AHDB Aphid News(4 July 2014 No.13)

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

The large migration of the peach–potato aphid is starting to decline. Numbers of the rose–grain aphid and the grain aphid are on the increase, but natural enemies are also abundant in crops.

CEREALS

Numbers of cereal aphids flying are increasing, but accumulated totals are generally well below average for the time of year. An exception is accumulation of the rose–grain aphid in south west England. Numbers of the grain aphid are starting to rise in southern England this week. Numbers in crops are generally below threshold levels and natural enemies seem to be in control. The recommended threshold for control is 50% of tillers infested before GS61 increasing to 66% of tillers infested from GS61 to two weeks before the end of grain filling. Almost all winter crops are beyond this stage.

POTATOES

Virus pressure as suggested by vector aphid abundance has fallen to around or below normal. In England virus pressure is still largely due to the peach–potato aphid, but in Scotland the rose–grain aphid is now making a contribution. 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.

SPRING OILSEED RAPE

Mealy cabbage aphids are flying in low numbers, with highest numbers in Essex. The threshold for control is >4% plants infested before petal fall.

FIELD BRASSICAS

Numbers of peach–potato aphids flying are starting to decline. Mealy cabbage aphids are flying in low numbers, with highest numbers in Essex.

CARROTS

The numbers of willow–carrot aphid flying are now low everywhere.

PEAS AND BEANS

The pea aphid is flying throughout central and southern England, with highest numbers in Essex. Combining peas should be sprayed when around 1 plant in 5 is infested and vining peas at about 1 plant in 7. Black aphid numbers are starting to increase in the yellow trays, and the black bean aphid was caught in seven suction traps this bulletin week with a hotspot at Writtle, Essex.

SUCTION-TRAPPING RESULTS

Suction-trap sites

The information below relates to suction-trap samples collected during Bulletin Week 13: 23/6-29/6.

- Unsettled weather with thundery showers at the weekend provided few opportunities for any significant increase in aphid flight activity.
- Numbers of the grain aphid increased across the Country with hotspots at Writtle and Starcross. Numbers of the rose–grain aphid in the suction-traps are rising in Scotland and high in the south west. The numbers of bird cherry–oat aphid are below average.
- Numbers of the peach–potato aphid (*Myzus persicae*) are starting to fall in central and eastern England. The first individual has been caught in the suction-trap at Elgin.
- The potato aphid (*Macrosiphum euphorbiae*) was caught in low numbers at six sites.
- The pea aphid (*Acyrthosiphon pisum*) has been caught at nine sites with a hotspot at Writtle. Field reports indicate threshold levels are being reached in some parts of southern England.
- The mealy cabbage aphid (*Brevicoryne brassicae)* was caught at seven sites in central and southern England, with a hotspot at Writtle.
- The number of the willow–carrot aphid (*Cavariella aegopodii*) is now very low.
- The black bean aphid (*Aphis fabae*) was caught in seven suction traps this bulletin week with a hotspot at Writtle (18)

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 (*Metopolophium dirhodum*)	**Bulletin Week Totals**		**23/06-29/06**		**Accumulated until**		**29/06**
	2014	Compared to last Bulletin week	2013	10-year average 2004-13	2014	2013	10-year average 2004-13
Dundee	51	↑	0	39	97	0	256
Gogarbank (Edinburgh)	18	↓	8	46	55	36	274
Newcastle	1		0	29	2	1	88
Preston	1		8	166	13	32	337
Kirton	6	↑	1	203	45	7	842
Broom's Barn (nr Bury St Edmunds)	26	↑	18	252	112	28	852
Wellesbourne	40	↓	/	/	136	/	/
Hereford	*15	↑	6	109	65	20	341
Rothamsted (Harpenden)	21	↓	1	89	110	14	359
Writtle	51	↑	5	145	201	17	489
Silwood Park (nr Ascot)	/		3	32	7	10	109
Wye	/		3	44	5	9	190
Starcross (nr Exeter)	248	↓	17	96	794	59	470

The rose–grain aphid was caught at eleven sites this week, and was increasing at five of these sites, with hotspots at Starcross (248), Dundee (51) and Writtle (51). Accumulated numbers are below average everywhere except Starcross.

