

27 July 2018

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

- Cereal and OSR harvest is underway in Britain. Monitoring of vulnerable crops (particularly potatoes) is still advised. Aphid abundance has increased by 50% this week in the ST. However, much of this increase can be attributed to an increase in populations in Northern Britain. Many of the species reported are actually decreasing in much of the south of the country, in line with the harvest. The early harvest, together with the extremely dry weather conditions, may possibly result in the lack of a green bridge for virus transmission this year, particularly in the South East of Britain.

CEREALS

- The overall numbers of cereal aphids have increased in the ST this week. Numbers of the bird cherry–oat aphid (5327) and rose–grain aphid (3760) at Dundee were the highest recorded for this bulletin week, in eighteen years and eight years respectively. However, the risk to crops is passing for this season.

POTATOES

- Virus pressure has increased in Angus & Perthshire, the Borders, Northern England and the Midlands in the YWT. **Virus pressure is four times higher than the overall average for previous years in Grampian and thirteen times the average for Northern England.**
- The peach–potato aphid was recorded from all ST sites this week, with numbers increasing at five but decreasing towards the south. They were also found from YWT in the Grampian region and all regions in England, apart from the South West. Over two thousand individuals were recorded from traps in Northern England.
- The peach–potato aphid was recorded from all sites this week, with numbers increasing at five but decreasing towards the south. They were also found in all regions across Britain, apart from the North of Scotland, East Anglia and the South-West.
- With regards to non-colonising vectors of PVY and PVA; the total numbers of cereal aphids have increased this week in the ST. However, leaf curling plum aphids and willow-carrot aphid numbers have continued to decrease in relation to last week.
- The black bean aphid was caught at twelve ST sites this week, increasing in number at six. The highest number recorded was from Dundee (171). They were also recorded across Britain in the YWT apart from North Scotland and the Borders. This species transmits PVA very efficiently, further regional information on potato virus vectors and the FERA yellow water-pan trap (YWT) network can be accessed here: <http://aphmon.fera.defra.gov.uk/>

OILSEED RAPE, FIELD BRASSICAS and LEAFY VEGETABLES

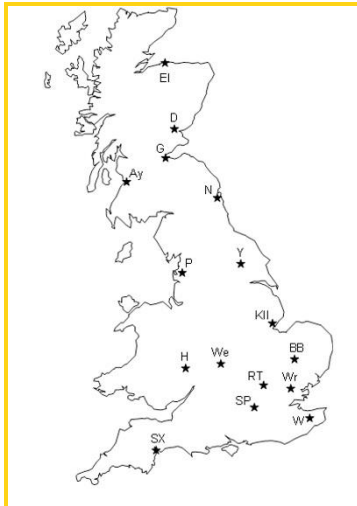
- The peach–potato aphid was recorded from all ST sites this week, with numbers increasing at five but decreasing towards the south. They were also found from YWT in the Grampian region and all regions in England apart from the South-West. Over two thousand individuals were recorded from traps in Northern England.
- The mealy cabbage aphid was recorded from all ST sites this week and increasing at six, but decreasing towards the south of the country. The highest number recorded was from York (158).
- Currant-lettuce aphids were recorded from three ST this week, each site recorded more than single individuals.

CARROTS

- The willow–carrot aphid was caught at six ST sites in single figures this week, with numbers increasing at only Broom's Barn and Wye.

PEAS and BEANS

- The pea aphid was recorded from all ST sites this week, apart from Hereford, and increased in number at seven, particularly towards the north of Britain. There was a hotspot at Kirton (672). Combining peas should be sprayed when around 20% of plants are infested and vining peas when 15% are infested. Pea aphids can transmit viruses even with low numbers present.
- The black bean aphid was caught at twelve ST sites this week, increasing in number at six. The highest number recorded was from Dundee (171). They were also recorded across Britain in the YWT, apart from North Scotland and the Borders. The threshold for black bean aphid in field and broad beans is 10% colonisation. 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 **15: 16/7 – 22/7**.

‘*’ 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		16/07-22/07		Accumulated until 22/07		
	2018	Compared to last Bulletin week	2017	10-year average 2008-17	2018	2017	10-year average 2008-17
Dundee	3760	↑	0	1079	4922	47	2049
Gogarbank (Edinburgh)	119	↑	2	84	286	301	464
Newcastle	21	↑	0	41	56	59	129
York	36	↓	5	/	215	164	/
Preston	9	↓	4	1	142	209	310
Kirton	126	↑	2	137	243	241	1220
Broom’s Barn (Bury St Edmunds)	14	↓	6	58	353	201	963
Wellesbourne	4	↓	2	17	254	284	290
Hereford	2	↓	7	35	181	174	496
Rothamsted (Harpenden)	4	↓	3	23	198	90	583
Writtle	5	↓	3	35	354	87	560
Silwood Park (nr Ascot)	0	↓	1	2	130	33	133
Wye	2	↓	1	16	137	92	161
Starcross (nr Exeter)	1	↓	8	7	87	166	296

The rose–grain aphid was recorded from all sites apart from Silwood. Ten sites, predominantly across the south of Britain, saw decreases. There was also a hotspot at Dundee (3760).

