



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

Aphid flight activity has increased significantly this week as the weather gradually improved. The trap catches continue to be dominated by the willow–carrot aphid (*Cavariella aegopodii*) and the leaf-curling plum aphid (*Brachycaudus helichrysi*), with numbers of the damson-hop aphid (*Phorodon humuli*) also now building.

CEREALS

Cereal aphids are flying throughout the country this week, but numbers generally remain low. Both winter and spring crops are past the stage at which further BYDV infection would be an issue, except possibly for some late crops in Scotland which have not yet reached the stage (GS31).

POTATOES

Virus pressure was high in England, particularly in East Anglia and Northern England. Large numbers of the peach—potato aphid (*Myzus persicae*) have been caught in these regions, but the willow—carrot aphid (*Cavariella aegopodii*) and the leaf-curling plum aphid (*Brachycaudus helichrysi*) are generally responsible for most of the virus pressure.

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 Edinburgh in the suction-traps.

The potato aphid (Macrosiphum euphorbiae) has 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 now flying throughout the country 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

Numbers of mealy cabbage aphids (*Brevicoryne brassicae*) have increased this week, particularly in central England. 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, coinciding with field reports from young brassicas. Numbers of mealy cabbage aphids (*Brevicoryne brassicae*) have increased this week, particularly in central England.

CARROTS

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

PEAS and BEANS

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

SUCTION-TRAPPING RESULTS



Suction-trap sites

The information below relates to suction-trap samples collected during Bulletin Week 9: 01/6 - 07/6. The weather this bulletin week was several degrees warmer and aphid numbers in the suction-traps have significantly increased in response.

- The cereal aphid hotspot at Starcross has continued, but elsewhere cereal aphid numbers are low.
- Numbers of the peach—potato aphid (*Myzus persicae*) are building with highest numbers in eastern England.
- The potato aphid (*Macrosiphum euphorbiae*) was caught at eight sites this week in low numbers.
- Field reports indicate both peach—potato aphid and potato aphid in potatoes in Essex.
- Numbers of the willow–carrot aphid (*Cavariella aegopodii*) have increased at 12/14 sites this week, with highest numbers in eastern England.
- The mealy cabbage aphid (*Brevicoryne brassicae*) was caught at eight sites this week, with a first arrival at Wye (3/6). There were hotspots at Wellesbourne (63), Kirton (35) and Writtle (28).
- The pea aphid (Acyrthosiphon pisum) was caught at seven sites this week, with a first arrival at Hereford (5/6), and a hotspot at Starcross (18), plus field reports of pea aphids in Kent and some PGRO field trials.
- The black bean aphid (Aphis fabae) has been caught at six sites this week, with field reports from beans and courgettes in Kent and Warwickshire.
- A single currant-lettuce aphid (Nasonovia ribisnigri) was caught at Kirton (1/6).

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	Bulletin Week Totals			06-07/06	Accumulated until		07/06
(Metopolophium dirhodum)	2015	Compared to last Bulletin week	2014	10-year average 2005-14	2015	2014	10-year average 2005-14
Dundee	2*		1	1	2	/	2
Gogarbank (Edinburgh)	0*		1	3	0	6	7
Newcastle	0*		/	1	0	/	5
York	0*		N/A	N/A	1	N/A	N/A
Preston	0*	\	/	10	2	/	28
Kirton	4*	^	7	7	11	28	15
Broom's Barn (nr Bury St Edmunds)	8*	^	15	32	16	52	42
Wellesbourne	8*	^	8	6	9	/	14
Hereford	8*	↑	15	10	9	22	21
Rothamsted (Harpenden)	3*	^	15	8	5	31	12
Writtle	4*	^	24	14	8	39	25
Silwood Park (nr Ascot)	4*	↑	/	13	7	/	20
Wye	2*	↑	/	2	4	/	5
Starcross (nr Exeter)	42*	↑	75	46	71	111	71

Low numbers of the rose–grain aphid were caught at ten sites this week, with a hotspot at Starcross (42). Accumulated numbers are at or slightly below the ten year average everywhere.

