

9th June 2017

This news sheet summarises up-to-date results from the Rothamsted/SASA suction-trap (**ST**) network and the FERA yellow water-pan trap (**YWT**) network.

GENERAL – Aphid flight activity is high for this time of year, but has fallen back a little from last week’s extreme high. Subsequent heavy rain and high winds will have put the brakes on the migration for a while. On the ground the heavy downpours may also have temporarily checked aphid population growth. The first reports of predators and parasitoids are now starting to come in. Monitoring crops is strongly advised.

CEREALS

- Numbers of the rose-grain aphids in the **ST** increased this week. Accumulated **ST** numbers of the bird cherry-oat aphid and the grain aphid are high at Preston, but relatively low elsewhere so far.
- Field reports indicate that cereal aphid numbers in crops, particularly the rose-grain aphid, are increasing in the north and west. The threshold for control against direct feeding damage is 50% of tillers infested before GS61 increasing to 66% of tillers infested from GS61 to two weeks before the end of grain filling. **Monitoring crops is advised.**

POTATOES

- **Virus pressure is high in all areas, particularly northern England.**
- The peach-potato aphid (*Myzus persicae*) numbers **continued to increase** this week, with high numbers in the **ST** at Broom’s Barn and Wellesbourne, as well as **very** high numbers in the **YWT** in northern England.
- The potato aphid (*Macrosiphum euphorbiae*) and the glasshouse and potato aphid (*Aulacorthum solani*) have been caught in above average numbers for the time of year in the **ST** and in a range of **YWT**.
- Non-colonising vectors of PVY and PVA such as the willow-carrot aphid and the leaf curling plum aphid (*Brachycaudus helichrysi*) may contribute to the overall virus pressure, but numbers do seem to have started to fall this week.
- Black bean aphids are being caught across the country in low numbers. This species transmits PVA very efficiently, so even a few early in the season on PVA susceptible varieties (Desiree, King Edward, Maris Peer, Marfona etc.) may be a problem. Cereal aphids remain may pose a threat later in the year. Further regional information on potato virus vectors and the FERA yellow water-pan trap (**YWT**) network can be accessed here: www.potato.org.uk/online-toolbox/aphid-monitoring.

OILSEED RAPE, FIELD BRASSICAS and LEAFY VEGETABLES

- The peach-potato aphid (*Myzus persicae*) continued to increase this week, with high numbers in the **ST** at Broom’s Barn and Wellesbourne, as well as very high numbers in the **YWT** in northern England. Tests show that 60-70% of these migrants are carrying Turnip yellows virus.
- The mealy cabbage aphid was caught in both **ST** and **YWT**, with highest numbers in the midlands where it has also been reported from some OSR crops. The threshold for control is >13% plants infested before petal fall in winter OSR and >4% plants infested before petal fall in spring OSR.
- No currant-lettuce aphids (*Nasonovia ribisnigri*) were caught in the **ST** this week.

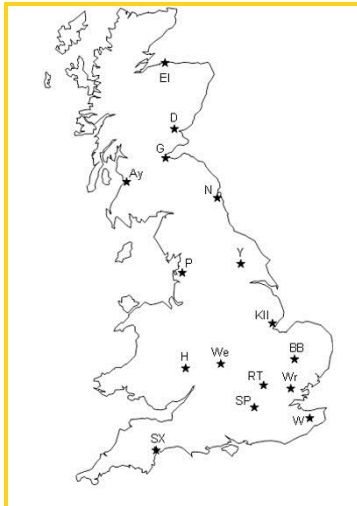
CARROTS and PARSNIPS

- The willow-carrot aphid migration has started to decline this week, with high **ST** numbers still at Kirton (255).
- Numbers of parsnip aphids are high at Wellesbourne and Hereford:

	N	Y	P	K	BB	We	H	RT	Wr	SP	W	SX
<i>C.pastinaceae</i>	1	36	18	8	22	135	144	25	22	20	17	2
<i>C.theobaldi</i>	6	0	16	19	28	108	29	11	26	22	22	2

