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ROTHAMSTED
RESEARCH

Rothamsted Experimental Station Report for 1972 Part 2



[Full Table of Content](#)

Rothamsted Insect Survey Fourth Report With a Comment on the Neuroptera by J. Bowden

L. R. Taylor and R. A. French

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Rothamsted Insect Survey

Fourth Report

L. R. TAYLOR and R. A. FRENCH

With a comment on the Neuroptera by J. BOWDEN

Suction traps

Aphid bulletins were issued weekly from 24 April 1972 (Bulletin No. 1) to 29 October (Bulletin No. 28). Of the 32 aphid taxa listed in Bulletin No. 1, 1968, 23 remain unchanged. *Neomyzus circumflexum* (Buckton) and *Eucallipterus tiliae* (Linn.) have been deleted; *Phyllaphis fagi* (Linn.), *Schizoneura (Eriosoma) ulmi* (Linn.), *Hyperomyzus lactucae* (Linn.) and *Dysaphis plantaginea* (Pass.) have been added. The *Amphorophora* spp. are now separated but only *A. rubi* (Kalt.) is listed. *Aphis fabae* (Scop.) is listed as *Aphis fabae* group; similarly, *Myzus persicae* (Sulz.) is now listed as *M. persicae* group, *M. certus* being separated later. *Aphis* spp. now includes *A. nasturtii* Kalt., *A. idaeii* Van der Goot and *A. frangulae* Kalt. Spring specimens of *Rhopalosiphum insertum* (Walk.) and *R. padi* (Linn.) were not adequately separated until 1971. *Pemphigus* spp. contains species currently inseparable from *bursarius*.

Catches from Zeeland, Broom's Barn and Aberystwyth were mainly identified at the site by D. Hille ris Lambers of Bladluisonderzoek T.N.O., G. D. Heathcote of Broom's Barn and J. A'Brook of the Welsh Plant Breeding Station. H. L. G. Stroyan of M.A.F.F. Plant Pathology Laboratories and V. F. Eastop of the British Museum (Natural History) confirmed difficult determinations and J. A. T. Woodford of Cambridge University separated *M. persicae* from *M. certus* and winged fundatrigeniae from spring migrants of *M. persicae*.

The same 32 aphid taxa that appeared in the weekly bulletin are listed in Table 1 a-h.

The bulletin sent out on Friday lists aphids caught between five and 12 days previously, except Zeeland and Copenhagen that appear a week late. This timing is determined by the postal service and is unlikely to be improved. The bulletin covers working weeks, Monday to Sunday. Published results (Table 1) are in four-week periods from Standard Week No. 13 to No. 44, 26 March to 4 November, as in 1971. The Standard Weeks, listed in Table 4, remain constant from year to year by the exclusion of 29 February and 31 December.

The East Craigs trap, burned down in 1971, has been replaced; the Zeeland trap has been moved 8 km north to a new site, rather less exposed than the previous one, and worked throughout the season. The new trap at Shardlow, near Derby, began trapping on 20 March. Additional traps at Garston, Hertfordshire, and at Rothamsted Farm (two traps) are not included in the bulletin nor in Table 1.

Whilst the Copenhagen trap occasionally produced numbers well outside the range of the British traps, it is not yet apparent that either the overall sample size, or the species composition, differ greatly.

Sample volumes were halved at Shardlow, Broom's Barn, Rothamsted Tower, Silwood Park and Wye from 16 July to 6 August, at Rosemaund from 24 July to 7 August and at all traps, except Zeeland from 25 September to 22 October. The bulletin and Table 1 are corrected to full sample volume.

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

ROTHAMSTED INSECT SURVEY

Neuroptera, including the aphid predators, have been identified from 1970, 1971 and 1972 catches and the commonest species, *Chrysopa carnea*, is listed in Table 3a with a discussion of this and the rarer species, listed in Table 3b, by J. Bowden (p. 209). It is unlikely that all specimens of the very small species were recovered in these years; a more careful search will be made in future.

In Table 3 dashes indicate no record; a blank records a zero catch.

Light traps

Tables 2 a–d give the total annual catches during 1970 and 1971 of the same 31 pest, or migratory, Lepidoptera as in *Rothamsted Report for 1971*, Part 2. Of the 68 sites with a full year's sample in 1970, 52 also completed 1971, 20 new sites makes a total of 72 in the table. At the end of 1972 129 traps are operating.

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

Voluntary workers again operated most of the traps and identified many of the insects; for this we are most grateful.

Table 1 (a–h)

The Rothamsted Insect Survey—Suction Traps: four-weekly total catches of aphids of economic, or other, interest reported in the Weekly Bulletin 1972

Pages 184–199

Table 2 (a–d)

The Rothamsted Insect Survey—Light Traps: annual records of moths of economic, or other, interest for 1970 and 1971

Pages 200–207

Table 3 (a–b)

*The Rothamsted Insect Survey—Suction Traps: four-weekly total catches of *Chrysopa carnea* and the three years' annual total of other lacewings for 1970, 1971 and 1972 identified by J. Bowden*

Pages 208–209

Table 4

The Standard Weeks used to tabulate and analyse insect samples in the Rothamsted Insect Survey

Page 211

ROTHAMSTED REPORT FOR 1972, PART 2

TABLE
The Rothamsted Insect Survey—Suction Traps: four-weekly total catches
Week Nos 13 to 16—

Species	Sites							
	Elgin	Dundee	Edinburgh	Copenhagen	Newcastle	High Mowthorpe	Shardlow	Aberystwyth
<i>Acyrtosiphon pisum</i>								
<i>Aphis fabae</i> grp.								
<i>Aphis</i> spp.								
<i>Amphorophora rubi</i>								
<i>Aulacorthum solani</i>								
<i>Brachycaudus helichrysi</i>								
<i>Brevicoryne brassicae</i>								
<i>Cavariella aegopodii</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>								
<i>Myzus ascalonicus</i>							1	
<i>Myzus ornatus</i>								1
<i>Myzus persicae</i> grp.								
<i>Nasonovia ribis nigri</i>								
<i>Pemphigus</i> spp.								
<i>Pentatrachopus fragaefolii</i>								
<i>Phorodon humuli</i>								
<i>Phyllaphis fagi</i>								
<i>Rhopalosiphum insertum</i>								
<i>Rhopalosiphum maidis</i>								
<i>Rhopalosiphum padi</i>								1
<i>Sitobion avenae</i>								
<i>Sitobion fragariae</i>								
First aphid caught							Apr 21	Apr 6

ROTHAMSTED INSECT SURVEY

1(a)

of aphids of economic, or other, interest reported in the *Weekly Bulletin* 1972

26 March to 22 April 1972

Brooms Barn	Hereford	Rothamsted Tower	Long Ashton	Silwood Park	Zeeland	Wye, Kent	Starcross	Rosewarne	Sites
									Species
									<i>Acyrtosiphon pisum</i>
									<i>Aphis fabae</i> grp.
									<i>Aphis</i> spp.
									<i>Amphorophora rubi</i>
									<i>Aulacorthum solani</i>
									<i>Brachycaudus helichrysi</i>
									<i>Brevicoryne brassicae</i>
									<i>Cavariella aegopodii</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>
			2						<i>Metopolophium dirhodum</i>
			1						<i>Metopolophium festucae</i>
	1		2						<i>Myzus ascalonicus</i>
			2						<i>Myzus ornatus</i>
									<i>Myzus persicae</i> grp.
									<i>Nasonovia ribis nigri</i>
									<i>Pemphigus</i> spp.
									<i>Pentatrachopus fragaefolii</i>
									<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
	Apr 20		Apr 9						

ROTHAMSTED REPORT FOR 1972, PART 2

TABLE

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

Species	Sites							
	Elgin	Dundee	Edinburgh	Copenhagen	Newcastle	High Mowthorpe	Shardlow	Aberystwyth
<i>Acyrtosiphon pisum</i>								
<i>Aphis fabae</i> grp.								
<i>Aphis</i> spp.								
<i>Amphorophora rubi</i>								
<i>Aulacorthum solani</i>			1					
<i>Brachycaudus helichrysi</i>	1		2				1	1
<i>Brevicoryne brassicae</i>								
<i>Cavariella aegopodii</i>	1							
<i>Cinara</i> spp.								
<i>Drepanosiphum plantanoidis</i>	4	7	9			3	32	
<i>Dysaphis plantaginea</i>								
<i>Elatobium abietinum</i>	8	2	2			2	2	26
<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				2	
<i>Metopolophium festucae</i>			11				1	1
<i>Myzus ascalonicus</i>	7	1	6		3	4	24	3
<i>Myzus ornatus</i>			5				2	
<i>Myzus persicae</i> grp.	1							
<i>Nasonovia ribis nigri</i>							1	
<i>Pemphigus</i> spp.								
<i>Pentatrichopus fragaefolii</i>								
<i>Phorodon humuli</i>								
<i>Phyllaphis fagi</i>								
<i>Rhopalosiphum insertum</i>			7				20	
<i>Rhopalosiphum maidis</i>								
<i>Rhopalosiphum padi</i>			2					
<i>Sitobion avenae</i>			1					10
<i>Sitobion fragariae</i>								
First aphid caught	May 16	May 5	May 2		May 1	May 7		

ROTHAMSTED INSECT SURVEY

1(b)

of aphids of economic, or other, interest reported in the Weekly Bulletin 1972

23 April to 20 May 1972

Brooms Barn	Hereford	Rothamsted Tower	Long Ashton	Silwood Park	Zeeland	Wye, Kent	Starcross	Rosewarne	Sites
5			1	1	7				Species
			1						<i>Acyrtosiphon pisum</i>
									<i>Aphis fabae</i> grp.
									<i>Aphis</i> spp.
									<i>Amphorophora rubi</i>
1	2		1	2			1		<i>Aulacorthum solani</i>
	1	9	1	8		4	4		<i>Brachycaudus helichrysi</i>
				4					<i>Brevicoryne brassicae</i>
									<i>Cavariella aegopodii</i>
									<i>Cinara</i> spp.
	6	2	31	1		1	5		<i>Drepanosiphum plantanoidis</i>
									<i>Dysaphis plantaginea</i>
2	5	11		21		24			<i>Elatobium abietinum</i>
									<i>Eriosoma ulmi</i>
									<i>Hyalopterus pruni</i>
									<i>Hyperomyzus lactucae</i>
		1		2				1	<i>Macrosiphum euphorbiae</i>
									<i>Megoura viciae</i>
			2		1			1	<i>Metopolophium dirhodum</i>
		1		5	2	1		1	<i>Metopolophium festucae</i>
17	5	23	11	39	1	12	3	5	<i>Myzus ascalonicus</i>
			5				1		<i>Myzus ornatus</i>
1		1	2				1		<i>Myzus persicae</i> grp.
									<i>Nasonovia ribis nigri</i>
									<i>Pemphigus</i> spp.
									<i>Pentatrachopus fragaefolii</i>
	1								<i>Phorodon humuli</i>
									<i>Phyllaphis fagi</i>
	1	2	5	5			1		<i>Rhopalosiphum insertum</i>
									<i>Rhopalosiphum maidis</i>
2					1				<i>Rhopalosiphum padi</i>
1	2		2	4		2			<i>Sitobion avenae</i>
									<i>Sitobion fragariae</i>
May 6		May 1		Apr 26	May 11	Apr 30	Apr 25	Apr 28	First aphid caught

