



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/onlinetoolbox/aphid-monitoring.

GENERAL

Things can change quickly with aphid populations and a series of warm weeks has seen aphid numbers steadily rising in our traps. The trap catches continue to be dominated by the leaf-curling plum aphid (Brachycaudus helichrysi), with numbers of the damson-hop aphid (Phorodon humuli) and the peach-potato aphid (Myzus persicae) also now building. The majority of field reports this week have been concerning the high populations of the black bean aphid (Aphis fabae) in winter and spring beans and also noticeable now in sugar beet crops.

Cereal aphids are flying throughout the country this week, but numbers generally remain low. There have been no reports of significant numbers of cereal aphids in crops. The 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.

POTATOES

Virus pressure was high throughout England. Large numbers of the peach-potato aphid (Myzus persicae) and the leafcurling plum aphid (Brachycaudus helichrysi) were generally responsible for most of the virus pressure. Numbers of the willow-carrot aphid (Cavariella aegopodii) remain high throughout the country, but are beginning to fall in the suction-traps.

Numbers of the peach-potato aphid (Myzus persicae) have increased throughout England, and have been caught in YWT in Scotland, but not the suction-traps this week. The potato aphid (Macrosiphum euphorbiae) has been caught in low numbers throughout England this week. Numbers of the black bean aphid (Aphis fabae) are high. This species is a good vector of PVA, so PVA-susceptible varieties may be at risk. 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. There are field reports of mealy cabbage aphids from eastern England, but most crops have finished flowering and thus the aphids should not pose a threat. Continue to monitor backward crops of spring rape where the threshold for control is >4% plants infested before petal fall.

FIELD BRASSICAS

Numbers of the peach-potato aphid (Myzus persicae) and the mealy cabbage aphid (Brevicoryne brassicae) have increased this week, particularly in central and southern England.

CARROTS

The willow-carrot aphid (Cavariella aegopodii) is still flying in large numbers throughout the country, but in the suction-traps numbers have started to fall and are expected to decrease from now on.

PEAS and BEANS

The black bean aphid (Aphis fabae) has been reported across the country at medium to high levels, somewhat higher than in recent years. The threshold for spraying is 10% of plants infested to prevent yield loss. The pea aphid (Acyrthosiphon pisum) is present in peas and may also affect beans. Combining peas should be sprayed when around 20% of plants are infested and vining peas when 15% are infested.

SUCTION-TRAPPING RESULTS



The information below relates to suction-trap samples collected during bulletin week 10:08/6-14/6. The weather this bulletin week was seasonably warm and aphid numbers in the suction-traps have increased, despite a wet weekend.

- The rose–grain aphid hotspot at Starcross has continued, but elsewhere cereal aphid numbers are low.
- Numbers of the peach–potato aphid (*Myzus persicae*) have increased at 8/14 sites, with highest numbers in central and southern England.
- The potato aphid (*Macrosiphum euphorbiae*) was caught at nine sites this
 week in low numbers, with small hotspots at Hereford (17) and Writtle
 (11).
- The willow–carrot aphid (*Cavariella aegopodii*) was caught in all our traps this week, but numbers are decreasing in 8/14 sites. Numbers were highest at Rothamsted (321) and Silwood (288).
- The mealy cabbage aphid (*Brevicoryne brassicae*) was caught at six sites this week, with hotspots at Wellesbourne (162) and Hereford (38).
- The pea aphid (Acyrthosiphon pisum) was caught at seven sites this week, with hotspots at Silwood (10) and Wye (20).
- The black bean aphid (Aphis fabae) has been caught at eight sites this week in low numbers.
- No currant-lettuce aphids (Nasonovia ribisnigri) were caught this week.

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, because fewer days' samples having been identified.

Rose-grain aphid (Metopolophium dirhodum)

Rose-grain aphid	Ві	ulletin Week Totals	08/	/ 06-14/06	Accı	umulated until	14/06
(Metopolophium dirhodum)	2015	Compared to last Bulletin week	2014	10-year average 2005-14	2015	2014	10-year average 2005-14
Dundee	0*	\	1	1	2	/	3
Gogarbank (Edinburgh)	3	↑	2	5	3	8	11
Newcastle	0*		1	4	0	/	9
York	0*		N/A	N/A	1	N/A	N/A
Preston	4*	↑	2	24	6	/	52
Kirton	3*	\	9	27	14	38	42
Broom's Barn (nr Bury St Edmunds)	1*	\	34	38	17	86	80
Wellesbourne	1*	\	34	25	11	/	40
Hereford	1*	\	17	21	11	39	42
Rothamsted (Harpenden)	3*		30	24	8	61	36
Writtle	8*	↑	67	29	16	106	54
Silwood Park (nr Ascot)	13*	↑	/	23	20	/	43
Wye	0*	\	/	2	4	/	7
Starcross (nr Exeter)	49*	↑	179	59	120	290	130

Low numbers of the rose–grain aphid were caught at ten sites this week, with a continuing hotspot at Starcross (49). Accumulated numbers are slightly below the ten year average everywhere.

