

23rd 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 – The weather pattern returned to warm and settled after the wet and windy interlude, with it came a revived flush of aphid flight activity. This might be short lived as the subsequent heatwave may be too hot for some to handle, since many aphid species struggle to fly above 25°C. There are field reports of lots of parasitoids about, but fewer aphid predators at present. Monitoring crops is strongly advised as on the ground aphids will be multiplying.

CEREALS

- Numbers of all three cereal aphids in the **ST** have increased a little this week and are highest in northern England and Scotland.
- Field reports confirm that cereal aphid numbers in crops are easy to find in the north and west, but have failed to reach thresholds yet. The threshold for control against direct feeding damage is 66% of tillers infested from GS61 to two weeks before the end of grain filling. Most damage occurs when grain aphids colonise the ears between GS 61-73. **Monitoring crops is advised.**

POTATOES

- **Virus pressure remains high in northern England and the Midlands but medium for Scotland, East Anglia and the south west. SASA report that the cumulative totals of aphids known to vector potato viruses in the Scottish ST to June 11th is the highest recorded in the last 10 years.**
- The peach–potato aphid (*Myzus persicae*) numbers increased this week compared to the previous week, with highest numbers in the **ST** across eastern England, as well as high numbers at some **YWT** sites in northern and central regions.
- Numbers of cereal aphids, non-colonising vectors of PVY and PVA, have started to increase this week.
- Black bean aphid numbers have increased across central and southern **ST** this week. 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. 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*) numbers increased this week, with highest numbers in the **ST** across eastern England. Tests continue show that 60-70% of these migrants are carrying Turnip yellows virus.
- Field reports suggest peach–potato aphids are now leaving maturing OSR to find alternative hosts.
- The mealy cabbage aphid was caught in both **ST** and **YWT** in low numbers. Field reports indicate numbers are below the threshold of >4% plants infested before petal fall in spring OSR.
- No currant-lettuce aphids (*Nasonovia ribisnigri*) were caught in the **ST** this week.

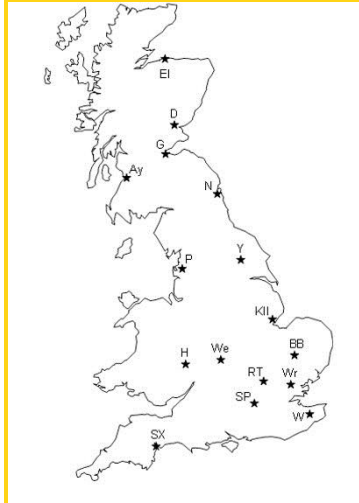
CARROTS and PARSNIPS

- Numbers of the willow–carrot aphid and the parsnip aphids have gone back up this week:

	N	Y	P	K	BB	We	H	RT	Wr	SP	W	SX
<i>C.aegopodii</i>	16	23	61	40	24	19	11	7	5	0	0	11
<i>C.pastinaceae</i>	3	36	0	90	123	53	46	14	42	0	8	0
<i>C.theobaldi</i>	2	0	4	20	10	7	3	6	1	0	0	3

PEAS and BEANS

- The pea aphid was caught at eleven **ST** sites this week, with numbers increasing at eight sites.
- 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, with highest numbers in central and south western England. 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 12: 12/6 – 18/6.

‘*’ 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		12/06-18/06		Accumulated until		18/06
	2017	Compared to last Bulletin week	2016	10-year average 2007-16	2017	2016	10-year average 2007-16
Dundee	/		8	3	14	10	5
Gogarbank (Edinburgh)	9	↓	5	6	199	18	15
Newcastle	*9	↑	7	6	38	16	14
York	*28	↑	4	/	90	23	/
Preston	*14	↑	6	41	153	59	74
Kirton	*39	↑	4	38	140	19	61
Broom’s Barn (Bury St Edmunds)	33	↑	3	37	98	29	97
Wellesbourne	*30	↑	5	30	62	45	56
Hereford	*25	↑	4	26	79	33	56
Rothamsted (Harpenden)	29	↑	2	24	47	37	49
Writtle	25	↑	0	31	68	42	68
Silwood Park (nr Ascot)	*0		0	15	18	18	43
Wye	*37	↑	3	7	44	10	13
Starcross (nr Exeter)	*6	↓	4	79	119	57	172

The rose-grain aphid was caught at all sites except Silwood, increasing a little at ten sites.

