

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 further details of the YWT results can be found at www.potato.org.uk/online-toolbox/aphid-monitoring.

GENERAL

A week of cool and windy weather put some aphid flights on hold, but overall numbers still increased. However, it is anticipated the recent warmer conditions may spark a significant increase in flight activity. Those which are already in crops will also be multiplying rapidly in the warm conditions.

CEREALS

Cereal aphids are flying but numbers generally remain low. Winter crops are past the stage at which further BYDV infection would be an issue. In spring cereals it now looks unlikely that there will be BYDV issues. These require large cereal aphid migrations into late crops and most crops, except those in Scotland, have reached the stage (GS31) after which further infection by BYDV has little impact.

POTATOES

Virus pressure was high in northern England and increasing in East Anglia and the Midlands largely driven by increasing numbers of the willow-carrot aphid (*Cavariella aegopodii*) and the leaf-curling plum aphid (*Brachycaudus helichrysi*).

Numbers of the peach-potato aphid (*Myzus persicae*) have increased through East Anglia, central and southern England, and have been caught as far north as Newcastle in the suction-traps, and one as far north as the Grampian region in the yellow water-pan traps.

The potato aphid (*Macrosiphum euphorbiae*) and the glasshouse and potato aphid (*Aulacorthum solani*) have been caught in low numbers throughout England this week.

The black bean aphid (*Aphis fabae*) is a good vector of PVA and is also now flying throughout central, eastern and southern England. Cereal aphids are flying but in very low numbers at this stage. Further regional information on potato virus vectors can be accessed here: www.potato.org.uk/online-toolbox/aphid-monitoring.

OILSEED RAPE

Mealy cabbage aphids (*Brevicoryne brassicae*) have been caught in central England and the south west this week. In winter oilseed rape the threshold for control is >13% plants infested before petal fall, but most crops are now beyond this stage. In spring rape the threshold for control is >4% plants infested before petal fall.

FIELD BRASSICAS and LEAFY VEGETABLES

Numbers of the peach-potato aphid (*Myzus persicae*) are highest in eastern England. Mealy cabbage aphids (*Brevicoryne brassicae*) have been caught in low numbers throughout England this week.

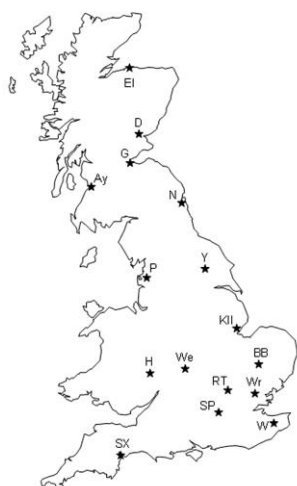
CARROTS

Numbers of the willow-carrot aphid (*Cavariella aegopodii*) flying have again increased this week, and were highest in southern and eastern England.

PEAS and BEANS

Pea aphid (*Acyrtosiphon pisum*) and the black bean aphid (*Aphis fabae*) are flying in low numbers, with field reports of both respectively in peas and beans in eastern England and East Anglia.

SUCTION-TRAPPING RESULTS



Suction-trap sites

The information below relates to suction-trap samples collected during Bulletin Week 8: 25/5 – 31/5. Aphid numbers in the suction-traps are slowly building and recent warmer conditions should see a significant increase in next week samples.

- There was minor hotspot at Starcross for the rose–grain aphid (*Metopolophium dirhodum*), but elsewhere cereal aphid numbers are low, particularly the grain aphid (*Sitobion avenae*).
- Numbers of the peach–potato aphid (*Myzus persicae*) are increasing with highest numbers in eastern England.
- The potato aphid (*Macrosiphum euphorbiae*) was caught at three sites this week in low numbers.
- Numbers of the willow–carrot aphid (*Cavariella aegopodii*) have increased at 9/13 sites this week, with highest numbers in southern and eastern England.
- The mealy cabbage aphid (*Brevicoryne brassicae*) was caught at seven sites this week, with first arrivals at Kirton (30/5), Broom’s Barn (26/5) and Rothamsted (30/5). Accumulated numbers are well below the 10-year means.
- The pea aphid (*Acyrtosiphon pisum*) was caught at four sites this week, with first arrivals at Broom’s Barn (30/5) and Rothamsted (27/5), plus a field report of pea aphids in a crop in eastern England.
- The black bean aphid (*Aphis fabae*) has been caught at seven sites this week, with highest numbers at Broom’s Barn. Field reports from East Anglia indicate big colonies on both spring (10-20%) and winter beans (<10%).