Bird cherry-oat aphid (Rhopalosiphum padi)

Bird cherry-oat aphid	Bulletin Week Totals		08/06-14/06		Accumulated until		14/06
(Rhopalosiphum padi)	2015	Compared to last Bulletin week	2014	10-year average 2005-14	2015	2014	10-year average 2005-14
Dundee	0*		2	7	1	/	20
Gogarbank (Edinburgh)	4	^	5	12	4	23	25
Newcastle	0*		0	15	1	/	35
York	3*	↑	N/A	N/A	5	N/A	N/A
Preston	1*	\	4	7	3	/	27
Kirton	3*	^	7	118	10	49	200
Broom's Barn (nr Bury St Edmunds)	3*		10	47	9	51	163
Wellesbourne	4*	^	4	24	5	/	88
Hereford	0*		4	17	1	19	47
Rothamsted (Harpenden)	6*	^	8	19	12	28	58
Writtle	7*	^	26	21	24	78	94
Silwood Park (nr Ascot)	11*	↑	/	28	15	/	134
Wye	0*	\	/	14	15	/	133
Starcross (nr Exeter)	7*	+	24	34	33	88	160

The bird cherry—oat aphid was caught at ten sites in low numbers this week. The accumulated numbers are below average.

Grain aphid (Sitobion avenae)

Grain aphid	Bulletin Week Totals		08/06-14/06		Accumulated until		14/06
(Sitobion avenae)	2015	Compared to last Bulletin week	2014	10-year average 2005-14	2015	2014	10-year average 2005-14
Dundee	0*	\	2	4	2	/	9
Gogarbank (Edinburgh)	1	^	1	4	1	16	9
Newcastle	0*		1	3	0	/	11
York	7*	^	N/A	N/A	15	N/A	N/A
Preston	3*	^	4	9	3	/	26
Kirton	0*	→	0	4	1	12	16
Broom's Barn (nr Bury St Edmunds)	0*	→	10	5	4	31	13
Wellesbourne	0*		15	9	0	/	44
Hereford	0*		4	9	2	11	23
Rothamsted (Harpenden)	0*	→	3	4	6	20	12
Writtle	0*	→	5	5	7	24	13
Silwood Park (nr Ascot)	0*	→	/	14	4	/	29
Wye	0*		/	1	0	/	11
Starcross (nr Exeter)	0*	\	10	11	17	28	39

The grain aphid was caught at three sites in low numbers this week. The accumulated numbers are below average.

Peach-potato aphid (Myzus persicae)

Peach-potato aphid	Bulletin Week Totals		08/06-14/06		Accumulated until		14/06
(Myzus persicae)	2015	Compared to last Bulletin week	2014	10-year average 2005-14	2015	2014	10-year average 2005-14
Dundee	0*		0	0	0	/	1
Gogarbank (Edinburgh)	0	\	1	1	1	1	3
Newcastle	0*		1	2	1	/	6
York	1*	↑	N/A	N/A	1	N/A	N/A
Preston	22*	^	6	8	22	/	15
Kirton	0*	\	5	15	23	71	40
Broom's Barn (nr Bury St Edmunds)	59*	\	251	72	270	1273	221
Wellesbourne	109*	^	71	82	155	/	206
Hereford	80*	^	13	15	88	60	42
Rothamsted (Harpenden)	91*	^	87	19	121	357	96
Writtle	235*	^	378	57	324	781	206
Silwood Park (nr Ascot)	32*	^	/	10	53	/	29
Wye	14*	\	/	13	81	/	92
Starcross (nr Exeter)	22*	^	9	8	33	122	49

The peach–potato aphid was caught at ten sites this week, with hotspots at Wellesbourne (109) and Writtle (235).