Bird cherry–oat aphid (<i>Rhopalosiphum padi</i>)	Bulletin Week Totals		16/07-22/07		Accumulated until		22/07
	2018	Compared to last Bulletin week	2017	10-year average 2008-17	2018	2017	10-year average 2008-17
Dundee	5327	↑	2	284	8320	59	987
Gogarbank (Edinburgh)	362	↓	24	51	1347	189	680
Newcastle	47	↓	14	33	304	109	311
York	26	↓	40	/	246	163	/
Preston	5	↓	6	15	70	895	186
Kirton	44	↓	14	40	197	104	685
Broom's Barn (nr Bury St Edmunds)	47	↑	22	39	183	130	739
Wellesbourne	32	↑	27	60	234	184	233
Hereford	0	↓	6	57	24	132	270
Rothamsted (Harpenden)	7	↓	4	47	110	50	370
Writtle	37	↑	14	39	179	115	453
Silwood Park (nr Ascot)	10	↓	7	27	126	70	206
Wye	6	↓	16	54	84	127	266
Starcross (nr Exeter)	5	↓	41	122	320	221	456

The bird cherry–oat aphid was recorded from all sites but Hereford this bulletin week, numbers increased at only four. There was a hotspot at Dundee (5327).

Grain aphid (<i>Sitobion avenae</i>)	Bulletin Week Totals		16/07-22/07		Accumulated until		22/07
	2018	Compared to last Bulletin week	2017	10-year average 2008-17	2018	2017	10-year average 2008-17
Dundee	1142	↑	2	129	1531	31	283
Gogarbank (Edinburgh)	77	↑	9	37	191	127	195
Newcastle	95	↑	7	22	136	36	76
York	506	↑	23	/	1060	362	/
Preston	58	↓	8	13	260	249	177
Kirton	300	↑	10	133	455	61	888
Broom's Barn (nr Bury St Edmunds)	95	↑	10	87	546	105	778
Wellesbourne	36	↓	15	115	202	86	417
Hereford	7	↓	4	97	173	85	496
Rothamsted (Harpenden)	35	↓	18	107	240	97	896
Writtle	142	↓	14	93	600	153	792
Silwood Park (nr Ascot)	16	↓	4	23	226	55	215
Wye	30	↓	13	47	129	98	155
Starcross (nr Exeter)	9	↓	6	36	123	148	244

The grain aphid was found at all sites this week, increasing at six, particularly in the north but decreasing in the south. There was a hotspot at Dundee (1142).

Peach–potato aphid (<i>Myzus persicae</i>)	Bulletin Week Totals		16/07-22/07		Accumulated until		22/07
	2018	Compared to last Bulletin week	2017	10-year average 2008-17	2018	2017	10-year average 2008-17
Dundee	18	↑	3	3	26	87	20
Gogarbank (Edinburgh)	11	↑	1	1	13	93	23
Newcastle	19	↓	6	2	49	262	43
York	230	↑	0	/	412	867	/
Preston	9	↓	0	1	157	63	126
Kirton	386	↑	0	20	597	739	724
Broom's Barn (nr Bury St Edmunds)	120	↑	0	37	1126	1154	914
Wellesbourne	6	↓	6	6	983	930	757
Hereford	5	↓	1	13	728	464	253
Rothamsted (Harpenden)	8	↓	0	75	556	275	489
Writtle	20	↓	0	28	821	128	747
Silwood Park (nr Ascot)	2	↓	0	1	119	37	67
Wye	3	↓	3	8	114	213	219
Starcross (nr Exeter)	2	↓	1	11	156	135	175

The peach–potato aphid was recorded from all sites this week, with numbers increasing at five but decreasing towards the south.

Potato aphid (<i>Macrosiphum euphorbiae</i>)	Bulletin Week Totals		16/07-22/07		Accumulated until		22/07
	2018	Compared to last Bulletin week	2017	10-year average 2008-17	2018	2017	10-year average 2008-17
Dundee	67	↑	1	6	115	25	20
Gogarbank (Edinburgh)	12	↓	0	3	54	72	49
Newcastle	5	↑	0	2	10	33	18
York	6	↑	0	/	15	34	/
Preston	2	↑	0	0	13	30	29
Kirton	2	↑	0	2	11	62	59
Broom's Barn (nr Bury St Edmunds)	0	↓	1	1	3	22	33
Wellesbourne	2	↓	0	3	7	52	44
Hereford	0	↓	0	8	8	114	92
Rothamsted (Harpenden)	1	↓	0	1	16	17	22
Writtle	0	↓	0	1	16	58	41
Silwood Park (nr Ascot)	0		0	1	5	6	18
Wye	2	↑	0	1	4	16	13
Starcross (nr Exeter)	0		0	0	48	36	38

The potato aphid was caught at nine sites this bulletin week, with numbers increasing at six particularly towards the north. There was a hotspot at Dundee (67).