ROTHAMSTED REPORT FOR 1972, PART 2

TABLE

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

Species	Sites							
	Elgin	Dundee	Edinburgh	Copenhagen	Newcastle	High Mowthorpe	Shardlow	Aberystwyth
<i>Acyrtosiphon pisum</i>	4		1	2		1	3	1
<i>Aphis fabae</i> grp.							12	1
<i>Aphis</i> spp.			1	2		1	17	
<i>Amphorophora rubi</i>							2	
<i>Aulacorthum solani</i>	2		3	1			14	
<i>Brachycaudus helichrysi</i>	21	8	29	1	10	18	508	27
<i>Brevicoryne brassicae</i>								1
<i>Cavariella aegopodii</i>	4	4	7	3	6	44	398	9
<i>Cinara</i> spp.								
<i>Drepanosiphum platanoidis</i>	14	34	103		102	25	157	5
<i>Dysaphis plantaginea</i>								
<i>Elatobium abietinum</i>	39	31	29		106	12	15	71
<i>Eriosoma ulmi</i>				3			11	
<i>Hyalopterus pruni</i>		3				1	5	
<i>Hyperomyzus lactucae</i>		10	12	4	2	3	3	2
<i>Macrosiphum euphorbiae</i>	2	2	7				5	3
<i>Megoura viciae</i>								
<i>Metopolophium dirhodum</i>		1	1				3	
<i>Metopolophium festucae</i>	15	2	34		1	6	16	9
<i>Myzus ascalonicus</i>	45	4	29	4	16	21	51	4
<i>Myzus ornatus</i>	2		6				1	1
<i>Myzus persicae</i> grp.			3			1	2	1
<i>Nasonovia ribis nigri</i>		1	2	1	1		5	
<i>Pemphigus</i> spp.								
<i>Pentatrichopus fragaefolii</i>								
<i>Phorodon humuli</i>		7						
<i>Phyllaphis fagi</i>	4	1	2	1	1		69	3
<i>Rhopalosiphum insertum</i>			28	21	6	4	158	
<i>Rhopalosiphum maidis</i>								
<i>Rhopalosiphum padi</i>			1	17	1			19
<i>Sitobion avenae</i>	5	1	6	24		1	12	
<i>Sitobion fragariae</i>	3	1	9				18	3
First aphid caught				May 23				

ROTHAMSTED INSECT SURVEY

1(c)

of aphids of economic, or other, interest reported in the Weekly Bulletin 1972

21 May to 17 June 1972

Brooms Barn	Hereford	Rothamsted Tower	Long Ashton	Silwood Park	Zeeland	Wyc, Kent	Starcross	Rosewarne	Sites	Species
7		2	1	3	8	1	2			<i>Acyrtosiphon pisum</i>
	7	3	7	9	3	1	3			<i>Aphis fabae</i> grp.
1	6	2	8	11		6	1			<i>Aphis</i> spp.
			1		1	1				<i>Amphorophora rubi</i>
1	1		7	1		4	1			<i>Aulacorthum solani</i>
256	333	756	154	446	35	205	27	4		<i>Brachycaudus helichrysi</i>
								1		<i>Brevicoryne brassicae</i>
119	180	111	98	102	183	62	11	2		<i>Cavariella aegopodii</i>
			1	2						<i>Cinara</i> spp.
14	16	6	27	19	7	7	14	4		<i>Drepanosiphum platanoidis</i>
2					2					<i>Dysaphis plantaginea</i>
10	19	30	12	21		32	10			<i>Elatobium abietinum</i>
1	4	3	16	16	11	12				<i>Eriosoma ulmi</i>
			2	3	4	1				<i>Hyalopterus pruni</i>
1	12	10	10	8	1	7				<i>Hyperomyzus lactucae</i>
1	3	1	2	9		1	1			<i>Macrosiphum euphorbiae</i>
										<i>Megoura viciae</i>
		1	6	3		5	5			<i>Metopolophium dirhodum</i>
74	7	53	6	13	6	9		8		<i>Metopolophium festucae</i>
13	6	24	10	28	13	8	6	1		<i>Myzus ascalonicus</i>
			3	2						<i>Myzus ornatus</i>
3	1	3	6	4			1			<i>Myzus persicae</i> grp.
2	1	5	8	9	1		4	1		<i>Nasonovia ribis nigri</i>
										<i>Pemphigus</i> spp.
22	192	12	66	86	13	160	1			<i>Pentatrachopus fragaefolii</i>
						1				<i>Phorodon humuli</i>
3	90	33	15	23	1	18	3	2		<i>Phyllaphis fagi</i>
										<i>Rhopalosiphum insertum</i>
										<i>Rhopalosiphum maidis</i>
15		1	2	2	1	2	2	2		<i>Rhopalosiphum padi</i>
22	12	14	15	50	2	22	12	2		<i>Sitobion avenae</i>
2	50	8	44	44	2	12	8	3		<i>Sitobion fragariae</i>
										First aphid caught

ROTHAMSTED REPORT FOR 1972, PART 2

TABLE

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

Species	Sites							
	Elgin	Dundee	Edinburgh	Copenhagen	Newcastle	High Mowthorpe	Shardlow	Aberystwyth
<i>Acyrtosiphon pisum</i>	3		5	13	3	3	2	4
<i>Aphis fabae</i> grp.		1	1	2	1	3	33	7
<i>Aphis</i> spp.	6		2	20	2	6	176	11
<i>Amphorophora rubi</i>						1	3	4
<i>Aulacorthum solani</i>	2			4			14	4
<i>Brachycaudus helichrysi</i>	17	19	32	38	45	165	510	98
<i>Brevicoryne brassicae</i>							3	3
<i>Cavariella aegopodii</i>	12	5	23	54	36	364	1350	131
<i>Cinara</i> spp.		1		11			4	3
<i>Drepanosiphum platanoidis</i>	34	44	79	5	134	172	189	11
<i>Dysaphis plantaginea</i>				1			8	1
<i>Elatobium abietinum</i>	5	8	7		13	1		4
<i>Eriosoma ulmi</i>	12	119	63	201	17	38	178	7
<i>Hyalopterus pruni</i>	3	13	3	68	1	104	304	22
<i>Hyperomyzus lactucae</i>		58	4	13	2	2	6	2
<i>Macrosiphum euphorbiae</i>	2	26	5	4	1	1	9	5
<i>Megoura viciae</i>					1			1
<i>Metopolophium dirhodum</i>	3	20	5	67	3	16	41	25
<i>Metopolophium festucae</i>	5	3	10	1	2	54	10	12
<i>Myzus ascalonicus</i>	9	2	3		7	16	8	5
<i>Myzus ornatus</i>	1		2				2	1
<i>Myzus persicae</i> grp.	2	2	3	4			10	6
<i>Nasonovia ribis nigri</i>		2		3	1	1	7	2
<i>Pemphigus</i> spp.			2	15		3	29	2
<i>Pentatrichopus fragaefolii</i>				1			1	
<i>Phorodon humuli</i>	1			1		23	494	200
<i>Phyllaphis fagi</i>	1	2	4	3	5	6	11	
<i>Rhopalosiphum insertum</i>		1	1	38	1	2	73	1
<i>Rhopalosiphum maidis</i>				4	1			
<i>Rhopalosiphum padi</i>	6	2	4	872		2	17	11
<i>Sitobion avenae</i>	2	4	3	379	1	8	93	52
<i>Sitobion fragariae</i>	4	3	4		4	2	31	20

ROTHAMSTED INSECT SURVEY

1(d)

of aphids of economic, or other, interest reported in the Weekly Bulletin 1972
18 June to 15 July 1972

Brooms Barn	Hereford	Rothamsted Tower	Long Ashton	Silwood Park	Zeeland	Wye, Kent	Starcross	Rosewarne	Sites	Species
19	13	7	4	8	26	3	7	2		<i>Acyrtosiphon pisum</i>
11	52	29	26	100	77	8	13	1		<i>Aphis fabae</i> grp.
9	25	48	29	91	2	23	15	5		<i>Aphis</i> spp.
1	8	2	4	2	2	1				<i>Amphorophora rubi</i>
	8		14	7	1	5	7	5		<i>Aulacorthum solani</i>
409	351	492	44	140	228	104	33	5		<i>Brachycaudus helichrysi</i>
48	1	12		11	3	1	4			<i>Brevicoryne brassicae</i>
161	405	190	80	136	814	117	10	12		<i>Cavariella aegopodii</i>
5	4	1		1	8	3		3		<i>Cinara</i> spp.
29	34	10	22	7		13	11	21		<i>Drepanosiphum platanoidis</i>
7	3	7	1	3	13	5		1		<i>Dysaphis plantaginea</i>
	11		1				2			<i>Elatobium abietinum</i>
20	88	29	19	12	11	43	3	1		<i>Eriosoma ulmi</i>
61	73	57	50	33	140	104	26	8		<i>Hyalopterus pruni</i>
6	16	10	4	20	9	15	6	1		<i>Hyperomyzus lactucae</i>
9	8	7	3	30	4	8	12			<i>Macrosiphum euphorbiae</i>
	27		5	4		1		2		<i>Megoura viciae</i>
562	30	337	24	88	485	35	553	27		<i>Metopolophium dirhodum</i>
247	21	96	2	21	63	5	10	2		<i>Metopolophium festucae</i>
3	2	7		7	8	3	1	2		<i>Myzus ascalonicus</i>
	1	1	1	3	6	3	1			<i>Myzus ornatus</i>
46	1	26	4	17	40	5	2	1		<i>Myzus persicae</i> grp.
	5	7	7	8	2	4	6			<i>Nasonovia ribis nigri</i>
8	19	13	16	43	94	6	5	2		<i>Pemphigus</i> spp.
		1								<i>Pentatrachopus fragaefolii</i>
120	579	159	74	131	94	301	4			<i>Phorodon humuli</i>
2	4	1	4	6		30	1			<i>Phyllaphis fagi</i>
9	30	46	8	18	18	10	5			<i>Rhopalosiphum insertum</i>
1										<i>Rhopalosiphum maidis</i>
25	4	21	13	121	46	63	31	6		<i>Rhopalosiphum padi</i>
517	107	312	134	403	144	151	178	26		<i>Sitobion avenae</i>
15	75	26	21	79	3	9	22	10		<i>Sitobion fragariae</i>