Bird cherry–oat aphid (<i>Rhopalosiphum padi</i>)	Bulletin Week Totals		12/06-18/06		Accumulated until		18/06
	2017	Compared to last Bulletin week	2016	10-year average 2007-16	2017	2016	10-year average 2007-16
Dundee	/		89	26	7	109	42
Gogarbank (Edinburgh)	10	↓	15	12	120	24	27
Newcastle	*6		6	30	67	15	57
York	*0	↓	4	/	62	49	/
Preston	*110	↑	16	10	784	61	33
Kirton	*8	↑	20	87	67	178	217
Broom's Barn (nr Bury St Edmunds)	9	↑	7	41	76	253	199
Wellesbourne	*20	↑	18	16	100	249	108
Hereford	*0	↓	8	17	109	168	69
Rothamsted (Harpenden)	2	↑	1	13	33	184	81
Writtle	1		14	23	55	410	130
Silwood Park (nr Ascot)	*0		9	11	35	143	125
Wye	*65	↑	5	12	91	181	132
Starcross (nr Exeter)	*17	↑	22	27	153	492	201

The bird cherry–oat aphid was caught at ten sites this bulletin week. Numbers were highest at Preston (110) and Wye (65). Accumulated numbers are noticeably above the 10-yr mean at Preston and Edinburgh, but this is not so further south.

Grain aphid (<i>Sitobion avenae</i>)	Bulletin Week Totals		12/06-18/06		Accumulated until		18/06
	2017	Compared to last Bulletin week	2016	10-year average 2007-16	2017	2016	10-year average 2007-16
Dundee	/		5	7	4	13	14
Gogarbank (Edinburgh)	41	↑	6	3	101	16	10
Newcastle	*2	↑	3	3	9	10	12
York	*47	↑	4	/	109	19	/
Preston	*0	↓	2	6	146	19	25
Kirton	*6	↑	1	4	15	11	14
Broom's Barn (nr Bury St Edmunds)	4	↑	0	5	14	22	15
Wellesbourne	*12	↑	6	9	22	43	42
Hereford	*11	↑	6	8	27	20	23
Rothamsted (Harpenden)	0	↓	1	5	9	18	14
Writtle	10	↑	2	8	11	21	18
Silwood Park (nr Ascot)	*0		3	18	5	21	35
Wye	*0		1	3	4	40	16
Starcross (nr Exeter)	*8	↑	5	14	41	39	48

The grain aphid was caught at nine sites this week, with highest numbers at Edinburgh (41) and York (47). Accumulated numbers are highest at Edinburgh and Preston compared to the 10-yr means.

Peach–potato aphid (<i>Myzus persicae</i>)	Bulletin Week Totals		12/06-18/06		Accumulated until		18/06
	2017	Compared to last Bulletin week	2016	10-year average 2007-16	2017	2016	10-year average 2007-16
Dundee	/		0	1	2	1	2
Gogarbank (Edinburgh)	22	↑	0	1	57	0	3
Newcastle	*42	↑	3	1	57	6	6
York	*196	↑	29	/	402	182	/
Preston	*11	↑	52	9	15	114	28
Kirton	*268	↑	110	33	495	166	71
Broom's Barn (nr Bury St Edmunds)	162	↑	110	98	1158	356	327
Wellesbourne	*78	↑	394	169	716	1536	479
Hereford	*48	↑	103	34	236	532	116
Rothamsted (Harpenden)	62	↑	40	45	218	280	158
Writtle	54	↑	42	93	111	393	308
Silwood Park (nr Ascot)	*0		7	10	15	52	41
Wye	*28	↑	16	27	137	64	107
Starcross (nr Exeter)	*14		0	11	91	44	60

The peach–potato aphid was caught at twelve sites this week, with numbers increasing at eleven sites and highest numbers at York (196), Kirton (268) and Broom's Barn (162). Accumulated numbers are above the 10-yr means across central England.

Potato aphid (<i>Macrosiphum euphorbiae</i>)	Bulletin Week Totals		12/06-18/06		Accumulated until		18/06
	2017	Compared to last Bulletin week	2016	10-year average 2007-16	2017	2016	10-year average 2007-16
Dundee	/		1	1	7	8	6
Gogarbank (Edinburgh)	1	↓	3	3	56	11	16
Newcastle	*2	↓	0	1	29	3	8
York	*0		0	0	31	5	5
Preston	*0		2	3	27	23	15
Kirton	*1	↓	3	4	62	15	11
Broom's Barn (nr Bury St Edmunds)	0		0	2	15	4	10
Wellesbourne	*1	↑	9	5	51	17	18
Hereford	*15	↑	6	6	95	25	20
Rothamsted (Harpenden)	0		2	3	8	14	10
Writtle	2	↑	0	7	52	16	23
Silwood Park (nr Ascot)	*0		0	2	8	15	14
Wye	*0	↓	0	3	19	2	8
Starcross (nr Exeter)	*4		4	7	37	8	28

The potato aphid was caught at seven sites this bulletin week, with highest numbers at Hereford (15) but low elsewhere. Accumulated numbers are above the 10-yr means for this time of year at many sites.

