	1	1	1	1	1	1	1	5	5
<i>Noctua pronuba</i>	1985	8	4	—	17	5	147	73	27	27	6	22	22	22	20	20	20	20	20	20	20	20	20	20	20
Large Yellow Underwing	1986	21	9	18	23	10	265	63	20	45	9	22	22	22	20	20	20	20	20	20	20	20	20	20	20
<i>Lacanobia oleracea</i>	1985	9	9	—	6	0	2	2	33	0	1	3	17	0	0	0	0	0	0	0	0	0	0	0	0
Bright-line Brown-eye	1986	15	8	0	36	0	3	5	23	0	0	6	21	0	0	0	0	0	0	0	0	0	6	21	17
<i>Euxoa nigricans</i>	1985	0	0	—	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Garden Dart	1986	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Mesapamea secalis</i>	1985	0	23	—	140	18	50	68	77	43	47	14	18	14	17	17	17	17	17	17	17	17	17	17	18
Common Rustic	1986	4	24	0	103	14	76	91	85	28	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
<i>Melanchnra persicariae</i>	1985	3	4	—	0	0	1	1	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dot Moth	1986	3	5	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
<i>Operophtera brumata</i>	1985	187	8	—	6	0	127	84	0	39	3	2	0	0	1	2	2	1	2	1	2	1	2	0	0
Winter Moth	1986	93	4	2	11	0	139	98	0	22	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1

ROTHAMSTED INSECT SURVEY

2(c)

of moths of economic, or other importance for 1985 and 1986

ROTHAMSTED REPORT FOR 1987, PART 2

TABLE

The Rothamsted Insect Survey—Light Traps: annual records

Pest Species	Year	—	352	Inverpoly	456	Lairg	398	Cromarty	457	Newton, Elgin	181	350	Beinn Eighe	49	Fort Augustus	48	Kindrogan	—	47	Dundee	—	0	261	East Craigs	—	0	446	Brodick
<i>Abraxas grossulariata</i>	1985	—	0	46	0	0	0	0	0	0	181	5	0	0	0	0	0	—	0	0	0	0	0	0	0	0	0	
Magpie Moth	1986	14	0	25	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Agrotis segetum</i>	1985	—	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Turnip Moth	1986	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Erannis defoliaria</i>	1985	—	0	0	9	3	0	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mottled Umber	1986	1	0	0	5	1	0	0	2	4	1	629	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Phlogophora meticulosa</i>	1985	—	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Angle Shades	1986	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alsophila aescularia</i>	1985	—	0	0	53	14	0	0	6	0	1	25	0	0	0	0	0	1	25	0	0	0	0	0	0	0	0	0
March Moth	1986	0	0	0	43	3	0	0	3	0	0	11	0	0	0	0	0	2	11	0	0	0	0	0	0	0	0	0
<i>Hepialus humuli</i>	1985	—	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ghost Swift	1986	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Hepialus lupulinus</i>	1985	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Common Swift	1986	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Agrotis epsilon</i>	1985	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dark Sword-grass	1986	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Euproctis chrysorrhoea</i>	1985	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brown-tail	1986	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Agrotis exclamationis</i>	1985	—	0	0	7	29	0	0	11	22	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Heart and Dart	1986	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Autographa gamma</i>	1985	—	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Silver Y	1986	3	0	0	18	2	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Spodoptera exigua</i>	1985	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Mottled Willow	1986	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Orthonama obstipata</i>	1985	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
The Gem	1986	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Nomophila noctuella</i>	1985	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rush Veneer Pearl	1986	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Plutella xylostella</i>	1985	—	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diamond-back Moth	1986	0	2	20	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Udea ferrugalis</i>	1985	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rusty-dot Pearl	1986	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ROTHAMSTED INSECT SURVEY

2(d)