ROTHAMSTED REPORT FOR 1972, PART 2

TABLE

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

Species	Sites							
	Elgin	Dundee	Edinburgh	Copenhagen	Newcastle	High Mowthorpe	Shardlow	Aberystwyth
<i>Acyrtosiphon pisum</i>	5	29	1	18	4	11	19	2
<i>Aphis fabae</i> grp.	6	7	12	27	18	144	1769	62
<i>Aphis</i> spp.	9	19	13	60	22	38	412	8
<i>Amphorophora rubi</i>		2				1	2	2
<i>Aulacorthum solani</i>	3	4	1				4	3
<i>Brachycaudus helichrysi</i>	14	82	33	191	33	46	235	93
<i>Brevicoryne brassicae</i>				9		1	2	
<i>Cavariella aegopodii</i>	17	13	24	19	18	381	443	38
<i>Cinara</i> spp.	4		1	3	3		8	2
<i>Drepanosiphum platanoidis</i>	5	10	24	3	53	101	262	20
<i>Dysaphis plantaginea</i>				1			6	2
<i>Elatobium abietinum</i>					1			
<i>Eriosoma ulmi</i>	2	39	15	8	2	11	27	
<i>Hyalopterus pruni</i>	2	134	18	853	13	143	1069	44
<i>Hyperomyzus lactucae</i>	1	14	14	3	12	6	32	6
<i>Macrosiphum euphorbiae</i>	15	200	35	4	2	3	8	2
<i>Megoura viciae</i>			1		4	1	2	1
<i>Metopolophium dirhodum</i>	27	1411	120	104	57	229	188	102
<i>Metopolophium festucae</i>	6	32	5	2	10	112	3	
<i>Myzus ascalonicus</i>	1	2			1	3		1
<i>Myzus ornatus</i>	1	1	4					
<i>Myzus persicae</i> grp.	18	40	15	38	3		12	4
<i>Nasonovia ribis nigri</i>	6	3	6				17	6
<i>Pemphigus</i> spp.	9	10	27	37	6	3	89	15
<i>Pentatrichopus fragaefolii</i>				1				
<i>Phorodon humuli</i>		2	5	12	2	9	145	130
<i>Phyllaphis fagi</i>		1			1	3	2	6
<i>Rhopalosiphum insertum</i>	5	35	57	431	11	29	404	6
<i>Rhopalosiphum maidis</i>		1		3		1	3	3
<i>Rhopalosiphum padi</i>	27	181	189	7471	12	28	24	22
<i>Sitobion avenae</i>	66	534	78	1030	19	105	330	163
<i>Sitobion fragariae</i>	9	50	39	2	23	69	73	10

ROTHAMSTED INSECT SURVEY

1(e)

of aphids of economic, or other, interest reported in the Weekly Bulletin 1972
16 July to 12 August 1972

Brooms Barn	Hereford	Rothamsted Tower	Long Ashton	Silwood Park	Zeeland	Wye, Kent	Starcross	Rosewarne	Sites	Species
30	4	32	4	4	8	14	9	1		<i>Acyrtosiphon pisum</i>
170	1177	427	321	2685	324	252	70	5		<i>Aphis fabae</i> grp.
29	56	54	132	372	12	34	23	7		<i>Aphis</i> spp.
6			1		1			1		<i>Amphorophora rubi</i>
4	3				2	2	1	4		<i>Aulacorthum solani</i>
134	172	97	106	51	52	8	31	9		<i>Brachycaudus helichrysi</i>
131	2	21	4	39	7	44	2	1		<i>Brevicoryne brassicae</i>
41	114	21	91	39	109	8	24	6		<i>Cavariella aegopodii</i>
16	1		1	2	1		1			<i>Cinara</i> spp.
11	11		14	3	6	3	10	28		<i>Drepanosiphum platanoidis</i>
2	1		4			2				<i>Dysaphis plantaginea</i>
										<i>Elatobium abietinum</i>
2	15		2	2	17	12	1			<i>Eriosoma ulmi</i>
260	426	246	475	457	399	577	226	24		<i>Hyalopterus pruni</i>
20	17	16	22	20	10		18	2		<i>Hyperomyzus lactucae</i>
12	7	22	6	36	30	6	35	1		<i>Macrosiphum euphorbiae</i>
			1	7				2		<i>Megoura viciae</i>
548	71	374	56	182	490	14	530	72		<i>Metopolophium dirhodum</i>
18	7	16	4	20	7	4	2	9		<i>Metopolophium festucae</i>
	1		1					1		<i>Myzus ascalonicus</i>
		2		2						<i>Myzus ornatus</i>
120	3	30	7	20	856	15	5			<i>Myzus persicae</i> grp.
7	1	13	4	4	2		9	5		<i>Nasonovia ribis nigri</i>
26	34	7	47	26	111	14	14	7		<i>Pemphigus</i> spp.
			1							<i>Pentatrichopus fragaefolii</i>
26	350	4	138	37	41	50	27	3		<i>Phorodon humuli</i>
		1	4				1			<i>Phyllaphis fagi</i>
91	267	160	228	85	250	123	36	14		<i>Rhopalosiphum insertum</i>
			2		8	2	1	6		<i>Rhopalosiphum maidis</i>
185	19	115	89	209	804	310	390	43		<i>Rhopalosiphum padi</i>
1265	454	878	624	1660	793	1074	800	388		<i>Sitobion avenae</i>
12	211	92	70	396	4	71	49	8		<i>Sitobion fragariae</i>

ROTHAMSTED REPORT FOR 1972, PART 2

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

Species	Sites							
	Elgin	Dundee	Edinburgh	Copenhagen	Newcastle	High Mowthorpe	Shardlow	Aberystwyth
<i>Acyrtosiphon pisum</i>	2	21	1		8	2		1
<i>Aphis fabae</i> grp.	6	146	121	7	302	89	624	241
<i>Aphis</i> spp.		35	14	4	33	20	48	16
<i>Amphorophora rubi</i>	1	10						
<i>Aulacorthum solani</i>	1	7						
<i>Brachycaudus helichrysi</i>	31	65	111	15	35	88	130	56
<i>Brevicoryne brassicae</i>	6	1		17	1	1	2	
<i>Cavariella aegopodii</i>	15	26	5	1	4	5	5	3
<i>Cinara</i> spp.		7	3	1	1			3
<i>Drepanosiphum platanoidis</i>	5	153	92	8	318	224	110	37
<i>Dysaphis plantaginea</i>					1			1
<i>Elatobium abietinum</i>								
<i>Eriosoma ulmi</i>		6	1				2	
<i>Hyalopterus pruni</i>	3	1344	21	128	13	35	189	31
<i>Hyperomyzus lactucae</i>		4	3		2	2		1
<i>Macrosiphum euphorbiae</i>	33	171	16		20	4	2	
<i>Megoura viciae</i>					3			
<i>Metopolophium dirhodum</i>	11	136	8		73	3		2
<i>Metopolophium festucae</i>		4	1		6			
<i>Myzus ascalonicus</i>								
<i>Myzus ornatus</i>		1	2		1			
<i>Myzus persicae</i> grp.	62	135	52	1	40	1	3	1
<i>Nasonovia ribis nigri</i>	29	1						8
<i>Pemphigus</i> spp.	29	15	46	25	13	12	54	206
<i>Pentatrichopus fragaefolii</i>		2			1			
<i>Phorodon humuli</i>		1					4	4
<i>Phyllaphis fagi</i>		3	3		2	3	2	
<i>Rhopalosiphum insertum</i>	26	140	268	58	94	177	301	34
<i>Rhopalosiphum maidis</i>				9				1
<i>Rhopalosiphum padi</i>	134	496	242	374	408	44	87	54
<i>Sitobion avenae</i>	87	1328	104	21	46	59	46	53
<i>Sitobion fragariae</i>	5	92	61		82	69	15	10

ROTHAMSTED INSECT SURVEY

1(f)

of aphids of economic, or other, interest reported in the Weekly Bulletin 1972
13 August to 9 September 1972

Brooms Barn	Hereford	Rothamsted Tower	Long Ashton	Silwood Park	Zeeland	Wye, Kent	Starcross	Rosewarne	Sites
		2	1	1	1		1		Species
40	79	64	15	46	21	26	21	33	<i>Acyrtosiphon pisum</i>
7	13	15	11	24		19	4	5	<i>Aphis fabae</i> grp.
									<i>Aphis</i> spp.
									<i>Amphorophora rubi</i>
									<i>Aulacorthum solani</i>
467	78	75	37	80	6	76	15	12	<i>Brachycaudus helichrysi</i>
8	6	8	3	7		2	1		<i>Brevicoryne brassicae</i>
4				3	2	1	1	3	<i>Cavariella aegopodii</i>
	2		1			1			<i>Cinara</i> spp.
40	14	25	34	34	1	18	7	24	<i>Drepanosiphum platanoidis</i>
						1			<i>Dysaphis plantaginea</i>
									<i>Elatobium abietinum</i>
1		1	1	2					<i>Eriosoma ulmi</i>
37	182	116	306	120	433	143	279	123	<i>Hyalopterus pruni</i>
		1		1	3			1	<i>Hyperomyzus lactucae</i>
			1	1		1	2		<i>Macrosiphum euphorbiae</i>
						4			<i>Megoura viciae</i>
1					1		2		<i>Metopolophium dirhodum</i>
	1					1			<i>Metopolophium festucae</i>
		1							<i>Myzus ascalonicus</i>
5	1		2		4	2	8	1	<i>Myzus ornatus</i>
1			1		1		1	1	<i>Myzus persicae</i> grp.
23	18	8	16	25	78	5	12	32	<i>Nasonovia ribis nigri</i>
									<i>Pemphigus</i> spp.
1	16		2			7	2	1	<i>Pentatrachopus fragaefolii</i>
								1	<i>Phorodon humuli</i>
								1	<i>Phyllaphis fagi</i>
132	324	212	190	88	124	219	283	102	<i>Rhopalosiphum insertum</i>
		1		1			3	2	<i>Rhopalosiphum maidis</i>
90	21	89	60	186	415	636	585	220	<i>Rhopalosiphum padi</i>
33	45	50	36	57	4	31	39	55	<i>Sitobion avenae</i>
1	1	4	2	5	4	12	5	13	<i>Sitobion fragariae</i>