Cabbage aphid (<i>Brevicoryne brassicae</i>)	Bulletin Week Totals		12/06-18/06		Accumulated until		18/06
	2017	Compared to last Bulletin week	2016	10-year average 2007-16	2017	2016	10-year average 2007-16
Dundee	/		0	0	2	0	0
Gogarbank (Edinburgh)	3	↑	0	0	16	1	2
Newcastle	*5	↑	1	1	7	1	5
York	*19	↑	1	/	19	38	/
Preston	*0		4	1	8	90	20
Kirton	*22	↑	10	4	28	68	29
Broom's Barn (nr Bury St Edmunds)	8	↑	0	3	105	34	24
Wellesbourne	*11	↑	236	138	44	1263	373
Hereford	*0		84	25	59	977	164
Rothamsted (Harpenden)	0		0	1	0	7	11
Writtle	7	↑	2	14	16	41	92
Silwood Park (nr Ascot)	*0		0	2	4	9	19
Wye	*0	↓	0	4	1	21	19
Starcross (nr Exeter)	*4	↑	0	38	53	9	77

The mealy cabbage aphid was caught at eight sites this week. Although there were small increases from last week accumulated numbers remain at or below the 10-yr means.

Willow-carrot aphid (<i>Cavariella aegopodii</i>)	Bulletin Week Totals		12/06-18/06		Accumulated until		18/06
	2017	Compared to last Bulletin week	2016	10-year average 2007-16	2017	2016	10-year average 2007-16
Dundee	/		39	9	14	148	72
Gogarbank (Edinburgh)	2	↓	58	19	69	132	77
Newcastle	*16	↑	5	14	87	9	58
York	*23	↑	136	/	710	407	/
Preston	*61	↑	65	57	516	1037	546
Kirton	*40	↑	122	80	1001	658	543
Broom's Barn (nr Bury St Edmunds)	24	↑	61	75	590	428	735
Wellesbourne	*19	↑	64	87	912	417	444
Hereford	*11	↓	33	27	830	149	350
Rothamsted (Harpenden)	7	↑	19	59	136	225	401
Writtle	5	↑	21	46	250	470	916
Silwood Park (nr Ascot)	*0	↓	8	55	113	123	274
Wye	*0		18	24	154	230	363
Starcross (nr Exeter)	*11	↑	12	19	160	127	130

The willow-carrot aphid was caught at eleven sites this week. Numbers have increased slightly at nine sites. The highest numbers were at Preston (61).

Pea aphid (<i>Acyrtosiphon pisum</i>)	Bulletin Week Totals		12/06-18/06		Accumulated until		18/06
	2017	Compared to last Bulletin week	2016	10-year average 2007-16	2017	2016	10-year average 2007-16
Dundee			0	0	0	0	1
Gogarbank (Edinburgh)	1	↑	0	1	3	1	3
Newcastle	*1		4	1	2	5	2
York	*0		2	/	1	8	/
Preston	*5	↑	0	1	10	6	4
Kirton	*18	↑	28	13	34	53	21
Broom's Barn (nr Bury St Edmunds)	19	↑	16	18	41	73	43
Wellesbourne	*4	↑	30	15	6	170	49
Hereford	*1	↓	10	8	28	101	29
Rothamsted (Harpenden)	26	↑	8	14	31	106	45
Writtle	32	↑	13	14	65	106	52
Silwood Park (nr Ascot)	*0		3	6	9	50	35
Wye	*28	↑	1	7	41	29	19
Starcross (nr Exeter)	*1	↓	3	14	19	29	43

The pea aphid was caught at eleven sites this week, with numbers increasing at eight sites.

Black bean aphid (<i>Aphis fabae</i>)	Bulletin Week Totals		12/06-18/06		Accumulated until		18/06
	2017	Compared to last Bulletin week	2016	10-year average 2007-16	2017	2016	10-year average 2007-16
Dundee	/		0	0	0	2	2
Gogarbank (Edinburgh)	2	↑	0	0	9	3	2
Newcastle	*0		0	0	0	0	1
York	*0	↓	0	/	8	0	/
Preston	*19	↑	0	0	21	1	2
Kirton	*7	↑	5	2	7	8	3
Broom's Barn (nr Bury St Edmunds)	48	↑	0	6	97	1	13
Wellesbourne	*65	↑	2	9	72	2	15
Hereford	*0		0	12	3	0	18
Rothamsted (Harpenden)	44	↑	0	12	61	3	21
Writtle	41	↑	0	12	74	0	21
Silwood Park (nr Ascot)	*1	↑	1	5	6	9	18
Wye	*0	↓	1	3	17	1	9
Starcross (nr Exeter)	*120	↑	84	38	149	176	64

The black bean aphid was caught at nine sites this week, with highest numbers at Starcross (120) and central England. 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](#)

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