of moths of economic, or other importance for 1985 and 1986

	293	Auchincruive		464	Embleton		264	Culzean Castle		296	Kielder		454	Mabie		362	Stocksfield		39	Chester-le-Street		416	Forest-in-Teesdale		313	Windermere		187	Wykeham		453	Arnside		5	3		2	410	Harrogate		Year	Pest Species
0	0	7		0	0		0	0		0	0		0	0		0	0		4	0		0	0		0	0		0	0		2	0		2	4		0	1985	<i>Abraxas grossulariata</i>			
0	0	0		0	0		0	0		0	0		0	0		0	0		3	0		0	0		0	0		0	0		0	0		0	1986	Magpie Moth						
2	1	0	0	0	0		0	0		0	0		0	0		0	0		0	0		0	0		0	0		5	1		0	1		0	1985	<i>Agrotis segetum</i>						
1	0	0		0	0		0	0		0	0		0	0		0	0		0	0		0	0		0	0		1	0		0	0		0	1986	Turnip Moth						
0	0	—	2	0	2		—	—		0	0		—	10		1	0		0	3		5	14		7	1		2	1		4	7		1985	<i>Erannis defoliaria</i>							
0	0	2	0	4	2		—	10		1	0		0	5		0	0		5	14		7	1		1	7		5	2		1	1		1986	Mottled Umber							
0	0	—	1	0	1		2	—		1	0		—	0		0	2		10	5		1	13		5	2		5	1		1	1		1985	<i>Phlogophora meticulosa</i>							
0	0	5	0	0	0		0	0		0	0		0	0		0	2		5	1		13		2	1		2	1		1	1		1986	Angle Shades								
0	0	—	2	2	0		—	—		3	0		—	1		2	0		0	0		20	8		0	0		—	2		19	1985	<i>Alsophila aescularia</i>									
0	0	1	2	0	0		—	—		1	2		—	1		0	1		0	0		8	0		0	0		0	2		3	1986	March Moth									
0	0	—	0	0	5		0	—		1	0		—	1		0	0		2	0		0	1		1	0		3	1		1	1		1985	<i>Hepialus humuli</i>							
0	0	0	0	0	0		1	1		0	0		—	0		0	0		0	0		1	1		1	1		0	1		1	1		1986	Ghost Swift							
3	1	—	0	0	0		1	—		0	0		—	0		0	0		0	0		0	0		0	0		3	0		2	79		1985	<i>Hepialus lupulinus</i>							
1	5	0	0	0	0		0	0		0	0		0	0		0	0		0	0		0	0		0	0		0	0		35	1986	Common Swift									
0	0	—	0	0	0		0	0		0	0		—	0		0	0		0	0		0	0		0	0		0	0		0	1985	<i>Agrotis epsilon</i>									
0	0	1	0	0	0		0	0		0	0		—	0		0	0		0	0		1	1		0	0		0	1		0	1986	Dark Sword-grass									
0	0	—	0	0	0		0	0		0	0		—	0		0	0		0	0		0	0		0	0		0	0		0	1985	<i>Euproctis chrysorrhoea</i>									
0	0	0	0	0	0		0	0		0	0		—	0		0	0		0	0		0	0		0	0		0	0		0	1986	Brown-tail									
56	1	—	38	3	440		—	73		2	284		86	127		481		130		1985	<i>Agrotis exclamationis</i>																					
45	6	2	22	7	10		0	12		14	21		24	16					1986	Heart and Dart																						
0	0	—	3	3	4		—	39		0	0		6	28		44		5		1985	<i>Autographa gamma</i>																					
40	6	3	11	1	57		4	1		3	64		65	5					1986	Silver Y																						
0	0	—	0	0	0		—	0		0	0		0	0		0	0		0	1985	<i>Spodoptera exigua</i>																					
0	0	0	0	0	0		0	0		0	0		0	0		0	0		0	1986	Small Mottled Willow																					
0	0	—	0	0	0		—	0		0	0		0	0		0	0		0	1985	<i>Orthonama obstipata</i>																					
0	0	0	0	0	0		0	0		0	0		0	0		0	0		0	1986	The Gem																					
0	0	—	0	1	0		—	0		0	0		0	0		0	0		0	1985	<i>Nomophila noctuella</i>																					
0	0	—	0	0	0		0	0		0	0		—	0		0	0		0	1986	Rush Veneer Pearl																					
0	—	0	1	6	—		0	0		0	0		0	3		0	1		—	1985	<i>Plutella xylostella</i>																					
154	—	0	1	111	0		6	0		0	—		11	0		8		—	1986	Diamond-back Moth																						
0	—	0	0	0	—		0	0		0	0		0	0		0	0		—	1985	<i>Udea ferrugalis</i>																					
0	—	0	0	0	0		0	0		0	0		—	0		0	0		—	1986	Rusty-dot Pearl																					