Bird cherry-oat aphid (Rhopalosiphum padi)

Bird cherry-oat aphid	Bulletin Week Totals		01/06-07/06		Accumulated until		07/06
(Rhopalosiphum padi)	2015	Compared to last Bulletin week	2014	10-year average 2005-14	2015	2014	10-year average 2005-14
Dundee	0*		7	5	1	/	12
Gogarbank (Edinburgh)	0*		6	5	0	18	13
Newcastle	0*	\	/	10	1	/	20
York	0*		N/A	N/A	2	N/A	N/A
Preston	2*	^	/	4	2	/	20
Kirton	1*	↑	12	34	8	42	81
Broom's Barn (nr Bury St Edmunds)	3*	↑	10	78	6	41	116
Wellesbourne	0*		3	21	1	/	65
Hereford	0*		2	11	1	15	29
Rothamsted (Harpenden)	0*	\	3	16	6	20	40
Writtle	5*	\	13	24	17	52	73
Silwood Park (nr Ascot)	2*	↑	/	54	4	/	106
Wye	5*	^	/	28	15	/	119
Starcross (nr Exeter)	11*	↑	13	36	26	64	127

The bird cherry—oat aphid was caught at seven sites this week, with a first arrival at Preston (3/6), but the accumulated numbers are below average.

Grain aphid (Sitobion avenue)

Grain aphid	Bulletin Week Totals		01/06-07/06		Accumulated until		07/06
(Sitobion avenae)	2015	Compared to last Bulletin week	2014	10-year average 2005-14	2015	2014	10-year average 2005-14
Dundee	2*		1	2	2	/	5
Gogarbank (Edinburgh)	0*		6	2	0	15	6
Newcastle	0*		/	2	0	/	8
York	4*	^	N/A	N/A	8	N/A	N/A
Preston	0*		/	6	0	/	17
Kirton	1*	^	4	2	1	12	12
Broom's Barn (nr Bury St Edmunds)	3*	^	0	3	4	21	8
Wellesbourne	0*		18	8	0	/	35
Hereford	0*		2	5	2	7	14
Rothamsted (Harpenden)	6*	^	0	3	6	17	7
Writtle	4*	↑	5	1	7	19	8
Silwood Park (nr Ascot)	4*	↑	/	6	4	/	15
Wye	0*		/	3	0	/	9
Starcross (nr Exeter)	14*	↑	7	9	17	18	28

The grain aphid was caught at eight sites this week, with first arrivals at Kirton (3/6), Rothamsted (7/6) and Silwood (7/6). The accumulated numbers are below average.

Peach-potato aphid (Myzus persicae)

Peach-potato aphid	Bulletin Week Totals		01/06-07/06		Accumulated until		07/06
(Myzus persicae)	2015	Compared to last Bulletin week	2014	10-year average 2005-14	2015	2014	10-year average 2005-14
Dundee	0*		0	1	0	/	1
Gogarbank (Edinburgh)	1*	^	0	1	1	0	2
Newcastle	0*	\	/	1	1	/	3
York	0*		N/A	N/A	0	N/A	N/A
Preston	0*		/	5	0	/	7
Kirton	20*	^	40	10	23	66	24
Broom's Barn (nr Bury St Edmunds)	171*	^	430	40	211	1022	149
Wellesbourne	36*	^	62	42	46	/	124
Hereford	4*	^	24	9	9	47	27
Rothamsted (Harpenden)	24*	^	64	28	30	270	77
Writtle	65*	^	124	39	89	403	149
Silwood Park (nr Ascot)	18*	^	/	4	21	/	20
Wye	40*	^	/	12	67	/	78
Starcross (nr Exeter)	3*	↑	13	8	10	113	41

The peach–potato aphid was caught at ten sites this week, with a first arrival at Edinburgh (4/6), and hotspots at Broom's Barn (171), Writtle (65) and Wye (40).

Potato aphid (Macrosiphum euphorbiae)

Potato aphid		Bulletin Week Totals		01/06-07/06		Accumulated until	
(Macrosiphum euphorbiae)	2015	Compared to last Bulletin week	2014	10-year average 2005-14	2015	2014	10-year average 2005-14
Dundee	0*		0	1	0	/	3
Gogarbank (Edinburgh)	1*	^	4	4	1	10	9
Newcastle	0*		/	1	0	/	6
York	0*		N/A	N/A	0	N/A	N/A
Preston	0*		/	3	1	/	9
Kirton	0*	\	5	1	5	23	7
Broom's Barn (nr Bury St Edmunds)	3*	^	5	2	7	23	7
Wellesbourne	3*	↑	2	4	4	/	14
Hereford	7*	↑	4	4	8	13	11
Rothamsted (Harpenden)	0*		1	2	2	10	6
Writtle	2*	^	12	4	6	22	14
Silwood Park (nr Ascot)	4*	↑	/	2	6	/	11
Wye	2*	^	/	1	2	/	4
Starcross (nr Exeter)	3*	↑	1	6	7	7	19

The potato aphid was caught at eight sites this week in low numbers, with first arrivals at Edinburgh (4/6) and Wye (7/6).