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 (<i>Metopolophium dirhodum</i>)	Bulletin Week Totals 25/05-31/05				Accumulated until 31/05		
	2015	Compared to last Bulletin week	2014	10-year average 2005-14	2015	2014	10-year average 2005-14
Dundee	/		2	1	0	/	1
Gogarbank (Edinburgh)	0		2	2	0	5	3
Newcastle	0*		/	1	0	/	3
York	0*		N/A	N/A	1	N/A	N/A
Preston	1*	↑	1	11	2	9	18
Kirton	1	↓	7	4	7	21	9
Broom’s Barn (nr Bury St Edmunds)	6	↑	15	5	7	37	10
Wellesbourne	0		1	5	1	/	8
Hereford	1	↑	7	5	1	7	11
Rothamsted (Harpenden)	0	↓	10	2	2	16	5
Writtle	1	↓	5	5	4	15	11
Silwood Park (nr Ascot)	1*	↑	/	1	3	/	7
Wye	0*		/	1	2	/	3
Starcross (nr Exeter)	15	↑	25	10	29	36	25

Low numbers of the rose–grain aphid were caught at seven sites this week, with a hotspot at Starcross (15). There were first arrivals at Preston (27/5), Broom’s Barn (26/5) and Hereford (30/5). Accumulated numbers are at or slightly below the ten year average everywhere except Starcross.

Bird cherry–oat aphid (*Rhopalosiphum padi*)

Bird cherry–oat aphid (<i>Rhopalosiphum padi</i>)	Bulletin Week Totals 25/05-31/05				Accumulated until 31/05		
	2015	Compared to last Bulletin week	2014	10-year average 2005-14	2015	2014	10-year average 2005-14
Dundee	/		7	4	1	/	7
Gogarbank (Edinburgh)	0		5	4	0	12	8
Newcastle	1*		/	3	1	/	10
York	0*	↓	N/A	N/A	2	N/A	N/A
Preston	0*		1	5	0	19	16
Kirton	1	↓	5	15	6	30	48
Broom's Barn (nr Bury St Edmunds)	1	↓	13	12	3	31	39
Wellesbourne	0	↓	1	14	1	/	44
Hereford	0		1	4	1	13	18
Rothamsted (Harpenden)	2	↓	5	4	6	17	24
Writtle	7	↑	5	10	11	39	48
Silwood Park (nr Ascot)	0*		/	8	2	/	52
Wye	4*	↑	/	26	10	/	91
Starcross (nr Exeter)	4	↓	13	12	15	51	91

The bird cherry–oat aphid was caught at seven sites this week, with a first arrival at Newcastle (27/5), but the accumulated numbers are below average.

Grain aphid (*Sitobion avenae*)

Grain aphid (<i>Sitobion avenae</i>)	Bulletin Week Totals 25/05-31/05				Accumulated until 31/05		
	2015	Compared to last Bulletin week	2014	10-year average 2005-14	2015	2014	10-year average 2005-14
Dundee	/		0	2	0	/	3
Gogarbank (Edinburgh)	0		8	2	0	9	4
Newcastle	0*		/	1	0	/	6
York	1*	↓	N/A	N/A	5	N/A	N/A
Preston	0*		12	8	0	22	11
Kirton	0		3	5	0	8	9
Broom's Barn (nr Bury St Edmunds)	1	↑	10	2	1	21	5
Wellesbourne	0		4	8	0	/	27
Hereford	0	↓	2	4	2	5	10
Rothamsted (Harpenden)	0		8	2	0	17	5
Writtle	1	↑	5	2	3	14	7
Silwood Park (nr Ascot)	0*		/	1	0	/	9
Wye	0*		/	2	0	/	6
Starcross (nr Exeter)	0		2	4	3	11	19

The grain aphid was caught at three sites this week, with a first arrival at Broom's Barn (30/5). The accumulated numbers are below average.

Peach–potato aphid (*Myzus persicae*)

Peach–potato aphid (<i>Myzus persicae</i>)	Bulletin Week Totals 25/05-31/05				Accumulated until 25/05-31/05		
	2015	Compared to last Bulletin week	2014	10-year average 2005-14	2015	2014	10-year average 2005-14
Dundee	/		0	0	0	/	0
Gogarbank (Edinburgh)	0		0	0	0	0	1
Newcastle	1*	↑	/	1	1	/	2
York	0*		N/A	N/A	0	N/A	N/A
Preston	0*		2	1	0	6	2
Kirton	1	↑	7	3	3	26	15
Broom's Barn (nr Bury St Edmunds)	28	↑	99	18	40	592	109
Wellesbourne	7	↑	43	13	9	/	82
Hereford	1	↓	9	8	4	23	18
Rothamsted (Harpenden)	3	↑	124	13	6	206	49
Writtle	13	↑	89	39	24	279	110
Silwood Park (nr Ascot)	0*		/	2	3	/	16
Wye	19*	↑	/	18	26	/	66
Starcross (nr Exeter)	0	↓	22	8	7	100	33

The peach–potato aphid was caught at eight sites this week, with a first arrival at Newcastle (25/5), and hotspots at Broom's Barn (28), Writtle (13) and Wye (19). The accumulated totals are below average for the time of year.