Bird cherry–oat aphid *(Rhopalosiphum padi)*

Bird cherry–oat aphid *(Rhopalosiphum padi)*	**Bulletin Week Totals**		**23/06-29/06**		**Accumulated until**		**29/06**
	2014	Compared to last Bulletin week	2013	10-year average 2004-13	2014	2013	10-year average 2004-13
Dundee	14	↑	0	54	39	1	262
Gogarbank (Edinburgh)	10	↑	2	41	38	7	526
Newcastle	2		0	69	4	1	213
Preston	2	↓	3	28	28	12	93
Kirton	4	↑	3	115	56	15	686
Broom's Barn (nr Bury St Edmunds)	15	↑	1	211	71	9	701
Wellesbourne	7	↓	/	/	27	/	/
Hereford	*6	↓	2	48	33	10	161
Rothamsted (Harpenden)	5	↓	2	81	51	24	287
Writtle	18	↓	3	130	115	9	412
Silwood Park (nr Ascot)	/		2	14	10	20	176
Wye	/		4	12	12	13	222
Starcross (nr Exeter)	65	↑	17	62	195	99	363

The bird cherry–oat aphid was caught at eleven sites this week, with numbers slowly increasing at five sites, but the accumulated numbers remain well below average.

Grain aphid *(Sitobion avenae)*

Grain aphid *(Sitobion avenae)*	**Bulletin Week Totals**		**23/06-29/06**		**Accumulated until**		**29/06**
	2014	Compared to last Bulletin week	2013	10-year average 2004-13	2014	2013	10-year average 2004-13
Dundee	7	↑	2	12	17	4	76
Gogarbank (Edinburgh)	2	↓	3	26	30	6	134
Newcastle	1		0	16	2	0	63
Preston	8		3	35	42	9	199
Kirton	3	↑	5	83	15	19	499
Broom's Barn (nr Bury St Edmunds)	31	↑	1	168	66	4	573
Wellesbourne	34	↑	/	/	97	/	/
Hereford	18	↑	1	73	33	5	284
Rothamsted (Harpenden)	28	↑	2	95	54	3	536
Writtle	168	↑	3	192	224	4	604
Silwood Park (nr Ascot)	/		3	51	18	14	177
Wye	/		2	152	6	7	391
Starcross (nr Exeter)	81	↑	7	163	137	23	386

The grain aphid was caught at eleven sites, with increases at eight of these sites since last week, and hotspots at Writtle (168) and Starcross (81).

Peach–potato aphid (*Myzus persicae*)

Peach–potato aphid (*Myzus persicae*)	**Bulletin Week Totals**		**23/06-29/06**		**Accumulated until**		**29/06**
	2014	Compared to last Bulletin week	2013	10-year average 2004-13	2014	2013	10-year average 2004-13
Dundee	0	↓	0	1	1	0	5
Gogarbank (Edinburgh)	1	↓	0	1	4	0	9
Newcastle	5		0	1	6	0	14
Preston	20	↑	1	14	37	2	104
Kirton	28	↑	1	65	111	5	247
Broom's Barn (nr Bury St Edmunds)	50	↑	20	104	1330	40	484
Wellesbourne	139	↓	/	/	576	/	/
Hereford	*9	↓	0	21	86	0	96
Rothamsted (Harpenden)	44	↓	1	77	485	3	262
Writtle	99	↓	19	145	1133	25	507
Silwood Park (nr Ascot)	/		2	5	7	3	42
Wye	/		17	18	31	30	182
Starcross (nr Exeter)	10	↓	1	15	160	10	76

The peach–potato aphid was caught at ten sites this week, with numbers increasing at three sites. There were hotspots at Wellesbourne (139) and Writtle (99). The first peach–potato aphid has been at Elgin five days earlier than the long term average.