ROTHAMSTED REPORT FOR 1987, PART 2

TABLE

The Rothamsted Insect Survey—Light Traps: annual records

Pest Species	Year	465	Shadwell	131	Spurn Head	35	Bangor	337	Jodrell Bank	439	Sherwood Forest	0	223	Gibraltar Point	274	Wells-next-the-Sea	1	168	Sutton Bonington	0	0	381	Terrington	0	4	0	0	0	382	Preston Montford	12	280	Empingham	0	0	424	Compton Park
<i>Abraxas grossulariata</i>	1985	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Magpie Moth	1986	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	13	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
<i>Agrotis segetum</i>	1985	—	6	0	0	0	0	8	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Turnip Moth	1986	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
<i>Erannis defoliaria</i>	1985	—	0	0	31	15	0	0	0	0	0	0	0	0	0	0	0	4	0	0	7	1	0	0	0	0	0	0	0	0	0	0	0	0			
Mottled Umber	1986	4	0	0	73	27	—	0	0	0	0	0	0	0	0	0	0	2	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0			
<i>Phlogophora meticulosa</i>	1985	—	25	2	0	15	8	0	0	0	0	0	0	0	0	0	0	12	1	14	25	9	0	0	0	0	0	0	0	0	0	0	0	0			
Angle Shades	1986	4	8	4	0	5	0	0	0	0	0	0	0	0	0	0	0	1	48	3	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0		
<i>Alsophila aescularia</i>	1985	—	0	0	27	22	14	1	0	0	0	0	0	0	0	0	0	7	1	1	8	1	0	0	0	0	0	0	0	0	0	0	0	0			
March Moth	1986	3	0	0	7	22	8	1	1	0	0	0	0	0	0	0	0	12	1	12	6	0	0	0	0	0	0	0	0	0	0	0	0	0			
<i>Hepialus humuli</i>	1985	—	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Ghost Swift	1986	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
<i>Hepialus lupulinus</i>	1985	—	19	0	1	0	9	4	0	0	0	0	0	0	0	0	0	26	23	24	18	58	8	0	0	0	0	0	0	0	0	0	0	0			
Common Swift	1986	7	12	0	6	1	2	4	0	0	0	0	0	0	0	0	0	16	3	16	3	23	1	0	0	0	0	0	0	0	0	0	0	0			
<i>Agrotis ipsilon</i>	1985	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Dark Sword-grass	1986	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<i>Euproctis chrysorrhoea</i>	1985	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Brown-tail	1986	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<i>Agrotis exclamationis</i>	1985	—	80	16	245	19	80	6	212	18	292	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Heart and Dart	1986	1	24	9	20	4	43	4	100	11	49	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
<i>Autographa gamma</i>	1985	—	36	3	9	10	27	0	5	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Silver Y	1986	5	49	1	12	33	13	3	4	5	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<i>Spodoptera exigua</i>	1985	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Small Mottled Willow	1986	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Orthonama obstipata</i>	1985	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
The Gem	1986	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Nomophila noctuella</i>	1985	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Rush Veneer Pearl	1986	0	0	0	0	0	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Plutella xylostella</i>	1985	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Diamond-back Moth	1986	0	6	10	0	—	0	0	0	0	0	0	0	0	0	0	0	1	6	30	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Udea ferrugalis</i>	1985	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Rusty-dot Pearl	1986	0	0	0	0	0	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

ROTHAMSTED INSECT SURVEY

2(e)