ROTHAMSTED REPORT FOR 1972, PART 2

TABLE

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

Species	Sites							
	Elgin	Dundee	Edinburgh	Copenhagen	Newcastle	High Mowthorpe	Shardlow	Aberystwyth
<i>Acyrtosiphon pisum</i>		2		1			1	1
<i>Aphis fabae</i> grp.	9	85	57	3	590	252	271	577
<i>Aphis</i> spp.		24	59	2	80	37	72	34
<i>Amphorophora rubi</i>								
<i>Aulacorthum solani</i>	1							2
<i>Brachycaudus helichrysi</i>	55	54	157	42	117	276	280	118
<i>Brevicoryne brassicae</i>	48		5	31	19	14	23	2
<i>Cavariella aegopodii</i>	146	5	1	3	12	6	3	3
<i>Cinara</i> spp.		6	1			1		1
<i>Drepanosiphum platanoidis</i>	195	1581	578	18	376	120	896	182
<i>Dysaphis plantaginea</i>			2		2	2	15	13
<i>Elatobium abietinum</i>								
<i>Eriosoma ulmi</i>	2	24	13	1	5		2	9
<i>Hyalopterus pruni</i>	42	5773	14	115	78	29	66	16
<i>Hyperomyzus lactucae</i>	2	5	22	2	9	4	19	6
<i>Macrosiphum euphorbiae</i>	6	13	2		8	98	41	
<i>Megoura viciae</i>								
<i>Metopolophium dirhodum</i>	60	17	14		9		2	7
<i>Metopolophium festucae</i>		1			3			2
<i>Myzus ascalonicus</i>								
<i>Myzus ornatus</i>	2	1			2			
<i>Myzus persicae</i> grp.	86	118	56		66	10	17	12
<i>Nasonovia ribis nigri</i>	15	1	3			3	2	62
<i>Pemphigus</i> spp.	470	210	842	44	309	199	317	1388
<i>Pentatrichopus fragaefolii</i>		1						
<i>Phorodon humuli</i>		2					1	9
<i>Phyllaphis fagi</i>		84	91		20	7	21	4
<i>Rhopalosiphum insertum</i>	1077	1181	1643	73	3636	1212	1454	1609
<i>Rhopalosiphum maidis</i>		2			2			4
<i>Rhopalosiphum padi</i>	1411	1434	1123	197	10235	1027	1680	2587
<i>Sitobion avenae</i>	13	28	15	3	11	13	22	25
<i>Sitobion fragariae</i>	30	18	18		44	5	21	26

ROTHAMSTED INSECT SURVEY

1(g)

of aphids of economic, or other, interest reported in the Weekly Bulletin 1972

10 September to 7 October 1972

Brooms Barn	Hereford	Rothamsted Tower	Long Ashton	Silwood Park	Zeeland	Wye, Kent	Starcross	Rosewarne	Sites
3	4	2	3				2		Species
26	57	28	33	27	1632	44	30	40	<i>Acyrtosiphon pisum</i>
2	16	4	29	32	1	10	20	21	<i>Aphis fabae</i> grp.
									<i>Aphis</i> spp.
	1				1		2	2	<i>Amphorophora rubi</i>
257	160	192	57	109	68	491	67	22	<i>Aulacorthum solani</i>
2	28	4	17	14	8	6	24	4	<i>Brachycaudus helichrysi</i>
			6		15	5	6	4	<i>Brevicoryne brassicae</i>
			2	2					<i>Cavariella aegopodii</i>
246	119	261	169	772	22	269	90	101	<i>Cinara</i> spp.
5	4	6	2	16	4	11	2	1	<i>Drepanosiphum platanoidis</i>
6		1	4			10			<i>Dysaphis plantaginea</i>
11	6	9	7	16	731	60	31	9	<i>Elatobium abietinum</i>
4	4	4	10	1	19	1	16	2	<i>Eriosoma ulmi</i>
1				3	10	3	2		<i>Hyalopterus pruni</i>
			2		5	2	2	3	<i>Hyperomyzus lactucae</i>
									<i>Macrosiphum euphorbiae</i>
									<i>Megoura viciae</i>
									<i>Metopolophium dirhodum</i>
									<i>Metopolophium festucae</i>
		1	2						<i>Myzus ascalonicus</i>
2	19	4	41	5	88	26	68	3	<i>Myzus ornatus</i>
3		4	2	6	9		2	5	<i>Myzus persicae</i> grp.
53	75	36	229	87	250	57	176	30	<i>Nasonovia ribis nigri</i>
									<i>Pemphigus</i> spp.
									<i>Pentatrachopus fragaefolii</i>
	678		1	8	6	110	6		<i>Phorodon humuli</i>
4		6		4		4			<i>Phyllaphis fagi</i>
185	720	146	296	45	2253	516	435	341	<i>Rhopalosiphum insertum</i>
						3	4	2	<i>Rhopalosiphum maidis</i>
583	528	394	1625	539	3860	1312	2485	572	<i>Rhopalosiphum padi</i>
1	16	6	17	9	2	22	19	9	<i>Sitobion avenae</i>
1			1	2	1		7	4	<i>Sitobion fragariae</i>

ROTHAMSTED REPORT FOR 1972, PART 2

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

Species	Sites							
	Elgin	Dundee	Edinburgh	Copenhagen	Newcastle	High Mowthorpe	Shardlow	Aberystwyth
<i>Acyrtosiphon pisum</i>								
<i>Aphis fabae</i> grp.	4	22	6		42	28	25	102
<i>Aphis</i> spp.		14	28		38	11	19	6
<i>Amphorophora rubi</i>								
<i>Aulacorthum solani</i>							1	
<i>Brachycaudus helichrysi</i>	12	11	20	31	12	48	27	17
<i>Brevicoryne brassicae</i>	47	8	6	5	10	6	12	7
<i>Cavariella aegopodii</i>	91			2	5	9	4	
<i>Cinara</i> spp.	3	5	6					2
<i>Drepanosiphum platanoidis</i>	190	525	226	7	220	39	294	100
<i>Dysaphis plantaginea</i>				2	2	1	8	2
<i>Elatobium abietinum</i>								
<i>Eriosoma ulmi</i>	2	91	10	4	3	1	8	5
<i>Hyalopterus pruni</i>	18	4438	42		25	25	14	
<i>Hyperomyzus lactucae</i>		2	5		6	6	23	5
<i>Macrosiphum euphorbiae</i>	2					2	4	4
<i>Megoura viciae</i>								
<i>Metopolophium dirhodum</i>	51	29	31		44	13	22	39
<i>Metopolophium festucae</i>		4				2	5	1
<i>Myzus ascalonicus</i>		4	4		6	9	9	1
<i>Myzus ornatus</i>	1		1					
<i>Myzus persicae</i> grp.	110	158	132	4	39	15	42	39
<i>Nasonovia ribis nigri</i>	6		4			4	3	20
<i>Pemphigus</i> spp.	133	295	186	29	104	15	91	185
<i>Pentatrichopus fragaefolii</i>		1						
<i>Phorodon humuli</i>								9
<i>Phyllaphis fagi</i>	2	343	62		61	136	37	
<i>Rhopalosiphum insertum</i>	809	2619	3078	103	2739	1760	1007	2083
<i>Rhopalosiphum maidis</i>		2	1		6	2		3
<i>Rhopalosiphum padi</i>	1280	2454	1727	178	4703	655	1345	818
<i>Sitobion avenae</i>	7	4	4		4	4	1	20
<i>Sitobion fragariae</i>	36	16	38		86	25	99	83

ROTHAMSTED INSECT SURVEY

1(h)

of aphids of economic, or other, interest reported in the weekly Bulletin 1972

8 October to 4 November 1972

	Brooms Barn	Hereford	Rothamsted Tower	Long Ashton	Silwood Park	Zeeland	Wye, Kent	Starcross	Rosewarne	Sites
			2			2	2			Species
11	7	10	11	4	3139	29	13	18		<i>Acyrtosiphon pisum</i>
6	1	17	7	23	3	11	13	23		<i>Aphis fabae</i> grp.
5										<i>Aphis</i> spp.
						8	1	3	1	<i>Amphorophora rubi</i>
35	26	25	12	36	32	18	20	8		<i>Aulacorthum solani</i>
1	3	1	9	9	2	3	28	18		<i>Brachycaudus helichrysi</i>
5	5	5	10	3	34	6	9	4		<i>Brevicoryne brassicae</i>
		1		5		1				<i>Cavariella aegopodii</i>
93	43	173	392	441	289	129	124	60		<i>Cinara</i> spp.
1	4	5	7	16	1		5			<i>Drepanosiphum platanoidis</i>
										<i>Dysaphis plantaginea</i>
8	12	2	28	2	6	19				<i>Elatobium abietinum</i>
6		2	12	37	392	18	8			<i>Eriosoma ulmi</i>
1	6	4	16	4	49	11	10	3		<i>Hyalopterus pruni</i>
				3	4	4				<i>Hyperomyzus lactucae</i>
										<i>Macrosiphum euphorbiae</i>
										<i>Megoura viciae</i>
	10	3	15	1	32	17	10			<i>Metopolophium dirhodum</i>
			2	2		3	1	5		<i>Metopolophium festucae</i>
2	12	4	11	6	6	18		5		<i>Myzus ascalonicus</i>
			3	1		2	1			<i>Myzus ornatus</i>
19	16	13	48	9	695	45	40	15		<i>Myzus persicae</i> grp.
		3	2	3	18	2	2	6		<i>Nasonovia ribis nigri</i>
102	26	55	925	70	327	108	220	11		<i>Pemphigus</i> spp.
								1		<i>Pentatrachopus fragaefolii</i>
	76	1	2	5		10				<i>Phorodon humuli</i>
15	3	9	11	10		5	2			<i>Phyllaphis fagi</i>
183	639	437	1077	380	3138	981	635	415		<i>Rhopalosiphum insertum</i>
1	1		2		1	3	4			<i>Rhopalosiphum maidis</i>
567	501	410	2448	692	7393	2115	1340	336		<i>Rhopalosiphum padi</i>
2	9	4	26	5	20	18	9	5		<i>Sitobion avenae</i>
3	38	16	72	34	85	70	65	13		<i>Sitobion fragariae</i>