Cabbage aphid (<i>Brevicoryne brassicae</i>)	Bulletin Week Totals 16/07-22/07				Accumulated until 22/07		
	2018	Compared to last Bulletin week	2017	10-year average 2008-17	2018	2017	10-year average 2008-17
Dundee	3	↑	0	0	4	6	1
Gogarbank (Edinburgh)	1	↑	0	0	2	36	6
Newcastle	10	↑	0	0	10	18	7
York	158	↑	4	/	270	33	/
Preston	23	↓	0	0	51	22	27
Kirton	76	↑	0	4	127	52	166
Broom's Barn (nr Bury St Edmunds)	64	↑	0	14	308	113	126
Wellesbourne	123	↓	2	23	525	82	961
Hereford	19	↓	11	18	756	164	276
Rothamsted (Harpenden)	10	↓	0	13	196	4	66
Writtle	40	↓	2	23	1440	23	174
Silwood Park (nr Ascot)	5	↓	0	5	114	17	43
Wye	20	↓	1	8	89	46	70
Starcross (nr Exeter)	28	↓	1	22	189	84	180

The mealy cabbage aphid was recorded from all sites this week and increasing at six, but decreasing towards the south of the country. The highest number recorded was from York (158). There was also a first arrival at Newcastle (16/7).

Willow-carrot aphid (<i>Cavariella aegopodii</i>)	Bulletin Week Totals 16/07-22/07				Accumulated until 22/07		
	2018	Compared to last Bulletin week	2017	10-year average 2008-17	2018	2017	10-year average 2008-17
Dundee	6		0	2	78	113	90
Gogarbank (Edinburgh)	2		1	2	57	187	122
Newcastle	0		1	2	17	166	108
York	0	↓	0	/	181	743	/
Preston	2		0	1	85	608	668
Kirton	2		0	2	288	930	862
Broom's Barn (nr Bury St Edmunds)	4	↑	0	2	1092	577	887
Wellesbourne	0	↓	0	0	205	774	625
Hereford	0		0	1	52	841	491
Rothamsted (Harpenden)	0	↓	0	2	136	120	478
Writtle	0		0	2	685	213	991
Silwood Park (nr Ascot)	0	↓	0	1	169	101	303
Wye	4	↑	0	1	189	135	425
Starcross (nr Exeter)	0	↓	0	2	137	160	178

The willow-carrot aphid was caught at six sites in single figures this week, with numbers increasing at only Broom's Barn and Wye. The highest number found was at Dundee (6).

Pea aphid (<i>Acyrtosiphon pisum</i>)	Bulletin Week Totals		16/07-22/07		Accumulated until		22/07
	2018	Compared to last Bulletin week	2017	10-year average 2008-17	2018	2017	10-year average 2008-17
Dundee	133	↑	0	13	258	8	27
Gogarbank (Edinburgh)	19	↑	0	3	34	4	26
Newcastle	9	↑	0	6	22	9	15
York	72	↑	0	/	143	9	/
Preston	1	↓	0	0	38	17	27
Kirton	672	↑	5	199	856	134	571
Broom's Barn (nr Bury St Edmunds)	82	↑	10	91	312	144	432
Wellesbourne	7	↓	13	72	263	157	295
Hereford	0	↓	3	19	104	45	100
Rothamsted (Harpenden)	17	↓	7	39	322	136	277
Writtle	77	↓	16	82	461	309	489
Silwood Park (nr Ascot)	12	↓	9	11	140	43	71
Wye	51	↑	22	41	172	145	153
Starcross (nr Exeter)	1	↓	10	9	47	34	86

The pea aphid was recorded from all sites this week apart from Hereford and increased in number at seven particularly towards the north of Britain. There was a hotspot at Kirton (672).

Black bean aphid (<i>Aphis fabae</i>)	Bulletin Week Totals		16/07-22/07		Accumulated until		22/07
	2018	Compared to last Bulletin week	2017	10-year average 2008-17	2018	2017	10-year average 2008-17
Dundee	171	↑	0	11	223	6	21
Gogarbank (Edinburgh)	5	↓	16	4	15	44	13
Newcastle	1	↑	5	3	1	14	12
York	20	↓	4	/	45	107	/
Preston	4		0	3	16	63	27
Kirton	46	↑	2	9	90	39	173
Broom's Barn (nr Bury St Edmunds)	28	↑	0	9	103	107	273
Wellesbourne	2	↓	4	15	45	118	209
Hereford	0	↓	0	23	31	18	128
Rothamsted (Harpenden)	8	↑	2	27	87	113	361
Writtle	12	↓	0	9	124	86	312
Silwood Park (nr Ascot)	4	↓	0	14	149	13	85
Wye	8	↑	0	26	40	29	107
Starcross (nr Exeter)	0	↓	0	3	55	234	125

The black bean aphid was caught at twelve sites this week, increasing in number at six. The highest number recorded was from Dundee (171). There was also a first arrival at Newcastle (16/7).

Further information

Please send information on crop aphids to: alex.greenslade@rothamsted.ac.uk

AHDB Cereals and Oilseeds: [Click here](#)

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