



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

The large migration of the peach–potato aphid (*Myzus persicae*) in England has continued this week. It is strongly suspected that they are moving away from oilseed rape crops and tests show they are carrying high levels of Turnip Yellows Virus. This week's big mover is the black bean aphid (*Aphis fabae*) looking for younger, fresher plant material to feed on. Some suction-trap catches this week have notably high numbers of parasitoids, and field reports indicate numbers of aphid predators and parasites are rapidly increasing.

CEREALS

Numbers of cereal aphids flying this week have increased slightly, but numbers remain low for the time of year. 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 and above average throughout much of England. Large numbers of the peach—potato aphid (*Myzus persicae*) were generally responsible for most of the virus pressure in England, but there is large site-to-site variation possibly influenced by the proximity of maturing oilseed rape. Peach—potato aphids have been found in Scottish YWT again this week, but are still not being found in the Scottish suction-traps.

The potato aphid (*Macrosiphum euphorbiae*) has been caught in low numbers throughout the country this week. Numbers of the black bean aphid (*Aphis fabae*) flying this week have increased significantly. This species is a good vector of PVA, so PVA-susceptible varieties may be at risk. Cereal aphids are slowly increasing, but remain at low levels for the time of year. 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*) and peach–potato aphids (*Myzus persicae*) have increased in England this week, but numbers in the crop are generally low. Continue to monitor backward crops of spring rape where the threshold for control is >4% plants infested before petal fall.

FIELD BRASSICAS and LEAFY VEGETABLES

Numbers of the peach–potato aphid (*Myzus persicae*) and the mealy cabbage aphid (*Brevicoryne brassicae*) have increased this week, particularly in central and eastern England. The currant-lettuce aphid (*Nasonovia ribisnigri*) was caught in the suction-traps at Elgin, Dundee and Starcross.

CARROTS

The willow–carrot aphid (*Cavariella aegopodii*) was caught in all our traps this week. This year's big and extended migration is finally starting to decline. This week numbers were highest at Kirton (769) and Broom's Barn (350).

PEAS and BEANS

The black bean aphid (*Aphis fabae*) has been reported right across the country at medium to high levels, 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, particularly in eastern England, and it 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



Suction-trap sites

The information below relates to suction-trap samples collected during bulletin week 12: 22/6 - 28/6. The current high temperatures combined with increasing populations of natural enemies should mean a drop in next week's report.

- Cereal aphid numbers have started to increase, particularly the rose–grain aphid, but numbers are low for the time of year.
- Numbers of the peach–potato aphid (Myzus persicae) are high through much of England, with highest numbers in central and eastern England.
 Field reports received of high numbers in some ware potatoes triggering treatment, and extra vigilance is needed in seed crops next to maturing oilseed rape.
- The potato aphid (*Macrosiphum euphorbiae*) was caught at eleven sites this week, with small hotspots at Hereford (34), Wellesbourne (25) and Preston (20).
- The willow–carrot aphid (*Cavariella aegopodii*) was caught in all our traps this week. This year's very big migration is finally starting to decline. This week numbers were highest at Kirton (769) and Broom's Barn (350).
- The mealy cabbage aphid (*Brevicoryne brassicae*) was caught at ten sites this week, with a big hotspot at Wellesbourne (945), and smaller hotspots at Kirton (384) and Hereford (230).
- The pea aphid (*Acyrthosiphon pisum*) was caught at ten sites this week, with a hotspot at Kirton (35), and with numbers increasing at seven sites.
- Numbers of the black bean aphid (Aphis fabae) markedly increased across central and southern England, with hotspots at Writtle (686), Broom's Barn (361) and Wellesbourne (255).

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		ulletin Week Totals	22/	06-28/06	Accumulated until		28/06
(Metopolophium dirhodum)	2015	Compared to last Bulletin week	2014	10-year average 2005-14	2015	2014	10-year average 2005-14
Dundee	0*		51	27	2	/	34
Gogarbank (Edinburgh)	0		18	32	3	55	58
Newcastle	8*	↑	1	20	8	/	38
York	17*	↑	N/A	N/A	26	N/A	N/A
Preston	25*	↓	1	166	63	/	274
Kirton	42*	↑	6	145	68	45	280
Broom's Barn (nr Bury St Edmunds)	84*	↑	26	162	121	112	318
Wellesbourne	74*	↑	40	84	85	/	164
Hereford	112*	↑	15	98	158	65	171
Rothamsted (Harpenden)	39*	↑	21	76	67	110	143
Writtle	39*	↑	51	104	69	201	210
Silwood Park (nr Ascot)	28*	↑	/	33	56	/	89
Wye	25*	↑	/	30	39	/	57
Starcross (nr Exeter)	87*	↓	248	63	313	794	256

The rose–grain aphid was caught at twelve sites this week, with numbers increasing at ten sites. There were hotspots at Hereford (112), Starcross (87) and Broom's Barn (84). Accumulated numbers are below the ten year average everywhere except Starcross.