ROTHAMSTED REPORT FOR 1972, PART 2

TABLE

The Rothamsted Insect Survey—Light Traps: annual records

Species	Year	57 Ardross	58 Newton, Elgin	50 Grula, Skye	49 Fort Augustus	48 Kindrogan	29 Rannoch	47 Dundee	140 Vane Farm	97 Rowardennan	98 Auchincruive	127 Kielder	39 Chester le Street	108 Egremont	133 Leighton Moss	72 Castletown, I.O.M.	45 Malham Tarn	68 Harrogate	101 Keighley
<i>Gortyna micacea</i> Rosy Rustic	1970	148	94	—	46	245	98	6	122	3	7	43	17	24	96	26	1	22	118
	1971	66	75	90	16	596	49	9	147	3	17	37	3	33	93	43	3	10	25
<i>Bupalus piniaria</i> Bordered White	1970	0	1	—	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1971	0	0	0	2	0	0	0	0	0	0	3	0	0	0	0	0	0	0
<i>Panolis flammea</i> Pine Beauty	1970	4	1	—	7	0	12	0	0	0	0	1	0	0	0	0	0	0	0
	1971	0	1	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
<i>Cerapteryx graminis</i> Antler Moth	1970	9	19	—	43	122	550	122	136	64	19	143	1	1	14	4	280	1	2
	1971	1	29	86	8	56	103	4	75	53	24	69	1	1	0	1	15	0	0
<i>Erannis aurantiaria</i> Scarce Umber	1970	25	5	—	21	9	12	1	3	16	0	16	0	0	3	0	9	0	0
	1971	12	1	0	6	29	17	1	1	19	0	12	0	0	5	0	1	0	0
<i>Operophtera fagata</i> Northern Winter Moth	1970	4	4	—	0	8	30	0	153	16	0	19	0	0	0	0	3	0	0
	1971	1	1	1	0	6	55	0	29	43	0	28	0	0	34	0	7	0	0
<i>Apamea sordens</i> Rustic Shoulder-knot	1970	0	3	—	2	0	0	2	0	0	1	0	5	0	1	3	2	2	2
	1971	0	3	0	0	0	0	9	1	0	0	0	0	11	0	1	3	0	0
<i>Gortyna flavago</i> Frosted Orange	1970	0	5	—	0	1	0	3	4	0	0	1	0	0	2	0	0	1	0
	1971	0	10	0	0	2	0	1	3	0	0	1	0	1	0	0	0	1	0
<i>Mamestra brassicae</i> Cabbage Moth	1970	0	0	—	0	0	0	7	0	0	0	1	11	1	0	0	0	3	0
	1971	0	0	0	0	0	0	15	0	0	0	1	3	8	0	0	1	0	0
<i>Noctua pronuba</i> Large Yellow Underwing	1970	5	48	—	9	11	0	24	29	0	3	4	14	3	9	18	34	14	13
	1971	3	22	7	1	10	1	34	40	1	5	9	3	10	7	27	5	17	10
<i>Diataraxia oleracea</i> Bright-line Brown-eye	1970	2	8	—	4	0	0	0	10	0	2	0	5	8	3	17	0	2	1
	1971	2	3	0	1	0	0	5	12	0	6	0	3	3	0	5	0	0	1
<i>Euxoa nigricans</i> Garden Dart	1970	0	2	—	0	0	0	0	1	0	0	0	5	0	0	0	0	0	0
	1971	1	0	0	0	6	0	3	0	0	0	0	1	0	0	0	0	0	0
<i>Apamea secalis</i> Common Rustic	1970	7	103	—	0	0	1	8	83	5	50	1	7	3	8	68	1	9	3
	1971	11	81	56	1	0	0	33	33	0	23	24	2	69	5	25	3	10	21
<i>Melanchra persicariae</i> Dot Moth	1970	0	0	—	0	0	0	0	0	0	0	1	0	0	1	0	0	3	0
	1971	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
<i>Operophtera brumata</i> Winter Moth	1970	96	6	—	27	29	7	1	66	79	0	59	0	0	21	3	21	10	0
	1971	66	5	0	12	18	13	0	14	63	0	22	0	0	27	2	2	10	0

ROTHAMSTED INSECT SURVEY

2(a)

of moths of economic, or other, interest for 1970 and 1971

124 Preston		131 Spurn Head		85 Prestwich		35 Bangor		77 Maentwrog		79 Shardlow		160 Thorpe in the Glebe		168 Sutton Bonnington		109 Holme Fen		138 Market Harborough		126 Aberystwyth		80 Shirley (Olton)		94 Monks Wood		112 Shirley (Jacey)		129 Wellingsborough		88 Broom's Barn		148 Cleeve Prior		125 Sandy		Year	Species
64	32	—	1	19	38	3	—	23	6	23	3	167	4	3	3	17	3	1970	<i>Gortyna micacea</i>																		
91	15	9	0	3	36	1	17	23	0	41	7	97	3	5	2	14	0	1971	Rosy Rustic																		
0	0	—	3	0	0	0	—	0	0	1	0	0	0	0	0	0	13	1970	<i>Bupalus piniaria</i>																		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	1971	Bordered White																		
0	0	—	0	0	0	0	—	0	0	0	0	0	0	0	0	0	28	1970	<i>Panolis flammea</i>																		
0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	7	1971	Pine Beauty																		
3	48	—	3	15	26	0	—	8	0	8	0	0	0	0	0	0	13	1970	<i>Cerapteryx graminis</i>																		
5	71	3	0	50	5	0	0	3	0	14	0	0	0	0	0	2	18	1971	Antler Moth																		
0	0	—	1	62	2	0	—	1	0	0	0	0	0	0	0	0	8	1970	<i>Erannis aurantiaria</i>																		
0	0	0	0	12	0	0	0	0	0	2	0	0	0	0	0	2	2	1971	Scarce Umber																		
0	0	—	0	0	0	0	—	0	0	0	0	0	0	0	0	0	0	1970	<i>Operophtera fagata</i>																		
0	0	0	0	31	0	0	0	3	0	0	0	0	0	0	0	0	4	1971	Northern Winter Moth																		
0	3	—	0	0	16	0	—	1	2	3	1	0	0	1	0	4	1	1970	<i>Apamea sordens</i>																		
0	11	2	0	0	0	0	0	1	0	0	0	4	0	4	4	2	1	1971	Rustic Shoulder-knot																		
12	4	—	0	0	1	3	—	2	0	1	1	3	0	0	0	4	0	1970	<i>Gortyna flavago</i>																		
23	1	0	1	0	6	0	1	3	0	0	0	0	0	0	0	0	8	1971	Frosted Orange																		
0	2	—	1	2	3	1	—	4	9	1	1	0	15	8	2	0	3	1970	<i>Mamestra brassicae</i>																		
1	0	9	3	1	3	0	0	3	1	0	0	1	1	2	0	3	4	1971	Cabbage Moth																		
10	20	—	14	1	10	21	—	3	54	18	12	11	10	4	1	8	7	1970	<i>Noctua pronuba</i>																		
11	23	4	11	9	10	10	13	9	23	5	12	8	18	8	3	9	2	1971	Large Yellow Underwing																		
0	38	—	2	1	17	1	—	14	10	13	4	3	18	12	2	15	13	1970	<i>Diataraxia oleracea</i>																		
0	28	2	2	0	10	5	27	15	11	1	3	4	7	6	2	17	27	1971	Bright-line Brown-eye																		
0	0	—	0	0	0	0	—	1	1	0	0	0	0	2	0	0	0	1970	<i>Euxoa nigricans</i>																		
0	0	1	0	0	0	0	1	9	0	0	0	0	0	4	0	0	4	1971	Garden Dart																		
0	9	—	13	6	55	5	—	3	1	55	0	1	0	24	8	93	12	1970	<i>Apamea secalis</i>																		
0	7	4	2	1	22	0	29	4	28	29	1	13	7	14	3	12	8	1971	Common Rustic																		
0	2	—	0	0	8	4	—	4	5	6	0	2	0	1	3	7	1	1970	<i>Melanchra persicariae</i>																		
0	0	0	0	0	4	1	0	3	1	2	0	2	1	1	8	6	0	1971	Dot Moth																		
0	6	—	0	30	7	9	—	16	7	0	0	0	0	9	4	26	18	1970	<i>Operophtera brumata</i>																		
0	13	0	0	41	18	5	9	9	2	15	1	0	0	7	12	5	29	1971	Winter Moth																		