Potato aphid (*Macrosiphum euphorbiae*)

Potato aphid (*Macrosiphum euphorbiae*)	**Bulletin Week Totals**		**23/06-29/06**		**Accumulated until**		**29/06**
	2014	Compared to last Bulletin week	2013	10-year average 2004-13	2014	2013	10-year average 2004-13
Dundee	2	↑	2	2	6	4	10
Gogarbank (Edinburgh)	0	↓	1	3	22	3	40
Newcastle	0		2	2	1	4	16
Preston	3	↑	2	5	14	15	27
Kirton	0		2	14	23	3	50
Broom's Barn (nr Bury St Edmunds)	0		6	13	28	9	39
Wellesbourne	2		/	/	16	/	/
Hereford	*2	↓	3	12	28	9	50
Rothamsted (Harpenden)	0	↓	0	5	12	6	21
Writtle	3		3	9	34	12	39
Silwood Park (nr Ascot)	/		2	1	3	4	15
Wye	/		3	1	6	4	15
Starcross (nr Exeter)	3		10	5	14	32	43

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

Mealy Cabbage aphid (*Brevicoryne brassicae)*

Cabbage aphid (*Brevicoryne brassicae)*	**Bulletin Week Totals**		**23/06-29/06**		**Accumulated until**		**29/06**
	2014	Compared to last Bulletin week	2013	10-year average 2004-13	2014	2013	10-year average 2004-13
Dundee	0		0	0	0	0	1
Gogarbank (Edinburgh)	0		0	0	0	0	3
Newcastle	0		0	0	0	0	8
Preston	0		0	1	3	0	23
Kirton	1	↓	0	12	8	0	79
Broom's Barn (nr Bury St Edmunds)	3	↑	1	53	34	1	206
Wellesbourne	10	↓	/	/	47	/	/
Hereford	*1	↑	0	29	5	0	133
Rothamsted (Harpenden)	2	↓	1	119	12	1	196
Writtle	46	↑	1	157	96	2	532
Silwood Park (nr Ascot)	/		0	16	0	0	42
Wye	/		2	6	1	2	68
Starcross (nr Exeter)	19	↑	1	43	25	3	179

The mealy cabbage aphid was caught at seven sites this week, with hotspots at Wellesbourne (10), Writtle (46) and Starcross (19). Accumulated numbers are well below the 10-year means.

Willow–carrot aphid *(Cavariella aegopodii)*

Willow–carrot aphid *(Cavariella aegopodii)*	**Bulletin Week Totals**		**23/06-29/06**		**Accumulated until**		**29/06**
	2014	Compared to last Bulletin week	2013	10-year average 2004-13	2014	2013	10-year average 2004-13
Dundee	0	↓	1	1	179	7	48
Gogarbank (Edinburgh)	1		0	6	97	2	85
Newcastle	2		1	11	26	4	95
Preston	6	↑	14	34	968	257	471
Kirton	5	↑	20	49	874	95	608
Broom's Barn (nr Bury St Edmunds)	7	↑	58	35	372	506	841
Wellesbourne	8	↓	/	/	185	/	/
Hereford	*0	↓	36	13	59	261	381
Rothamsted (Harpenden)	7	↓	7	30	100	154	433
Writtle	10		25	36	147	192	927
Silwood Park (nr Ascot)	/		7	5	13	103	268
Wye	/		24	25	22	60	383
Starcross (nr Exeter)	4	↑	91	13	37	427	165

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

Pea aphid *(Acyrthosiphon pisum)*

Pea aphid *(Acyrthosiphon pisum)*	**Bulletin Week Totals**		**23/06-29/06**		**Accumulated until**		**29/06**
	2014	Compared to last Bulletin week	2013	10-year average 2004-13	2014	2013	10-year average 2004-13
Dundee	2	↑	0	1	5	0	6
Gogarbank (Edinburgh)	1	↓	0	2	16	2	17
Newcastle	0		1	2	0	1	8
Preston	0		1	5	5	1	35
Kirton	2	↑	0	78	21	0	271
Broom's Barn (nr Bury St Edmunds)	11	↑	7	71	94	7	231
Wellesbourne	11	↓	/	/	48	/	/
Hereford	*2	↓	1	15	13	2	65
Rothamsted (Harpenden)	14	↓	0	50	97	5	165
Writtle	49	↑	0	103	166	2	299
Silwood Park (nr Ascot)	/		3	17	7	1	62
Wye	/		8	29	5	11	144
Starcross (nr Exeter)	12	↓	17	26	70	41	107

The pea aphid was caught at nine sites this week, with numbers increasing slightly at four sites and a hotspot at Writtle (49).

BBSRC 20 Years of Pioneering Great British Bioscience

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

mark-s.taylor@rothamsted.ac.uk richard.harrington@rothamsted.ac.uk

HGCA POTATO COUNCIL HDC frontier BAYER HUTCHINSONS PGRO Agrii