Potato aphid (Macrosiphum euphorbiae)

Potato aphid Potato aphid	Bulletin Week Totals		08/06-14/06		Accumulated until		14/06
(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	/	4
Gogarbank (Edinburgh)	0	\	9	7	1	19	16
Newcastle	1*	^	1	2	1	/	8
York	1*	^	N/A	N/A	1	N/A	N/A
Preston	0*		2	3	1	/	12
Kirton	0*		0	3	5	23	9
Broom's Barn (nr Bury St Edmunds)	1*	\	5	2	8	28	8
Wellesbourne	4*	^	3	4	8	/	18
Hereford	17*	^	10	5	25	23	16
Rothamsted (Harpenden)	0*		1	1	2	11	7
Writtle	11*	^	6	5	17	28	18
Silwood Park (nr Ascot)	4*	^	/	2	10	/	13
Wye	4*	^	/	3	6	/	7
Starcross (nr Exeter)	4*	↑	1	6	11	8	26

The potato aphid was caught at nine sites this week in low numbers, with small hotspots at Hereford (17) and Writtle (11).

Mealy Cabbage aphid (Brevicoryne brassicae)

Cabbage aphid	Bulletin Week Totals		08/06-14/06		Accumulated until		14/06
(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	1	0	0	1
Newcastle	0*		0	3	0	/	4
York	0*		N/A	N/A	0	N/A	N/A
Preston	0*		0	4	0	/	15
Kirton	0*	\	0	5	36	5	22
Broom's Barn (nr Bury St Edmunds)	0*	\	8	7	12	31	27
Wellesbourne	162*	^	6	24	232	/	104
Hereford	38*	↑	1	16	54	4	58
Rothamsted (Harpenden)	6*	^	2	2	8	5	12
Writtle	3*	\	14	16	33	38	101
Silwood Park (nr Ascot)	3*	^	/	5	3	/	22
Wye	0*	\	/	1	4	/	17
Starcross (nr Exeter)	7*	↑	2	36	15	6	84

The mealy cabbage aphid was caught at six sites this week, with hotspots at Wellesbourne (162) and Hereford (38). Accumulated numbers are below the 10-year means everywhere except Wellesbourne.

Willow-carrot aphid (Cavariella aegopodii)

Willow-carrot aphid	Bulletin Week Totals		08/06-14/06		Accumulated until		14/06
(Cavariella aegopodii)	2015	Compared to last Bulletin week	2014	10-year average 2005-14	2015	2014	10-year average 2005-14
Dundee	33*	^	5	11	38	/	60
Gogarbank (Edinburgh)	122	^	13	20	150	95	52
Newcastle	14*	→	8	16	34	/	53
York	42*	\	N/A	N/A	248	N/A	N/A
Preston	106*	^	13	58	186	/	440
Kirton	97*	→	7	55	487	869	468
Broom's Barn (nr Bury St Edmunds)	71*	→	22	53	1136	365	613
Wellesbourne	146*	→	46	58	552	/	362
Hereford	62*	^	6	18	171	55	324
Rothamsted (Harpenden)	321*	^	14	23	903	79	298
Writtle	168*	\	23	29	1920	127	742
Silwood Park (nr Ascot)	288*	^	/	15	525	/	223
Wye	80*	\	/	12	825	/	299
Starcross (nr Exeter)	7*	\	7	12	242	31	105

The willow–carrot aphid was caught at all fourteen sites this week, with numbers highest at Rothamsted (321) and Silwood (288).

Pea aphid (Acyrthosiphon pisum)

Pea aphid	Bulletin Week Totals		08/06-14/06		Accumulated until		14/06
(Acyrthosiphon pisum)	2015	Compared to last Bulletin week	2014	10-year average 2005-14	2015	2014	10-year average 2005-14
Dundee	0*		2	1	0	/	1
Gogarbank (Edinburgh)	0		4	1	0	12	4
Newcastle	0*		0	1	0	/	3
York	0*		N/A	N/A	0	N/A	N/A
Preston	0*		1	1	0	/	5
Kirton	0*		9	6	0	19	35
Broom's Barn (nr Bury St Edmunds)	0*	\	44	20	2	81	49
Wellesbourne	3*		8	10	8	/	40
Hereford	3*	↑	1	7	4	7	22
Rothamsted (Harpenden)	1*	\	27	14	5	59	42
Writtle	3*	\	59	16	8	88	58
Silwood Park (nr Ascot)	10*	^	/	15	14	/	37
Wye	20*	^	/	3	25	/	39
Starcross (nr Exeter)	1*	\	11	15	24	35	40

The pea aphid was caught at seven sites this week, with hotspots at Silwood (10) and Wye (20).

Further information

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

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