Bird cherry—oat aphid (Rhopalosiphum padi)

Bird cherry-oat aphid	Bulletin Week Totals		22/06-28/06		Accumulated until		28/06
(Rhopalosiphum padi)	2015	Compared to last Bulletin week	2014	10-year average 2005-14	2015	2014	10-year average 2005-14
Dundee	5*	↑	14	58	8	/	114
Gogarbank (Edinburgh)	0		10	44	4	38	93
Newcastle	1*	^	2	69	3	/	156
York	0*		N/A	N/A	5	N/A	N/A
Preston	0*	\	2	24	10	/	65
Kirton	14*	^	4	84	36	56	380
Broom's Barn (nr Bury St Edmunds)	7*	^	15	154	19	71	371
Wellesbourne	0*	\	7	13	11	/	122
Hereford	3*	\	6	45	12	33	106
Rothamsted (Harpenden)	1*	^	5	78	13	51	155
Writtle	25*	^	18	114	49	115	227
Silwood Park (nr Ascot)	0*		/	10	15	/	154
Wye	0*		/	8	15	/	157
Starcross (nr Exeter)	3*	\	65	53	40	195	238

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

Grain aphid (Sitobion avenae)

Grain aphid	Bulletin Week Totals		22/06-28/06		Accumulated until		28/06
(Sitobion avenae)	2015	Compared to last Bulletin week	2014	10-year average 2005-14	2015	2014	10-year average 2005-14
Dundee	0*		7	10	2	/	27
Gogarbank (Edinburgh)	0		2	21	1	30	37
Newcastle	1*	↑	1	8	1	/	24
York	17*	^	N/A	N/A	43	N/A	N/A
Preston	3*	\	8	23	9	/	61
Kirton	0*		3	48	1	15	71
Broom's Barn (nr Bury St Edmunds)	7*	^	31	111	11	66	137
Wellesbourne	0*		34	48	0	/	103
Hereford	17*	^	18	57	23	33	91
Rothamsted (Harpenden)	6*	^	28	64	11	54	82
Writtle	11*	↑	168	127	26	224	156
Silwood Park (nr Ascot)	6*	↑	/	28	9	/	76
Wye	6*	↑	/	22	9	/	43
Starcross (nr Exeter)	17*	^	81	114	42	137	199

Grain aphids were caught at ten sites and have started to increase this week. The accumulated numbers are below average.

Peach-potato aphid (Myzus persicae)

Peach-potato aphid	Ві	ulletin Week Totals	22/	22/06-28/06		Accumulated until	
(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	/	3
Gogarbank (Edinburgh)	0		1	1	1	4	5
Newcastle	10*	^	5	3	11	/	11
York	80*	^	N/A	N/A	111	N/A	N/a
Preston	3*	^	20	12	25	/	31
Kirton	1222*	↑	28	66	1533	111	137
Broom's Barn (Bury St Edmunds)	917*	^	50	99	1845	1330	399
Wellesbourne	307*	\	139	52	1010	/	303
Hereford	255*	^	9	21	490	86	77
Rothamsted (Harpenden)	477*	↑	44	73	842	485	197
Writtle	804*	^	99	124	1522	1133	425
Silwood Park (nr Ascot)	18*	\	/	4	113	/	37
Wye	227*	↑	/	33	496	/	153
Starcross (nr Exeter)	17*	\	10	14	75	160	74

The peach—potato aphid was caught at twelve sites this week, with hotspots at Kirton (1222), Broom's Barn (917), and Writtle (804), and numbers through much of England are above both the current and accumulated the 10 yr averages.