ROTHAMSTED REPORT FOR 1972, PART 2

TABLE

The Rothamsted Insect Survey—Light Traps: annual records

Species	Year	158 Ipswich	139 The Gwenffrwd	145 Shenley Brook End	170 Howe Park	144 Bletchley Park	200 Thame	1 Rothamsted (Barnfield)	34 Rothamsted (Allotments)	22 Rothamsted (Geescroft)	120 Wickham Bishops	193 Rye Meads	180 Hurley	90 Isleworth	16 Mortimer	130 Bath	69 Wisley	178 East Malling	179 Pirbright
<i>Gortyna micacea</i>	1970	4	59	42	—	7	—	5	43	14	144	—	—	1	2	2	26	—	—
Rosy Rustic	1971	1	31	19	7	4	2	6	15	13	71	20	68	1	0	1	2	15	4
<i>Bupalus piniaria</i>	1970	0	0	0	—	0	—	0	0	0	0	—	—	0	1	2	0	—	—
Bordered White	1971	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Panolis flammea</i>	1970	0	0	0	—	0	—	0	0	0	0	—	—	0	1	0	0	—	—
Pine Beauty	1971	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
<i>Cerapteryx graminis</i>	1970	0	206	1	—	0	—	0	1	0	0	—	—	0	0	0	1	—	—
Antler Moth	1971	0	175	0	2	0	0	0	0	0	0	0	0	0	0	0	3	0	9
<i>Erannis aurantiaria</i>	1970	0	17	3	—	0	—	0	0	21	5	—	—	0	0	0	9	—	—
Scarce Umber	1971	1	4	0	28	0	0	0	0	40	1	0	7	0	11	0	10	0	0
<i>Operophtera fagata</i>	1970	0	0	0	—	0	—	1	0	5	0	—	—	0	0	0	5	—	—
Northern Winter Moth	1971	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	20	0	2
<i>Apamea sordens</i>	1970	0	0	0	—	10	—	0	2	2	4	—	—	0	0	4	8	—	—
Rustic Shoulder-knot	1971	1	0	5	2	1	0	4	5	0	2	3	1	0	1	0	0	1	1
<i>Gortyna flavago</i>	1970	0	1	1	—	0	—	0	0	1	2	—	—	0	0	0	0	—	—
Frosted Orange	1971	0	0	0	0	0	1	3	0	1	2	0	1	0	0	1	1	0	1
<i>Mamestra brassicae</i>	1970	4	0	0	—	13	—	0	0	2	7	—	—	0	1	22	0	—	—
Cabbage Moth	1971	2	2	0	0	1	2	1	0	0	0	0	0	2	0	11	0	5	1
<i>Noctua pronuba</i>	1970	2	7	9	—	9	—	8	8	131	7	—	—	0	35	29	6	—	—
Large Yellow Underwing	1971	4	3	10	83	3	5	11	2	78	5	2	5	3	12	7	7	0	17
<i>Diataraxia oleracea</i>	1970	5	13	10	—	21	—	2	16	6	13	—	—	1	4	15	4	—	—
Bright-line Brown-eye	1971	2	2	9	7	5	2	5	0	4	12	19	3	2	0	13	3	0	4
<i>Euxoa nigricans</i>	1970	0	0	0	—	0	—	2	1	0	0	—	—	0	0	1	0	—	—
Garden Dart	1971	0	0	0	16	1	0	4	1	4	0	1	0	0	1	0	0	20	0
<i>Apamea secalis</i>	1970	3	8	12	—	15	—	22	14	83	6	—	—	0	18	37	8	—	—
Common Rustic	1971	6	7	20	183	8	10	22	8	23	29	35	14	4	5	32	54	14	8
<i>Melanchnra persicariae</i>	1970	1	39	19	—	2	—	0	1	0	18	—	—	0	3	9	0	—	—
Dot Moth	1971	2	4	8	4	0	7	0	0	0	0	1	0	0	1	1	1	0	0
<i>Operophtera brumata</i>	1970	0	25	7	—	20	—	1	1	252	15	—	—	12	55	18	34	—	—
Winter Moth	1971	0	41	8	190	8	0	4	0	409	47	1	15	11	153	2	51	13	4

ROTHAMSTED INSECT SURVEY

2(b)

of moths of economic, or other, interest for 1970 and 1971

	181 Wye	46 Alice Holt	92 Nettlecombe Court	174 Tenterden	185 West Buckland	184 Dulverton	186 Great Torrington	173 Lydd	33 Dungeness	192 Ringmer	176 Brighton	78 Ringwood	163 Arne	149 Starcross	67 Slapton Ley	114 Rosewarne	191 Guernsey	146 Jersey	Year	Species
	—	22	8	—	—	—	—	—	—	—	—	3	—	2	20	3	—	15	1970	<i>Gortyna micacea</i>
	8	19	16	89	58	60	60	1	32	6	0	5	0	4	18	8	51	6	1971	Rosy Rustic
	—	3	0	—	—	—	—	—	—	—	—	0	—	0	0	0	—	0	1970	<i>Bupalus piniaria</i>
	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	1971	Bordered White
	—	0	0	—	—	—	—	—	—	—	—	0	—	0	0	0	—	0	1970	<i>Panolis flammea</i>
	1	2	0	11	0	0	1	0	0	0	0	1	4	0	0	0	0	0	1971	Pine Beauty
	—	11	0	—	—	—	—	—	—	—	—	0	—	0	0	0	—	0	1970	<i>Cerapteryx graminis</i>
	0	9	0	0	10	17	0	9	15	0	1	1	0	0	0	0	0	0	1971	Antler Moth
	—	4	0	—	—	—	—	—	—	—	—	0	—	0	0	0	—	0	1970	<i>Erannis aurantiaria</i>
	1	10	2	1	0	4	0	0	0	5	0	3	6	0	0	0	0	0	1971	Scarce Umber
	—	1	0	—	—	—	—	—	—	—	—	1	—	0	0	0	—	0	1970	<i>Operophtera fagata</i>
	4	5	1	0	0	0	0	0	0	0	0	0	82	0	0	0	0	0	1971	Northern Winter Moth
	—	2	0	—	—	—	—	—	—	—	—	1	—	0	0	0	—	0	1970	<i>Apamea sordens</i>
	0	1	1	0	0	0	0	0	4	0	1	0	0	0	0	0	1	0	1971	Rustic Shoulder-knot
	—	0	1	—	—	—	—	—	—	—	—	0	—	0	1	1	—	0	1970	<i>Gortyna flavago</i>
	0	1	4	3	46	21	24	0	6	0	0	0	0	1	1	2	2	0	1971	Frosted Orange
	—	1	1	—	—	—	—	—	—	—	—	0	—	1	4	3	—	15	1970	<i>Mamestra brassicae</i>
	0	0	0	0	1	2	2	2	0	0	0	0	1	0	3	2	30	13	1971	Cabbage Moth
	—	22	4	—	—	—	—	—	—	—	—	4	—	1	5	3	—	6	1970	<i>Noctua pronuba</i>
	12	29	6	8	14	15	4	3	4	18	6	9	2	3	3	5	5	6	1971	Large Yellow Underwing
	—	1	9	—	—	—	—	—	—	—	—	1	—	1	10	7	—	11	1970	<i>Diataraxia oleracea</i>
	4	0	1	3	17	1	17	1	12	1	0	6	2	2	17	10	144	7	1971	Bright-line Brown-eye
	—	0	0	—	—	—	—	—	—	—	—	0	—	0	0	1	—	0	1970	<i>Euxoa nigricans</i>
	2	0	1	0	1	0	0	0	0	0	1	0	0	0	0	1	0	1	1971	Garden Dart
	—	26	27	—	—	—	—	—	—	—	—	9	—	10	33	21	—	5	1970	<i>Apamea secalis</i>
	4	20	18	11	8	19	59	0	36	22	1	9	8	5	38	3	36	8	1971	Common Rustic
	—	2	2	—	—	—	—	—	—	—	—	1	—	1	28	4	—	1	1970	<i>Melanchnra persicariae</i>
	2	1	0	0	2	3	1	0	2	0	1	0	0	0	10	3	0	2	1971	Dot Moth
	—	18	1	—	—	—	—	—	—	—	—	1	—	0	0	2	—	3	1970	<i>Operophtera brumata</i>
	62	35	11	21	6	6	6	0	0	20	1	11	19	4	0	0	6	1	1971	Winter Moth

ROTHAMSTED REPORT FOR 1972, PART 2

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<i>Abraxas grossulariata</i> Magpie Moth	1970	0	0	—	0	0	0	0	0	0	0	0	0	1	2	0	0	1	0
	1971	0	0	21	0	0	0	0	0	0	0	0	0	0	0	4	0	4	0
<i>Agrotis segetum</i> Turnip Moth	1970	0	0	—	0	0	0	3	1	0	0	0	0	0	0	0	0	0	1
	1971	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0
<i>Erannis defoliaria</i> Mottled Umber	1970	4	6	—	2	11	3	1	3	36	0	1	0	0	11	2	2	0	0
	1971	13	1	2	0	10	7	1	0	106	0	3	0	0	9	1	3	1	0
<i>Phlogophora meticulosa</i> Angle Shades	1970	0	0	—	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0
	1971	0	0	4	0	0	0	0	0	0	0	3	0	6	3	4	2	0	1
<i>Alsophila aescularia</i> March Moth	1970	23	6	—	1	0	0	0	0	50	0	0	0	0	11	0	0	3	0
	1971	14	3	0	2	0	0	2	0	68	0	0	0	0	51	0	1	1	1
<i>Hepialus humuli</i> Ghost Swift	1970	0	0	—	4	1	2	0	1	0	4	0	1	0	5	0	1	2	6
	1971	2	0	4	2	0	1	1	0	0	3	1	1	0	10	0	0	0	1
<i>Hepialus lupulina</i> Common Swift	1970	1	0	—	0	0	9	0	0	0	1	0	1	1	7	0	0	45	4
	1971	0	0	0	0	0	1	0	0	1	0	0	2	0	2	0	1	31	1
<i>Agrotis ipsilon</i> Dark Sword Grass	1970	1	1	—	0	0	1	0	0	0	0	0	0	0	1	4	0	0	0
	1971	0	1	1	0	0	0	0	0	0	0	1	0	3	1	0	0	0	0
<i>Euproctis chryssorrhoea</i> Brown-tail	1970	0	0	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1971	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Agrotis exclamationis</i> Heart and Dart	1970	1	30	—	0	4	0	2	7	0	3	2	22	7	44	127	0	40	8
	1971	2	1	0	12	0	0	3	6	0	0	1	28	16	25	82	0	38	11
<i>Plusia gamma</i> Silver Y	1970	1	1	—	1	1	0	0	1	0	0	3	13	1	10	22	1	1	0
	1971	3	6	16	24	13	7	12	40	3	4	18	54	5	15	131	16	31	15
<i>Laphygma exigua</i> Small Mottled Willow	1970	0	0	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1971	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Nycterosa obstipata</i> The Gem	1970	0	0	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1971	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	1970	0	0	—	0	0	—	0	0	0	0	0	0	—	3	—	1	—	—
	1971	0	0	—	0	0	—	0	1	0	0	1	0	—	3	—	0	—	—
<i>Plutella maculipennis</i> Diamond-back Moth	1970	0	1	—	0	13	—	321	1	0	82	7	66	—	0	—	0	—	—
	1971	0	0	—	0	0	—	1	0	1	2	0	0	—	0	—	0	—	—
<i>Udea ferrugalis</i> Rusty Dot Pearl	1970	0	0	—	0	0	—	0	0	0	0	0	0	—	0	—	0	—	—
	1971	0	0	—	0	0	—	0	0	0	0	0	0	—	0	—	0	—	—

