







AHDB Aphid News (25 July 2014 No.16)

APHID ALERT SUMMARY

This alert summarises up-to-date results from the Rothamsted/SASA suction-trap (ST) network and the FERA yellow water-pan trap (YWT) network. Further details of the ST results can be found below and at www.sasa.gov.uk/seed-ware-potatoes/virology/virus-epidemiology. Further details of the YWT results can be found at www.potato.org.uk/online-toolbox/aphid-monitoring.

GENERAL

This is the last planned bulletin of the summer season as most crops are now past the stage at which aphids cause problems, but if any particular issues arise we will report them. Towards the end of August we will combine forces with ADAS to produce a bulletin discussing issues and options for aphid and flea beetle control in oilseed rape in the absence of neonicotinoids. The regular series of autumn bulletins, especially relevant in relation to barley yellow dwarf virus and turnip yellows virus will begin in mid-September.

In summary for the year to date, we were predicting earlier flights and larger than usual numbers for many aphid species. This was certainly realised for peach—potato aphid in England, although not in Scotland. Cereal aphids have been relatively benign. The potential for problems was there, but natural enemies have done a fine job in keeping pace. It's too early to predict accurately what will happen in autumn. Hotter, drier summers tend to lead to fewer cereal aphids in autumn because of a reduction in abundance of wild grasses to tide them over between crops.

CEREALS

Numbers of cereal aphids flying from ripening crops are increasing, particularly in Scotland, but accumulated totals are generally still well below average for the time of year. Nationally about 35% of the winter barley has been harvested and winter wheat is just starting (<1% of the UK so far).

POTATOES

Current virus pressure in England as suggested by vector aphid abundance is now below normal. In Scotland the potato crop is that much later and the three main cereal aphid species represent the main contributors to PVY vector pressure at present. Further regional information on potato virus vectors can be accessed at www.sasa.gov.uk/seed-ware-potatoes/virology/virus-epidemiology and www.potato.org.uk/online-toolbox/aphid-monitoring.

WINTER OILSEED RAPE

Aphids are no longer an issue and about 40% of the crop has been harvested nationally.

SPRING OILSEED RAPE

Mealy cabbage aphids are flying in low numbers across central and southern England.

FIELD BRASSICAS and CARROTS

Numbers of peach–potato aphids, mealy cabbage aphids and willow–carrot aphids flying are now low everywhere.

PEAS AND BEANS

Pea aphid numbers have increased a little in central England this week. Numbers of black bean aphid are roughly the same as last week or have started to fall.

As always, we appreciate any intelligence from the field and any comments on the information we provide.

SUCTION-TRAPPING RESULTS



The information below relates to suction-trap samples collected during Bulletin Week 16: 14/7-20/7.

- A combination of the hot weather and thundery downpours resulted in little significant flight activity this bulletin week. In Scotland things are later and aphids remain somewhat more active right across the board.
- As they leave cereal crops, the three main cereal aphids dominate our suction-trap catches, particularly at Dundee. It is reported that to date 35% of winter barley crops have been harvested nationally.
- Numbers of the peach–potato aphid (*Myzus persicae*), potato aphid (*Macrosiphum euphorbiae*) and mealy cabbage aphid (*Brevicoryne brassicae*) flying are now low everywhere.
- The pea aphid (*Acyrthosiphon pisum*) has been caught at ten sites with hotspots at Wellesbourne (87), Rothamsted (35) and Writtle (20).
- The black bean aphid, (*Aphis fabae*), was caught at ten sites and numbers are roughly the same as last week or have started to fall.

Suction-trap sites

The tables below show current and accumulated totals with comparisons to previous years. '/' indicates that identifications have not been completed and '*' indicates where totals have been corrected proportionally to seven days, fewer days' samples having been identified.

Rose-grain aphid (Metopolophium dirhodum)

Rose–grain aphid	В	ulletin Week Totals	14/	07-20/07	Accumulated until		20/07
(Metopolophium dirhodum)	2014	Compared to last Bulletin week	2013	10-year average 2004-13	2014	2013	10-year average 2004- 13
Dundee	640	→	96	1011	1505	152	3113
Gogarbank (Edinburgh)	24	→	39	160	169	138	673
Newcastle	*30	^	12	101	50	15	353
Preston	8	→	0	26	35	58	402
Kirton	/		26	244	63	50	1723
Broom's Barn (nr Bury St Edmunds)	1	→	159	237	133	266	1676
Wellesbourne	12	→	/	/	219	/	/
Hereford	10	^	35	59	91	97	586
Rothamsted (Harpenden)	10	^	60	44	146	126	684
Writtle	5	\	24	60	236	110	859
Silwood Park (nr Ascot)	/		0	5	7	10	155
Wye	/		0	36	5	13	318
Starcross (nr Exeter)	21	\	20	15	933	184	549

The rose–grain aphid was caught at ten sites this week, and was increasing at three sites, with a hotspot at Dundee 640. Accumulated numbers are below average everywhere except Starcross.