PEAS and BEANS

- The pea aphid was caught in low numbers at eleven **ST** sites this week, with highest numbers at Writtle (22).
- The presence of pea aphids has been reported in pea crops and can be a major pest up to the fourth pod-bearing node stage, but not usually beyond. Combining peas should be sprayed when around 20% of plants are infested and vining peas when 15% of plants are infested. Pea aphids can transmit viruses even with low numbers present.
- Black bean aphids have been caught in both **ST** and **YWT** across the country, and field reports suggest numbers are increasing in bean crops in southern and eastern England. The threshold for control of black bean aphid in field and broad beans is 10% plant colonisation at early flowering. A lower threshold of 5% infested is advised to prevent virus transmission.



Suction-trapping Results

The information below relates to suction-trap samples collected during Bulletin Week 10: 29/5 – 04/6.

‘*’ indicates where totals have been corrected proportionally to seven days, fewer days’ samples having been processed and **0 = none so far this year.**

Rose–grain aphid (Metopolophium dirhodum)	Bulletin Week Totals		29/05-04/06		Accumulated until		04/06
	2017	Compared to last Bulletin week	2016	10-year average 2007-16	2017	2016	10-year average 2007-16
Dundee	/		1	1	12	1	2
Gogarbank (Edinburgh)	87	↑	1	3	165	2	5
Newcastle	26	↑	2	1	26	5	4
York	36	↑	2	/	47	8	/
Preston	44	↓	13	13	134	19	21
Kirton	59	↑	0	5	94	12	12
Broom’s Barn (Bury St Edmunds)	28		0	20	63	23	30
Wellesbourne	13	↓	5	5	29	32	14
Hereford	24	↑	3	10	50	19	18
Rothamsted (Harpenden)	8	↑	3	5	15	30	11
Writtle	20	↑	4	11	38	40	21
Silwood Park (nr Ascot)	4	↓	0	6	18	16	14
Wye	1	↑	1	2	6	6	5
Starcross (nr Exeter)	31	↓	4	32	103	48	54

The rose–grain aphid was caught at all sites, increasing at eight sites and with numbers highest at Edinburgh (87). Numbers are above both 10-yr means for this time of year at many sites.

Bird cherry–oat aphid (<i>Rhopalosiphum padi</i>)	Bulletin Week Totals		29/05-04/06		Accumulated until		04/06
	2017	Compared to last Bulletin week	2016	10-year average 2007-16	2017	2016	10-year average 2007-16
Dundee	/		9	4	5	18	10
Gogarbank (Edinburgh)	55	↑	4	5	89	7	10
Newcastle	18	↓	0	6	56	5	14
York	28	↑	2	/	38	24	/
Preston	231	↑	14	6	597	33	19
Kirton	11	↓	12	14	54	136	58
Broom's Barn (nr Bury St Edmunds)	8	↓	4	57	67	207	107
Wellesbourne	10	↓	32	18	71	152	62
Hereford	44	↓	27	10	104	131	37
Rothamsted (Harpenden)	10	↓	15	14	30	149	48
Writtle	12	↓	8	22	52	358	90
Silwood Park (nr Ascot)	16	↑	8	30	35	125	82
Wye	7	↑	9	26	24	163	108
Starcross (nr Exeter)	29	↓	30	24	132	440	142

The bird cherry–oat aphid was caught at all sites this bulletin week. Numbers were down on last week at eight sites but still high at Preston (231). Numbers are noticeably above the 10-yr mean at Preston and other northern sites, but not so further south.