ROTHAMSTED INSECT SURVEY

2(c)

of moths of economic, or other, interest for 1970 and 1971

124 Preston	131 Spurn Head	85 Prestwich	35 Bangor	77 Maentwrog	79 Shardlow	160 Thorpe in the Glebe	168 Sutton Bonnington	109 Holme Fen	138 Market Harborough	126 Aberystwyth	80 Shirley (Olton)	94 Monks Wood	112 Shirley (Jacey)	129 Wellingborough	88 Broom's Barn	148 Cleeve Prior	125 Sandy	Year	Species
0	1	—	0	0	4	8	—	0	12	3	1	6	11	7	1	80	0	1970	<i>Abraxas grossulariata</i>
0	0	0	0	0	1	7	0	2	58	3	15	4	9	2	0	35	0	1971	Magpie Moth
0	0	—	0	0	1	8	—	9	1	0	0	1	0	0	0	2	5	1970	<i>Agrotis segetum</i>
0	0	0	0	0	0	0	13	6	0	0	0	2	0	1	4	1	3	1971	Turnip Moth
6	0	—	0	3099	0	4	—	7	7	0	6	0	0	0	0	4	31	1970	<i>Erannis defoliaria</i>
4	0	0	0	535	4	4	0	1	3	3	9	0	0	0	2	0	23	1971	Mottled Umber
0	0	—	0	0	1	2	—	18	2	2	0	1	0	1	0	1	0	1970	<i>Phlogophora meticulosa</i>
3	2	0	2	3	10	3	5	28	10	7	0	4	0	9	2	12	8	1971	Angle Shades
0	2	—	0	38	6	58	—	6	3	5	1	2	0	0	0	10	5	1970	<i>Alsophila aescularia</i>
4	0	0	0	16	5	67	1	6	7	4	0	5	1	1	3	5	9	1971	March Moth
4	1	—	0	0	1	4	—	0	1	1	1	3	0	2	0	0	0	1970	<i>Hepialus humuli</i>
6	1	0	0	0	1	3	2	0	0	1	0	5	0	0	0	1	0	1971	Ghost Swift
0	25	—	0	0	116	43	—	1	32	0	1	4	1	8	7	10	4	1970	<i>Hepialus lupulina</i>
4	77	1	0	0	68	569	23	1	63	0	1	12	0	8	9	17	0	1971	Common Swift
0	6	—	0	1	4	0	—	23	2	0	0	0	0	0	1	1	1	1970	<i>Agrotis ipsilon</i>
0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	1971	Dark Sword Grass
0	0	—	0	0	0	0	—	0	0	0	0	0	0	0	0	0	0	1970	<i>Euproctis chrysorrhoea</i>
0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1971	Brown-tail
386	48	—	44	1	216	425	—	35	435	143	35	65	68	40	24	225	72	1970	<i>Agrotis exclamationis</i>
218	14	31	28	2	268	634	509	148	447	25	35	313	19	63	87	266	72	1971	Heart and Dart
2	13	—	1	3	1	17	—	46	26	6	6	3	2	10	3	18	16	1970	<i>Plusia gamma</i>
12	38	4	8	13	31	82	31	70	106	22	62	14	27	29	10	49	21	1971	Silver Y
0	0	—	0	0	0	0	—	0	0	0	0	0	0	0	0	0	0	1970	<i>Laphygma exigua</i>
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1971	Small Mottled Willow
0	0	—	0	0	0	0	—	2	0	1	0	0	0	0	0	0	0	1970	<i>Nycterosea obstipata</i>
0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1971	The Gem
—	11	—	0	—	—	—	—	0	0	15	—	0	—	0	1	0	6	1970	<i>Nomophila noctuella</i>
—	0	0	0	—	—	—	0	1	0	1	—	0	—	0	0	0	2	1971	Rush Veneer Pearl
—	185	—	2	—	—	—	—	0	21	23	—	0	—	0	73	193	92	1970	<i>Plutella maculipennis</i>
—	1	4	0	—	—	—	0	0	1	1	—	0	—	0	5	3	9	1971	Diamond-back Moth
—	0	—	0	—	—	—	—	0	0	3	—	0	—	0	0	0	1	1970	<i>Udea ferrugalis</i>
—	0	0	0	—	—	—	0	0	0	0	—	0	—	0	0	0	0	1971	Rusty Dot Pearl

ROTHAMSTED REPORT FOR 1972, PART 2

TABLE

The Rothamsted Insect Survey—Light Traps: annual records

Species	Year	158 Ipswich	139 The Gwenffrwd	145 Shenley Brook End	170 Howe Park	144 Bletchley Park	200 Thame	1 Rothamsted (Barnfield)	34 Rothamsted (Allotments)	22 Rothamsted (Geescroft)	120 Wickham Bishops	193 Rye Meads	180 Hurley	90 Isleworth	16 Mortimer	130 Bath	69 Wisley	178 East Malling	179 Pirbright
<i>Abraxas grossulariata</i>	1970	4	0	28	—	8	—	4	0	51	55	—	—	0	51	4	0	—	—
Magpie Moth	1971	0	0	16	109	5	23	5	0	62	49	0	4	0	25	0	0	0	1
<i>Agrotis segetum</i>	1970	3	0	2	—	7	—	0	1	7	0	—	—	0	1	1	0	—	—
Turnip Moth	1971	4	0	3	4	1	0	6	1	15	9	4	1	0	1	0	0	1	0
<i>Erannis defoliaria</i>	1970	0	10	2	—	0	—	1	0	56	5	—	—	0	27	2	29	—	—
Mottled Umber	1971	0	20	0	65	0	0	0	0	72	14	0	6	0	30	5	69	0	3
<i>Phlogophora meticulosa</i>	1970	0	0	0	—	0	—	0	0	1	0	—	—	0	4	3	0	—	—
Angle Shades	1971	0	1	14	26	3	0	1	1	4	1	4	0	1	3	5	0	2	0
<i>Alsophila aescularia</i>	1970	3	2	1	—	0	—	2	0	16	15	—	—	0	3	2	12	—	—
March Moth	1971	2	11	14	72	2	3	1	0	33	35	0	23	0	9	6	26	0	2
<i>Hepialus humuli</i>	1970	0	0	1	—	0	—	0	6	2	1	—	—	0	0	0	5	—	—
Ghost Swift	1971	0	1	1	0	0	0	2	2	3	3	1	5	0	0	0	1	9	1
<i>Hepialus lupulina</i>	1970	45	0	18	—	5	—	8	19	24	90	—	—	5	14	0	4	—	—
Common Swift	1971	54	0	32	16	9	6	16	141	33	370	4	12	49	10	0	0	2	2
<i>Agrotis ipsilon</i>	1970	0	0	2	—	2	—	0	0	5	2	—	—	0	0	0	0	—	—
Dark Sword Grass	1971	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
<i>Euproctis chrysorrhoea</i>	1970	1	0	0	—	0	—	0	0	0	4	—	—	0	0	0	0	—	—
Brown-tail	1971	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
<i>Agrotis exclamationis</i>	1970	38	60	170	—	322	—	50	34	131	48	—	—	1	104	221	92	—	—
Heart and Dart	1971	114	19	328	292	48	205	118	45	107	113	61	35	1	38	20	39	13	23
<i>Plusia gamma</i>	1970	6	2	8	—	5	—	5	4	11	20	—	—	0	3	4	12	—	—
Silver Y	1971	23	10	30	25	22	22	21	3	37	55	15	3	3	22	13	76	0	4
<i>Laphygma exigua</i>	1970	0	0	0	—	0	—	0	0	0	0	—	—	0	0	0	0	—	—
Small Mottled Willow	1971	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Nycterosea obstipata</i>	1970	0	0	0	—	0	—	0	0	0	0	—	—	0	0	0	0	—	—
The Gem	1971	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Nomophila noctuella</i>	1970	0	2	0	—	0	—	1	0	1	0	—	—	1	—	—	0	—	—
Rush Veneer Pearl	1971	0	0	0	3	0	—	0	1	0	0	0	0	0	—	—	0	0	—
<i>Plutella maculipennis</i>	1970	88	10	23	—	14	—	744	798	34	58	—	—	87	—	—	1	—	—
Diamond-back Moth	1971	0	0	1	1	3	—	35	13	0	0	0	0	2	—	—	0	2	—
<i>Udea ferrugalis</i>	1970	0	0	0	—	0	—	0	0	0	0	—	—	0	—	—	0	—	—
Rusty Dot Pearl	1971	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, interest for 1970 and 1971