Bird cherry-oat aphid (Rhopalosiphum padi)

Bird cherry–oat aphid	Bulletin Week Totals		14/07-20/07		Accumulated until		20/07
(Rhopalosiphum padi)	2014	Compared to last Bulletin week	2013	10-year average 2004-13	2014	2013	10-year average 2004- 13
Dundee	447	\	285	256	1070	467	1086
Gogarbank (Edinburgh)	101	→	85	53	336	246	811
Newcastle	*47	↑	25	32	71	38	358
Preston	28	↑	0	35	80	15	211
Kirton	/		25	195	91	56	1913
Broom's Barn (nr Bury St Edmunds)	5		24	241	90	45	1271
Wellesbourne	33	^	/	/	104	/	/
Hereford	41	^	24	55	118	47	345
Rothamsted (Harpenden)	42	^	55	110	121	105	600
Writtle	22	\	19	117	178	45	686
Silwood Park (nr Ascot)	/		0	41	10	20	360
Wye	/		0	60	12	13	452
Starcross (nr Exeter)	68	↑	62	109	292	462	696

The bird cherry—oat aphid was caught at ten sites this week, with numbers increasing at six sites, with hotspots at Dundee (447) and Gogarbank (101). The accumulated numbers remain well below average.

Grain aphid (Sitobion avenae)

Grain aphid	Bulletin Week Totals		14/07-20/07		Accumulated until		20/07
(Sitobion avenae)	2014	Compared to last Bulletin week	2013	10-year average 2004-13	2014	2013	10-year average 2004- 13
Dundee	587	^	218	204	963	370	1177
Gogarbank (Edinburgh)	139	→	48	63	347	93	428
Newcastle	*54	^	26	105	88	30	391
Preston	63	→	0	87	201	59	426
Kirton	/		32	506	167	71	2059
Broom's Barn (nr Bury St Edmunds)	5	→	103	421	149	135	1681
Wellesbourne	78	^	/	/	309	/	/
Hereford	81	↑	36	159	217	70	843
Rothamsted (Harpenden)	99	↑	123	228	309	155	1583
Writtle	92	→	76	308	553	149	1769
Silwood Park (nr Ascot)	/		0	68	18	17	698
Wye	/		0	384	6	8	1247
Starcross (nr Exeter)	105	↑	47	70	343	130	607

The grain aphid was caught at ten sites, with increases at six of these sites since last week, and hotspots at Dundee 587, Edinburgh 139 and Starcross 105.

Peach-potato aphid (Myzus persicae)

Peach-potato aphid	Bulletin Week Totals		14/07-20/07		Accumulated until		20/07
(Myzus persicae)	2014	Compared to last Bulletin week	2013	10-year average 2004-13	2014	2013	10-year average 2004- 13
Dundee	5	↑	1	3	10	4	17
Gogarbank (Edinburgh)	2	↑	1	1	6	1	12
Newcastle	*5	↑	0	1	12	0	19
Preston	5	↑	0	2	47	2	114
Kirton	/		12	30	141	23	456
Broom's Barn (nr Bury St Edmunds)	1	4	103	49	1351	240	678
Wellesbourne	5	V	/	/	675	/	/
Hereford	3	↑	7	9	105	18	136
Rothamsted (Harpenden)	3	4	581	74	520	638	414
Writtle	5	V	77	52	1158	191	695
Silwood Park (nr Ascot)	/		0	1	7	3	52
Wye	/		0	12	31	32	211
Starcross (nr Exeter)	4	↑	56	9	168	103	97

The peach–potato aphid was caught at ten sites this week, with numbers generally low everywhere.