Mealy Cabbage aphid (Brevicoryne brassicae)

Cabbage aphid	Bulletin Week Totals		01/06-07/06		Accumulated until		07/06
(Brevicoryne brassicae)	2015	Compared to last Bulletin week	2014	10-year average 2005-14	2015	2014	10-year average 2005-14
Dundee	0*		0	0	0	/	0
Gogarbank (Edinburgh)	0*		0	0	0	0	0
Newcastle	0*		/	1	0	/	1
York	0*		N/A	N/A	0	N/A	N/A
Preston	0*		/	4	0	/	10
Kirton	35*	↑	0	1	36	5	18
Broom's Barn (nr Bury St Edmunds)	8*	^	2	4	12	23	20
Wellesbourne	63*	^	10	22	69	/	80
Hereford	10*	↑	0	8	16	3	42
Rothamsted (Harpenden)	1*	^	1	2	2	3	10
Writtle	28*	↑	15	27	30	24	85
Silwood Park (nr Ascot)	0*		/	1	0	/	17
Wye	4*	^	/	4	4	/	16
Starcross (nr Exeter)	3*	↑	0	10	8	4	48

The mealy cabbage aphid was caught at eight sites this week, with a first arrival at Wye (3/6). There were hotspots at Wellesbourne (63), Kirton (35) and Writtle (28). Accumulated numbers are below the 10-year means.

Willow-carrot aphid (Cavariella aegopodii)

Willow-carrot aphid	Bulletin Week Totals		01/06-07/06		Accumulated until		07/06
(Cavariella aegopodii)	2015	Compared to last Bulletin week	2014	10-year average 2005-14	2015	2014	10-year average 2005-14
Dundee	4*		65	20	5	/	49
Gogarbank (Edinburgh)	23*	^	30	17	28	82	31
Newcastle	18*	^	/	27	20	/	37
York	112*	^	N/A	N/A	206	N/A	N/A
Preston	74*	^	/	103	79	/	382
Kirton	175*	^	96	91	390	862	413
Broom's Barn (nr Bury St Edmunds)	420*	^	29	108	1064	343	560
Wellesbourne	209*	^	6	121	406	/	303
Hereford	27*	\	1	80	109	49	306
Rothamsted (Harpenden)	237*	↑	6	57	582	65	275
Writtle	746*	↑	19	131	1752	104	713
Silwood Park (nr Ascot)	58*	↑	/	44	236	/	207
Wye	282*	^	/	72	745	/	287
Starcross (nr Exeter)	98*	^	14	26	235	24	94

The willow– carrot aphid was caught at fourteen sites this week, with numbers highest at Broom's Barn (420), Wellesbourne (209), Rothamsted (237), Writtle (746), and Wye (282).

Pea aphid (Acyrthosiphon pisum)

Pea aphid	Bulletin Week Totals		01/06-07/06		Accumulated until		07/06
(Acyrthosiphon pisum)	2015	Compared to last Bulletin week	2014	10-year average 2005-14	2015	2014	10-year average 2005-14
Dundee	0*		1	0	0	/	1
Gogarbank (Edinburgh)	0*		1	0	0	8	3
Newcastle	0*		/	0	0	/	1
York	0*		N/A	N/A	0	N/A	N/A
Preston	0*		/	1	0	/	3
Kirton	0*		2	2	0	9	12
Broom's Barn (nr Bury St Edmunds)	1*	^	19	4	2	37	30
Wellesbourne	3*	↑	7	5	5	/	23
Hereford	1*	↑	4	4	1	6	16
Rothamsted (Harpenden)	3*	↑	11	7	4	32	30
Writtle	4*	↑	17	11	6	29	37
Silwood Park (nr Ascot)	4*	^	/	10	5	/	33
Wye	0*	\	/	2	6	/	10
Starcross (nr Exeter)	18*	^	13	11	22	24	25

The pea aphid was caught at seven sites this week, with a first arrival at Hereford (5/6), and a hotspot at Starcross (18).

Further information

Please send information on crop aphids to: mark-s.taylor@rothamsted.ac.uk

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