Grain aphid (<i>Sitobion avenae</i>)	Bulletin Week Totals		29/05-04/06		Accumulated until		04/06
	2017	Compared to last Bulletin week	2016	10-year average 2007-16	2017	2016	10-year average 2007-16
Dundee	/		4	2	2	7	5
Gogarbank (Edinburgh)	25	↑	2	3	46	2	4
Newcastle	0	↓	0	2	6	5	7
York	36	↑	1	/	44	7	/
Preston	17	↓	2	8	125	3	12
Kirton	0	↓	0	1	9	9	7
Broom's Barn (nr Bury St Edmunds)	8	↑	3	3	10	19	8
Wellesbourne	9	↑	3	7	10	28	27
Hereford	1	↓	1	4	16	12	11
Rothamsted (Harpenden)	0	↓	1	2	8	15	6
Writtle	0		0	2	0	19	8
Silwood Park (nr Ascot)	1	↑	0	4	5	15	12
Wye	2	↑	0	3	4	39	12
Starcross (nr Exeter)	2	↑	0	6	30	28	23

The grain aphid was caught at nine sites this week, with highest numbers at Edinburgh (25), York (36) and Preston (17). Accumulated numbers are highest at Edinburgh and Preston compared to the 10-yr means.

Peach–potato aphid (<i>Myzus persicae</i>)	Bulletin Week Totals		29/05-04/06		Accumulated until		04/06
	2017	Compared to last Bulletin week	2016	10-year average 2007-16	2017	2016	10-year average 2007-16
Dundee	/		1	0	1	1	0
Gogarbank (Edinburgh)	18	↑	0	1	26	0	1
Newcastle	11	↑	1	2	11	1	3
York	76	↑	2	/	124	14	/
Preston	2	↑	2	4	4	2	5
Kirton	167	↑	2	7	214	28	21
Broom's Barn (nr Bury St Edmunds)	494	↑	8	46	988	56	150
Wellesbourne	344	↑	120	50	627	163	112
Hereford	57	↓	33	11	171	58	28
Rothamsted (Harpenden)	84	↑	42	38	145	108	84
Writtle	16	↓	43	61	53	198	159
Silwood Park (nr Ascot)	8	↑	14	6	15	27	19
Wye	33	↓	6	14	95	27	63
Starcross (nr Exeter)	10	↓	5	9	63	42	40

The peach–potato aphid was caught at all sites this week, with numbers increasing at nine sites and highest numbers at Broom's Barn (494) and Wellesbourne (344). Accumulated numbers are above the 10-yr means across central England.

Potato aphid (<i>Macrosiphum euphorbiae</i>)	Bulletin Week Totals		29/05-04/06		Accumulated until		04/06
	2017	Compared to last Bulletin week	2016	10-year average 2007-16	2017	2016	10-year average 2007-16
Dundee	/		4	1	5	5	3
Gogarbank (Edinburgh)	14	↓	4	4	47	4	7
Newcastle	8	↑	2	1	23	3	5
York	8	↓	1	/	31	5	/
Preston	8	↓	4	4	27	13	8
Kirton	10	↓	2	1	56	10	6
Broom's Barn (nr Bury St Edmunds)	8	↑	0	1	15	0	6
Wellesbourne	8	↓	4	3	50	7	10
Hereford	14	↓	2	5	79	8	9
Rothamsted (Harpenden)	4	↑	0	2	8	6	6
Writtle	22	↑	0	4	49	12	13
Silwood Park (nr Ascot)	0	↓	3	3	8	11	10
Wye	0	↓	0	1	18	2	3
Starcross (nr Exeter)	6	↓	0	4	28	2	15

The potato aphid was caught at eleven sites this bulletin week, with numbers decreasing at nine sites. Numbers are above the 10-yr means for this time of year at many sites.

Cabbage aphid <i>(Brevicoryne brassicae)</i>	Bulletin Week Totals		29/05-04/06		Accumulated until		04/06
	2017	Compared to last Bulletin week	2016	10-year average 2007-16	2017	2016	10-year average 2007-16
Dundee	/		0	0	0	0	0
Gogarbank (Edinburgh)	5	↓	0	0	13	0	0
Newcastle	1	↑	0	1	1	0	1
York	0		0	/	0	2	/
Preston	8	↑	0	4	8	0	6
Kirton	6	↑	1	2	6	46	19
Broom's Barn (nr Bury St Edmunds)	44	↓	2	4	97	16	16
Wellesbourne	2	↓	60	32	32	128	80
Hereford	22	↓	21	10	59	60	44
Rothamsted (Harpenden)	0		0	3	0	2	9
Writtle	2	↓	2	24	9	27	68
Silwood Park (nr Ascot)	0	↓	2	1	4	6	13
Wye	0		5	4	0	19	14
Starcross (nr Exeter)	14	↓	4	9	46	8	32

The mealy cabbage aphid was caught at nine sites this week, with highest numbers at Broom's Barn (44), Hereford (22) and Starcross (14).