of moths of economic, or other importance for 1985 and 1986

Monks Wood (Ewingswode)												Year	Pest Species
0	259	Santon Downham	0	340	Aberystwyth	0	175	277	Monks Wood (Ewingswode)	0	144	10	1985 <i>Abraxas grossularia</i>
0	0	0	0	1	Broom's Barn	0	0	10	Tregaron	0	4	6	1986 Magpie Moth
1	0	4	4	0	0	0	0	2	Llywdinam	0	4	4	1985 <i>Agrotis segetum</i>
0	0	0	4	0	0	0	0	1	Luddington	0	0	0	1986 Turnip Moth
11	3	102	0	102	18	4	1	5	Cockayne Hatley	0	6	3	1985 <i>Erannis defoliaria</i>
5	4	769	0	343	50	0	1	6	Aberporth	0	5	4	1986 Mottled Umber
10	1	14	13	11	5	8	4	21	Hereford	0	0	18	1985 <i>Phlogophora meticulosa</i>
7	0	11	50	6	5	1	1	2	Hereford	0	3	13	1986 Angle Shades
18	4	91	6	73	24	2	4	21	Cork	0	10	4	1985 <i>Alsophilinae aescularia</i>
6	5	388	4	98	13	2	1	2	Cork	0	4	9	1986 March Moth
1	0	0	0	0	2	0	4	5	Evesham	0	0	5	1985 <i>Hepialus humuli</i>
2	0	0	0	0	0	0	1	0	Evesham	0	0	0	1986 Ghost Swift
3	0	61	16	0	1	2	6	0	—	0	0	0	1985 <i>Hepialus lupulinus</i>
1	5	28	4	1	0	0	4	9	—	0	3	10	1986 Common Swift
0	0	0	0	0	0	0	0	0	—	0	0	0	1985 <i>Agrotis ipsilon</i>
0	0	0	1	2	1	0	2	0	—	0	0	0	1986 Dark Sword-grass
0	0	0	0	0	0	0	0	0	—	0	0	0	1985 <i>Euproctis chrysorrhoea</i>
0	0	0	0	0	0	0	0	0	—	0	0	0	1986 Brown-tail
12	277	20	29	699	319	87	1806	46	130	—	5	—	1985 <i>Agrotis exclamationis</i>
9	67	11	26	190	5	21	60	26	19	—	33	—	1986 Heart and Dart
30	15	18	5	35	24	0	17	16	1	—	—	—	1985 <i>Autographa gamma</i>
14	17	17	13	18	15	2	12	25	7	23	9	—	1986 Silver Y
0	0	0	0	0	0	0	0	0	0	—	—	—	1985 <i>Spodoptera exigua</i>
0	0	0	0	0	0	0	0	0	0	0	0	0	1986 Small Mottled Willow
0	0	0	0	0	0	0	0	0	0	—	—	—	1985 <i>Orthonama obstipata</i>
0	0	0	0	1	0	0	0	0	0	0	0	0	1986 The Gem
0	—	0	0	—	—	0	—	0	0	—	—	—	1985 <i>Nomophila noctuella</i>
0	—	0	0	—	—	0	—	0	—	1	—	—	1986 Rush Veneer Pearl
0	—	0	23	—	—	3	—	24	79	—	—	—	1985 <i>Plutella xylostella</i>
9	—	0	179	—	—	19	—	716	—	4	—	—	1986 Diamond-back Moth
0	—	0	0	—	—	0	—	0	0	—	—	—	1985 <i>Udea ferrugalis</i>
0	—	0	0	—	—	0	—	0	—	11	—	—	1986 Rusty-dot Pearl

ROTHAMSTED REPORT FOR 1987, PART 2

TABLE

The Rothamsted Insect Survey—Light Traps: annual records

Pest Species	Year	346	Rhadrifmwyn	412	Eaton Bray	1	Rothamsted (Barnfield)	34	Rothamsted (Allotments)	22	Rothamsted (Geescroft I)	99	Rothamsted (Geescroft II)	87	Writtle	292	Westonbirt	180	Hurley	347	Cardiff	370	Shepway	289	Wistey	
<i>Abraxas grossulariata</i> Magpie Moth	1985	2	67	—	42	3	0	28	27	3	1	1	1	0	0	1	1	0	2	4	4	—	0	0		
<i>Agrotis segetum</i> Turnip Moth	1985	1	3	—	0	2	0	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	
<i>Erannis defoliaria</i> Mottled Umber	1985	46	1	—	0	0	0	64	15	0	42	0	0	0	0	0	0	0	0	0	0	0	0	0	14	
<i>Phlogophora meticulosa</i> Angle Shades	1985	13	2	—	15	0	20	19	6	13	2	2	2	2	2	2	2	2	2	2	2	2	2	3	4	
<i>Alsophila aescularia</i> March Moth	1985	7	6	—	3	0	24	22	17	8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	13	
<i>Hepialus humuli</i> Ghost Swift	1985	0	2	—	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
<i>Hepialus lupulinus</i> Common Swift	1985	0	90	—	74	10	12	30	38	30	104	24	11	5	6	11	9	5	9	6	21	24	11	5	4	
<i>Agrotis ipsilon</i> Dark Sword-grass	1985	0	0	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Euproctis chrysorrhoea</i> Brown-tail	1985	0	0	—	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Agrotis exclamationis</i> Heart and Dart	1985	133	91	—	90	21	39	20	108	97	18	13	22	29	5	23	5	23	5	23	22	29	7	7	29	
<i>Autographa gamma</i> Silver Y	1985	60	10	—	14	7	13	14	19	34	0	45	37	29	1	20	1	20	1	20	41	37	10	10	29	
<i>Spodoptera exigua</i> Small Mottled Willow	1985	0	0	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Orthonama obstipata</i> The Gem	1985	0	0	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Nomophila noctuella</i> Rush Veneer Pearl	1985	0	0	—	0	1	0	1	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1
<i>Plutella xylostella</i> Diamond-back Moth	1985	1	0	—	23	46	0	0	0	0	0	1	8	59	50	—	29	222	238	29	222	59	50	238	238	
<i>Udea ferrugalis</i> Rusty-dot Pearl	1985	0	0	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	1986	5	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	—	0	0	0	0	0	0	1