Potato aphid (Macrosiphum euphorbiae)

Potato aphid	Bulletin Week Totals		14/07-20/07		Accumulated until		20/07
(Macrosiphum euphorbiae)	2014	Compared to last Bulletin week	2013	10-year average 2004-13	2014	2013	10-year average 2004- 13
Dundee	5	\	16	6	23	27	43
Gogarbank (Edinburgh)	2	^	20	5	27	34	64
Newcastle	*2	↑	14	4	3	25	24
Preston	0		0	2	14	21	33
Kirton	/		8	7	26	24	75
Broom's Barn (nr Bury St Edmunds)	0		14	6	29	30	53
Wellesbourne	0		/	/	19	/	/
Hereford	0		24	11	31	45	95
Rothamsted (Harpenden)	1	↑	7	4	13	17	29
Writtle	0		1	3	35	22	50
Silwood Park (nr Ascot)	/		0	1	3	5	18
Wye	/		0	2	6	5	18
Starcross (nr Exeter)	1		3	1	21	47	46

The potato aphid was caught at five sites this week in low numbers.

Mealy Cabbage aphid (Brevicoryne brassicae)

Cabbage aphid	Bulletin Week Totals		14/07-20/07		Accumulated until		20/07
(Brevicoryne brassicae)	2014	Compared to last Bulletin week	2013	10-year average 2004-13	2014	2013	10-year average 2004- 13
Dundee	0		0	1	0	0	6
Gogarbank (Edinburgh)	0		0	0	0	0	4
Newcastle	*0	\	0	1	1	0	10
Preston	2	↑	0	3	7	0	31
Kirton	/		0	13	17	0	105
Broom's Barn (nr Bury St Edmunds)	0	↓	12	26	43	13	289
Wellesbourne	9	↑	/	/	82	/	/
Hereford	4	↑	9	8	11	11	166
Rothamsted (Harpenden)	3		41	17	21	61	246
Writtle	1	↓	30	25	122	71	644
Silwood Park (nr Ascot)	/		0	3	0	0	58
Wye	/		0	15	1	2	99
Starcross (nr Exeter)	14	^	21	15	70	69	270

The mealy cabbage aphid was caught at six sites this week, with a hotspot at Starcross (14). Accumulated numbers are well below the 10-year means.

Willow-carrot aphid (Cavariella aegopodii)

Willow-carrot aphid	Bulletin Week Totals		14/07-20/07		Accumulated until		20/07
(Cavariella aegopodii)	2014	Compared to last Bulletin week	2013	10-year average 2004-13	2014	2013	10-year average 2004- 13
Dundee	2	\	18	4	186	29	62
Gogarbank (Edinburgh)	0	\	2	3	98	6	92
Newcastle	*2	↑	10	3	44	15	106
Preston	2		0	1	976	288	480
Kirton	/		16	4	876	162	621
Broom's Barn (nr Bury St Edmunds)	0		38	6	375	715	857
Wellesbourne	0		/	/	189	/	/
Hereford	0	\	15	2	60	438	397
Rothamsted (Harpenden)	0	\	28	4	103	261	447
Writtle	0		12	2	148	295	939
Silwood Park (nr Ascot)	/		0	1	13	104	269
Wye	/		0	1	22	71	388
Starcross (nr Exeter)	3	↑	11	2	42	598	181

The willow-carrot aphid was caught at four sites this week, with numbers low everywhere.

Pea aphid (Acyrthosiphon pisum)

Pea aphid	Bulletin Week Totals		07-20/07	Accı	20/07		
(Acyrthosiphon pisum)	2014	Compared to last Bulletin week	2013	10-year average 2004-13	2014	2013	10-year average 2004- 13
Dundee	12	\	8	16	43	12	66
Gogarbank (Edinburgh)	6	↑	6	4	26	13	37
Newcastle	*5		9	7	10	12	29
Preston	2	\	0	4	11	4	50
Kirton	/		24	191	47	39	1094
Broom's Barn (nr Bury St Edmunds)	2	\	34	129	125	55	732
Wellesbourne	87	↑	/	/	176	/	/
Hereford	14	1	18	34	37	36	144
Rothamsted (Harpenden)	35	↑	83	61	169	117	475
Writtle	20	→	35	101	264	91	861
Silwood Park (nr Ascot)	/		0	12	7	5	120
Wye	/		0	87	5	11	369
Starcross (nr Exeter)	9	1	20	19	86	115	153

The pea aphid was caught at ten sites this week, with numbers increasing at five sites and hotspots at Wellesbourne (87), Rothamsted (35) and Writtle (20).



Further information

www.hgca.com/pests

www.potato.org.uk/online-toolbox/aphid-monitoring

Rothamsted Insect Survey

HDC pest bulletin

http://www.sasa.gov.uk/seed-ware-potatoes/virology/virus-epidemiology

Please send information on crop aphids to

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