Willow-carrot aphid <i>(Cavariella aegopodii)</i>	Bulletin Week Totals		29/05-04/06		Accumulated until		04/06
	2017	Compared to last Bulletin week	2016	10-year average 2007-16	2017	2016	10-year average 2007-16
Dundee	/		88	36	4	100	49
Gogarbank (Edinburgh)	32	↑	23	20	62	25	25
Newcastle	20	↓	0	17	71	1	25
York	136	↓	49	/	685	130	/
Preston	50	↓	118	151	427	240	349
Kirton	255	↓	32	99	953	338	398
Broom's Barn (nr Bury St Edmunds)	69	↓	17	119	564	176	573
Wellesbourne	131	↓	42	143	890	133	257
Hereford	98	↓	28	121	805	49	285
Rothamsted (Harpenden)	18	↓	6	85	128	115	298
Writtle	10	↓	20	257	244	335	806
Silwood Park (nr Ascot)	6	↓	8	36	111	84	191
Wye	16	↓	36	94	154	177	304
Starcross (nr Exeter)	14	↓	20	30	143	104	93

The willow-carrot aphid was caught at all sites this week, but numbers have decreased at all of them except Edinburgh. The highest numbers were at York (136), Kirton (255) and Wellesbourne (131).

Pea aphid (<i>Acyrtosiphon pisum</i>)	Bulletin Week Totals		29/05-04/06		Accumulated until		04/06
	2017	Compared to last Bulletin week	2016	10-year average 2007-16	2017	2016	10-year average 2007-16
Dundee	/		0	0	0	0	0
Gogarbank (Edinburgh)	1		0	1	2	0	1
Newcastle	0		0	0	0	0	0
York	0		0	/	1	5	/
Preston	4	↑	0	1	5	2	2
Kirton	12	↑	1	1	16	9	5
Broom's Barn (nr Bury St Edmunds)	4	↓	0	3	21	24	11
Wellesbourne	2	↑	11	5	2	53	17
Hereford	12	↑	10	5	24	70	15
Rothamsted (Harpenden)	1	↓	6	8	4	80	22
Writtle	22	↑	17	11	30	76	25
Silwood Park (nr Ascot)	2	↓	6	6	9	44	18
Wye	4	↓	2	2	13	22	9
Starcross (nr Exeter)	4	↓	3	8	15	23	22

The pea aphid was caught in low numbers at eleven sites this week, with highest numbers at Writtle (22).

Black bean aphid (<i>Aphis fabae</i>)	Bulletin Week Totals		29/05-04/06		Accumulated until		04/06
	2017	Compared to last Bulletin week	2016	10-year average 2007-16	2017	2016	10-year average 2007-16
Dundee	/		2	1	0	2	2
Gogarbank (Edinburgh)	2	↓	0	1	7	0	1
Newcastle	0		0	0	0	0	0
York	0	↓	0	/	7	0	/
Preston	0		0	1	2	1	1
Kirton	0		1	0	0	2	1
Broom's Barn (nr Bury St Edmunds)	21	↑	0	2	29	1	6
Wellesbourne	0	↓	0	2	4	0	4
Hereford	0		0	1	3	0	2
Rothamsted (Harpenden)	9	↑	2	3	14	2	5
Writtle	8	↑	0	2	26	0	6
Silwood Park (nr Ascot)	3	↑	0	2	5	0	7
Wye	5	↓	0	1	16	0	3
Starcross (nr Exeter)	4	↓	5	4	27	15	10

The black bean aphid was caught in low numbers at seven sites this week, with highest numbers at Broom's Barn (21). Accumulated numbers are above the 10-yr means for this time of year at Broom's Barn and most of southern England.

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](#)

AHDB Horticulture: [Click here](#)

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