		181 Wye	46 Alice Holt	92 Nettlecombe Court	174 Tenterden	185 West Buckland	184 Dulverton	186 Great Torrington	173 Lydd	33 Dungeness	192 Ringmer	176 Brighton	78 Ringwood	163 Arne	149 Starcross	67 Slapton Ley	114 Rosewarne	191 Guernsey	146 Jersey	Year	Species
—	5	0	7	19	21	—	110	0	4	31	1	4	—	6	8	2	—	1	5	1970	<i>Abraxas grossulariata</i>
—	4	0	0	0	0	0	0	0	3	1	0	0	0	0	0	6	—	3	3	1970	<i>Agrotis segetum</i>
—	23	26	5	—	—	—	—	—	—	—	—	—	0	—	0	0	0	—	2	1970	<i>Erannis defoliaria</i>
—	10	1	1	—	—	—	—	—	—	—	—	—	0	—	0	0	0	—	1	1970	<i>Phlogophora meticulosa</i>
—	24	4	6	—	—	—	—	—	—	—	—	—	1	—	0	8	0	—	9	1970	<i>Alsophila aescularia</i>
—	0	1	2	—	—	—	—	—	—	—	—	—	0	—	0	4	3	—	0	1970	<i>Hepialus humuli</i>
—	39	3	2	—	—	—	—	—	—	—	—	—	1	—	2	0	1	—	0	1970	<i>Hepialus lupulina</i>
—	0	0	1	—	—	—	—	—	—	—	—	—	0	—	0	1	2	—	0	1970	<i>Agrotis ipsilon</i>
—	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1971	Dark Sword Grass
—	0	0	0	—	—	—	—	—	—	—	—	—	0	—	0	0	0	—	0	1970	<i>Euproctis chrysorrhoea</i>
—	438	104	180	—	—	—	—	—	—	—	—	—	51	—	49	273	232	—	133	1970	<i>Agrotis exclamationis</i>
—	45	7	24	—	—	—	—	—	—	—	—	—	0	—	7	16	25	—	35	1970	<i>Plusia gamma</i>
—	0	0	0	—	—	—	—	—	—	—	—	—	0	—	0	0	0	—	0	1970	<i>Laphygma exigua</i>
—	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1971	Small Mottled Willow
—	0	0	0	—	—	—	—	—	—	—	—	—	0	—	0	0	0	—	0	1970	<i>Nycterosea obstipata</i>
—	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	1971	The Gem
—	0	4	2	—	2	0	7	—	—	—	—	—	—	11	19	45	24	—	26	1970	<i>Nomophila noctuella</i>
—	4	48	0	—	—	—	—	—	—	—	—	—	—	17	165	119	352	—	203	1970	<i>Plutella maculipennis</i>
—	0	0	0	—	—	—	—	—	—	—	—	—	—	2	1	4	—	—	2	1970	<i>Udea ferrugalis</i>
—	0	0	0	—	0	0	0	—	—	—	—	—	—	1	0	1	0	9	0	1971	Rusty Dot Pearl

ROTHAMSTED REPORT FOR 1972, PART 2

TABLE 3(a)

The Rothamsted Insect Survey—Suction Traps: four-weekly totals of *Chrysopa carnea* in 1970–71–72, identified by J. Bowden

Week No.	Elgin	Dundee	Copenhagen	Newcastle	High Mowthorpe	Hereford	Rothamsted Tower	Long Ashton	Silwood Park	Wye	Starcross	Rosewarne
1970												
1–16			—			—		1		7		
17–20		7	—			—	2		9			
21–24			—			—	40	1	22	5		
25–28			—	1		—	8		8	3	7	
29–32			—	1	8	—	524	3	390	86	15	21
33–36	18	8	—	4	8	—	222	50	609	40	57	6
37–40	62	15	—	27	2	—	452	119	154	520	26	18
41–44	172	18	—	15	32	—	121	149	887	428	51	3
45–52			—			—	7	1			1	
1971												
1–16			—			—						
17–20			—	1	1	—	2	1	10			
21–24		1	—			—	1		4	7		
25–28			2*	3		—	17	1	3		1	1
29–32	1		406	1		0	20		4	7	5	1
33–36		8	250	1		14	188	9	341	120	32	32
37–40	77	8	33	12	6	145	230	105	277	338	65	91
41–44	36	1	2	9	16	97	99	214	145	24	76	77
45–52	1							1	1	1	6	1
1972												
1–16	1			1			23	13	9	8	2	
17–20							1		2			
21–24							5					
25–28			1			1	4					
29–32			11			2	4			1	1	
33–36			175				38		3	7	10	3
37–40									79			
41–44												
45–52												

* Two weeks' catch from 1 July

ROTHAMSTED INSECT SURVEY

TABLE 3(b)

The Rothamsted Insect Survey—Suction Traps: annual total catches of Neuroptera in 1970–71–72, identified by J. Bowden

	Year	Elgin	Dundee	Edinburgh	Copenhagen	Newcastle	High Mowthorpe	Hereford	Rothamsted Tower	Long Ashton	Silwood Park	Wye	Starcross	Rosewarne
Hemerobiidae														
<i>H. humulinus</i>	1970				—	1		—	1	1	3			1
	71				—				1		4	4	1	
	72				—									
<i>H. lutescens</i>	1970	2			—			—	6	1	6	1	2	
	71				—					3	7		4	
	72				—									
<i>H. micans</i>	1970				—			—						
	71	1			—									
	72				—									
<i>H. nitidulus</i>	1970				—			—	1	1	3			
	71				—	1					1			
	72				—									
<i>H. stigma</i>	1970				—	1		—			4			
	71	30	5		—	2	1		3	1	4	1	7	3
	72				—									
<i>Kimminsia betulina (nervosa)</i>	1970					1								
	71								1		2			2
	72													
<i>K. subnebulosa</i>	1970		1						12					
	71						1	4	7	8	9	1	7	6
	72													
<i>Nesomicromus pagnus</i>	1970								1	2	6	1	5	2
	71													
	72													
<i>Micromus variegatus</i>	1970													
	71							1			2	1		
	72													
Chrysopidae														
<i>Chrysopa albolineata</i>	1970						1				10			
	71													
	72										2			
<i>C. ciliata</i>	1970								3			1		4
	71													
	72													
<i>C. flava</i>	1970										2			
	71													
	72								1	1				

Species caught only once are listed in the text

ROTHAMSTED REPORT FOR 1972, PART 2

Neuroptera in the Rothamsted Insect Survey, 1970–72

There are 29 species of Hemerobiidae and 14 species of Chrysopidae in the British fauna. The suction traps have so far caught 13 species of Hemerobiidae and seven of Chrysopidae.

Eight species have been recorded one to three times only. These are: Hemerobiidae: *Hemerobius atrifrons* McLachlan, Elgin, 3 September 1971; *Symphorobius elegans* (Stephens), Silwood Park, 29 July 1972; *S. pygmaeus* (Rambur), Silwood Park, 19 July and 17 September 1971 and Shardlow, 19 August 1972; *Kimminsia killingtoni* Morton, Elgin, 20 and 21 July 1971. Chrysopidae: *Chrysopa flavifrons* Brauer, Hereford, 13 August 1972; *C. phyllochroma* Wesmael, Silwood Park, 3 July 1970; *C. septempunctata* Wesmael, Silwood Park, 26 June and 28 July 1970; *C. vittata* Wesmael, Silwood Park, 1 August 1970. Other species are in Table 3.

The outstanding feature is the abundance of *Chrysopa carnea* Stephens. It is the only species found in the most northerly traps; elsewhere it outnumbers all other species of *Chrysopa* combined by over 100 to 1. First appearances of *C. carnea* in all three years have been in the most southerly sites, particularly Wye and Silwood; Newcastle is consistently the earliest of the northern traps. The Elgin trap produces, in a short season, numbers far in excess of Dundee, Newcastle and High Mowthorpe and, in the period from week 41 to week 44, may catch more than all but the most productive southern traps. It is known (Macleod, 1967; Tauber & Tauber, 1969, Tauber *et al.*, 1970) that, in controlled conditions, reproductive diapause in adult *C. carnea* can be induced by a daily photoperiod of 12 hours and maintained for a long time by a daily photoperiod of 10 hours. One of the indications of diapause is the appearance of red-brown colour in the adults. The first occurrence of adults showing diapause colour has consistently been in weeks 39 and 40 when daily photoperiod changes, from more than, to less than 12 hours. A more striking phenomenon is the virtual disappearance of *C. carnea* from all traps in each year between weeks 43 and 45. In week 42, daily photoperiod (sunrise to sunset) is everywhere above 10 hours. During week 43, photoperiod decreases to about 9½ hours at Elgin (approximately 58° N) while still 10 hours or more at the most southern latitudes, 50°–52° N, which themselves receive less than 10-hour photoperiod during week 44. At Elgin the last substantial catches occur during week 43 and in the south during week 44. From week 45 few adults are taken until the following spring. These observations confirm the importance of a 12-hour photoperiod in diapause induction and also suggest that cessation of flight activity, caused by a critical photoperiod of about 10 hours, indicates the commencement of sustained and synchronised diapause and hibernation. In spring and early summer the beginning of flight activity must be related to some other environmental factor, possibly temperature, since 10-hour and 12-hour photoperiods are attained in weeks 8 and 12, respectively.

The Hemerobiidae are trapped in comparatively small numbers. *Kimminsia killingtoni*, taken twice at Elgin, is a northern species, the others are all generally regarded as more widely distributed. Greatest numbers are usually trapped in the south, exceptions being *Hemerobius stigma* Stephens which was particularly common at Elgin in 1971, and *Hemerobius atrifrons* taken once at Elgin but recorded in the literature as commonest in the south of England. (J. Bowden)

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ROTHAMSTED INSECT SURVEY

TABLE 4
The Standard Weeks used to tabulate and analyse insect samples in the Rothamsted Insect Survey

Week No.	Dates	Week No.	Dates
1	1 Jan.-7 Jan.	27	2 July-8 July
2	8 Jan.-14 Jan.	28	9 July-15 July
3	15 Jan.-21 Jan.	29	16 July-22 July
4	22 Jan.-28 Jan.	30	23 July-29 July
5	29 Jan.-4 Feb.	31	30 July-5 Aug.
6	5 Feb.-11 Feb.	32	6 Aug.-12 Aug.
7	12 Feb.-18 Feb.	33	13 Aug.-19 Aug.
8	19 Feb.-25 Feb.	34	20 Aug.-26 Aug.
9	26 Feb.-4 Mar.	35	27 Aug.-2 Sep.
10	5 Mar.-11 Mar.	36	3 Sep.-9 Sep.
11	12 Mar.-18 Mar.	37	10 Sep.-16 Sep.
12	19 Mar.-25 Mar.	38	17 Sep.-23 Sep.
13	26 Mar.-1 Apr.	39	24 Sep.-30 Sep.
14	2 Apr.-8 Apr.	40	1 Oct.-7 Oct.
15	9 Apr.-15 Apr.	41	8 Oct.-14 Oct.
16	16 Apr.-22 Apr.	42	15 Oct.-21 Oct.
17	23 Apr.-29 Apr.	43	22 Oct.-28 Oct.
18	30 Apr.-6 May	44	29 Oct.-4 Nov.
19	7 May-13 May	45	5 Nov.-11 Nov.
20	14 May-20 May	46	12 Nov.-18 Nov.
21	21 May-27 May	47	19 Nov.-25 Nov.
22	28 May-3 June	48	26 Nov.-2 Dec.
23	4 June-10 June	49	3 Dec.-9 Dec.
24	11 June-17 June	50	10 Dec.-16 Dec.
25	18 June-24 June	51	17 Dec.-23 Dec.
26	25 June-1 July	52	24 Dec.-30 Dec.