Potato aphid (Macrosiphum euphorbiae)

Potato aphid	Bulletin Week Totals		22/06-28/06		Accumulated until		28/06
(Macrosiphum euphorbiae)	2015	Compared to last Bulletin week	2014	10-year average 2005-14	2015	2014	10-year average 2005-14
Dundee	2*	^	2	2	2	/	8
Gogarbank (Edinburgh)	3	^	0	3	4	22	23
Newcastle	8*	^	0	1	11	/	12
York	7*	^	N/A	N/A	11	N/A	N/A
Preston	20*	^	3	4	31	/	21
Kirton	4*	\	0	13	37	23	26
Broom's Barn (nr Bury St Edmunds)	0*	\	0	11	14	28	23
Wellesbourne	25*	^	2	8	45	/	28
Hereford	34*	^	2	12	61	28	34
Rothamsted (Harpenden)	3*	\	0	5	11	12	16
Writtle	8*		3	7	34	34	33
Silwood Park (nr Ascot)	8*	^	/	1	23	/	15
Wye	0*		/	2	6	/	13
Starcross (nr Exeter)	0*	\	3	3	15	14	33

The potato aphid was caught at eleven sites this week, with small hotspots at Hereford (34), Wellesbourne (25) and Preston (20).

Mealy Cabbage aphid (Brevicoryne brassicae)

Cabbage aphid	Bulletin Week Totals		22/06-28/06		Accumulated until		28/06
(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	/	1
Gogarbank (Edinburgh)	0		0	0	0	0	2
Newcastle	0*		0	0	0	/	7
York	6*	\	N/A	N/A	36	N/A	N/A
Preston	0*		0	1	0	/	19
Kirton	384*	↑	1	14	455	8	64
Broom's Barn (nr Bury St Edmunds)	49*	↑	3	48	75	34	131
Wellesbourne	945*	^	10	79	1728	/	257
Hereford	230*	↑	1	29	387	5	109
Rothamsted (Harpenden)	38*	^	2	116	49	12	175
Writtle	64*	\	46	136	215	96	405
Silwood Park (nr Ascot)	17*	↑	/	20	25	/	46
Wye	39*	\	/	4	113	/	60
Starcross (nr Exeter)	53*	↑	19	36	101	25	129

The mealy cabbage aphid was caught at ten sites this week, with a big hotspot at Wellesbourne (945), and smaller hotspots at Hereford (230) and Kirton (384). Accumulated numbers are above the 10-year averages at Wellesbourne, Kirton, Hereford and Wye.

Willow-carrot aphid (Cavariella aegopodii)

Willow-carrot aphid	Bulletin Week Totals		22/06-28/06		Accumulated until		28/06
(Cavariella aegopodii)	2015	Compared to last Bulletin week	2014	10-year average 2005-14	2015	2014	10-year average 2005-14
Dundee	18*	^	0	2	69	/	66
Gogarbank (Edinburgh)	24	\	1	7	203	97	72
Newcastle	14*	\	2	12	87	/	92
York	28*	→	N/A	N/A	317	N/A	N/A
Preston	81*	→	6	32	417	/	514
Kirton	769*	^	5	47	1671	874	567
Broom's Barn (nr Bury St Edmunds)	350*	→	7	33	1889	372	702
Wellesbourne	181*	→	8	27	962	/	421
Hereford	76*	^	0	14	307	59	363
Rothamsted (Harpenden)	221*	→	7	29	1379	100	357
Writtle	224*	↑	10	38	2346	147	810
Silwood Park (nr Ascot)	71*	↑	/	6	666	/	235
Wye	120*	↑	/	27	1054	/	346
Starcross (nr Exeter)	28*	•	4	11	339	37	134

The willow–carrot aphid was caught at all fourteen sites this week, with numbers highest at Kirton (769) and Broom's Barn (350).

Pea aphid (Acvrthosiphon pisum)

Pea aphid	Bulletin Week Totals		22/06-28/06		Accumulated until		28/06
(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	/	5
Gogarbank (Edinburgh)	1	↑	1	1	1	16	16
Newcastle	0*		0	2	0	/	8
York	11*	↑	N/A	N/A	11	N/A	N/A
Preston	0*		0	5	0	/	35
Kirton	35*	^	2	50	41	21	223
Broom's Barn (nr Bury St Edmunds)	6*		11	47	14	94	199
Wellesbourne	14*	^	11	30	22	/	199
Hereford	11*	^	2	15	18	13	63
Rothamsted (Harpenden)	8*		14	51	22	97	154
Writtle	0*	\	49	81	31	166	254
Silwood Park (nr Ascot)	4*	^	/	22	20	/	69
Wye	8*	\	/	14	44	/	86
Starcross (nr Exeter)	6*	^	12	24	29	70	87

The pea aphid was caught at ten sites this week, with a hotspot at Kirton (35), and with numbers increasing at seven sites.

Further information

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

AHDB Cereals and Oilseeds: Click here

AHDB Potatoes: Click here

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