ROTHAMSTED INSECT SURVEY

2(f)

of moths of economic, or other importance for 1985 and 1986

																Year	Pest Species
3	451	Perry Woods	46	Alice Holt	0	219	Haslemere	19	379	Winchester	—	—	—	—	—	1985	<i>Abraxas grossulariata</i>
2	0	0	0	0	0	13	Lydd	5	0	Denny Lodge	3	4	18	4	—	1986	Magpie Moth
4	1	2	0	2	0	0	0	0	0	0	1	5	0	—	4	1985	<i>Agrotis segetum</i>
1	0	0	0	0	0	0	0	0	0	1	5	0	1	0	0	1986	Turnip Moth
0	4	7	6	2	0	—	0	32	23	25	11	0	0	—	0	1985	<i>Erannis defoliaria</i>
4	6	2	4	0	0	—	0	23	23	11	0	0	0	0	0	1986	Mottled Umber
17	4	3	3	2	6	—	0	0	1	18	17	8	7	3	—	1985	<i>Phlogophora meticulosa</i>
4	0	3	0	2	0	0	0	0	1	3	8	7	3	2	2	1986	Angle Shades
—	1	8	5	4	0	—	0	0	2	24	29	3	0	0	0	1985	<i>Alsophila aescularia</i>
1	5	0	0	0	0	—	0	2	29	0	0	0	0	0	0	1986	March Moth
2	2	1	3	0	1	—	0	0	0	1	0	0	0	0	—	1985	<i>Hepialus humuli</i>
2	0	3	0	2	0	0	0	0	0	0	0	0	0	0	0	1986	Ghost Swift
136	66	7	0	32	—	1	0	0	24	1	0	1	0	0	0	1985	<i>Hepialus lupulinus</i>
66	0	0	0	12	24	2	0	0	24	0	0	1	0	0	0	1986	Common Swift
0	0	0	0	0	—	0	0	0	0	1	0	1	0	0	—	1985	<i>Agrotis ipsilon</i>
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1986	Dark Sword-grass
0	1	0	0	5	—	3	0	0	10	0	0	0	0	1	5	1985	<i>Euproctis chrysorrhoea</i>
1	0	0	0	0	10	0	0	0	0	0	0	0	0	1	2	1986	Brown-tail
30	28	27	14	61	60	—	13	277	35	789	7	59	40	33	—	1985	<i>Agrotis exclamationis</i>
28	11	11	25	25	35	—	7	13	7	—	13	59	40	11	12	1986	Heart and Dart
23	6	15	10	11	—	3	3	32	10	28	68	22	9	20	14	1985	<i>Autographa gamma</i>
6	10	4	12	10	10	1	1	68	10	—	68	469	0	3	—	1986	Silver Y
0	0	0	0	0	—	0	0	0	0	0	0	0	0	0	—	1985	<i>Spodoptera exigua</i>
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1986	Small Mottled Willow
0	0	0	0	0	—	0	0	1	0	0	0	0	0	0	—	1985	<i>Orthonama obstipata</i>
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1986	The Gem
1	0	1	0	0	—	—	—	17	1	—	5	0	0	1	—	1985	<i>Nomophila noctuella</i>
0	0	0	1	0	0	—	—	—	0	—	0	0	0	0	0	1986	Rush Veneer Pearl
22	92	16	71	2	0	—	—	68	26	—	—	469	0	18	—	1985	<i>Plutella xylostella</i>
92	71	16	71	0	71	—	—	—	71	—	—	469	0	61	198	1986	Diamond-back Moth
1	0	0	0	0	—	—	—	0	0	—	9	0	0	2	—	1985	<i>Udea ferrugalis</i>
0	0	0	0	0	0	—	—	—	0	—	9	0	1	2	2	1986	Rusty-dot Pearl