Potato aphid (*Macrosiphum euphorbiae*)

Potato aphid (<i>Macrosiphum euphorbiae</i>)	Bulletin Week Totals 25/05-31/05				Accumulated until 31/05		
	2015	Compared to last Bulletin week	2014	10-year average 2005-14	2015	2014	10-year average 2005-14
Dundee	/		1	1	0	/	2
Gogarbank (Edinburgh)	0		4	2	0	6	5
Newcastle	0*		/	1	0	/	5
York	0*		N/A	N/A	0	N/A	N/A
Preston	0*		4	4	1	9	6
Kirton	3	↑	4	2	5	18	6
Broom's Barn (nr Bury St Edmunds)	1	↑	5	1	4	18	5
Wellesbourne	0	↓	2	3	1	/	10
Hereford	0	↓	4	3	1	9	7
Rothamsted (Harpenden)	0	↓	4	1	2	9	5
Writtle	0	↓	0	3	4	10	10
Silwood Park (nr Ascot)	0*		/	2	2	/	9
Wye	0*		/	0	0	/	3
Starcross (nr Exeter)	1	↑	0	2	4	6	14

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

Mealy Cabbage aphid (*Brevicoryne brassicae*)

Mealy Cabbage aphid (<i>Brevicoryne brassicae</i>)	Bulletin Week Totals 25/05-31/05				Accumulated until 31/05		
	2015	Compared to last Bulletin week	2014	10-year average 2005-14	2015	2014	10-year average 2005-14
Dundee	/		0	0	0	/	0
Gogarbank (Edinburgh)	0		0	0	0	0	0
Newcastle	0*		/	0	0	/	0
York	0*		N/A	N/A	0	N/A	N/A
Preston	0*		0	4	0	3	6
Kirton	1	↑	1	3	1	5	16
Broom's Barn (nr Bury St Edmunds)	4	↑	10	6	4	21	16
Wellesbourne	4	↑	7	15	6	/	58
Hereford	3	↓	1	8	7	3	34
Rothamsted (Harpenden)	1	↑	0	3	1	2	8
Writtle	1	↑	0	16	2	9	57
Silwood Park (nr Ascot)	0*		/	1	0	/	16
Wye	0*		/	3	0	/	13
Starcross (nr Exeter)	1	↓	1	14	6	4	38

The mealy cabbage aphid was caught at seven sites this week, with first arrivals at Kirton (30/5), Broom's Barn (26/5) and Rothamsted (30/5). Accumulated numbers are well below the 10-year means.

Willow-carrot aphid (*Cavariella aegopodii*)

Willow-carrot aphid (<i>Cavariella aegopodii</i>)	Bulletin Week Totals 25/05-31/05				Accumulated until 31/05		
	2015	Compared to last Bulletin week	2014	10-year average 2005-14	2015	2014	10-year average 2005-14
Dundee	/		61	19	1	/	29
Gogarbank (Edinburgh)	1	↓	44	12	5	52	15
Newcastle	2*		/	3	2	/	10
York	54*	↑	N/A	N/A	94	N/A	N/A
Preston	4*	↑	317	154	6	948	278
Kirton	100	↑	93	83	215	766	322
Broom's Barn (nr Bury St Edmunds)	367	↑	13	174	644	314	452
Wellesbourne	88	↑	30	117	197	/	183
Hereford	35	↓	18	150	83	48	226
Rothamsted (Harpenden)	179	↑	8	95	346	59	218
Writtle	448	↑	9	316	1007	85	582
Silwood Park (nr Ascot)	36*	↓	/	37	179	/	163
Wye	280*	↑	/	121	464	/	215
Starcross (nr Exeter)	67	↑	1	31	137	10	68

The willow-carrot aphid was caught at thirteen sites this week, with numbers highest at Broom's Barn (367), Writtle (448) and Wye (280). There was a first arrival at Newcastle (26/5).

Pea aphid (*Acyrtosiphon pisum*)

Pea aphid (<i>Acyrtosiphon pisum</i>)	Bulletin Week Totals				Accumulated until 31/05		
	2015	Compared to last Bulletin week	2014	10-year average 2005-14	2015	2014	10-year average 2005-14
Dundee	/		0	0	0	/	0
Gogarbank (Edinburgh)	0		7	1	0	7	2
Newcastle	0*		/	0	0	/	0
York	0*		N/A	N/A	0	N/A	N/A
Preston	0*		2	1	0	4	2
Kirton	0		3	1	0	8	5
Broom's Barn (nr Bury St Edmunds)	1	↑	6	3	1	18	10
Wellesbourne	0	↓	0	2	2	/	14
Hereford	0		1	2	0	2	9
Rothamsted (Harpenden)	1	↑	9	3	1	21	15
Writtle	0		2	4	2	12	21
Silwood Park (nr Ascot)	0*		/	1	1	/	17
Wye	2*	↑	/	1	6	/	7
Starcross (nr Exeter)	2	↑	5	3	4	11	14

The pea aphid was caught at four sites this week, with first arrivals at Broom's Barn (30/5) and Rothamsted (27/5).



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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