

13 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 – Aphid abundance has increased to more than three times that of last week in the ST network. It should be noted, however, that the accumulated numbers of several species are still at or below their respective 10-year means at many sites. Harvest is early this year. **Monitoring all vulnerable crops is advised.**

CEREALS

- The numbers of the three main cereal aphids in the STs have increased yet again this week. However, the accumulated numbers are still mostly below the 10-year mean for this time of year.
- No field reports have been received this week. The thresholds to justify insecticide sprays for direct feeding damage is for 50% of tillers to be infested before GS61 increasing to 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 GS61–73.
- **Monitoring vulnerable crops is advised.**

POTATOES

- The peach–potato aphid was caught at 13 ST sites across Britain this week, with numbers increasing at 12. There was a hotspot at Broom’s Barn (746). They were also found in the Grampian region and across England in YWT, with the highest number recorded from one particular site in the Midlands.
- The potato aphid was caught at six ST sites in single figures this bulletin week, increasing in number at four. They were also found in all regions across Britain in the YWT.
- Virus pressure has increased across all regions sampled across Britain in the YWT. **Virus pressure is also five times higher than the overall average for previous years in the Midlands region and more than twice the average in the South West.**
- With regard to non-colonising vectors of PVY and PVA, the numbers of cereal aphids and leaf curling plum aphids have continued to increase this week in the ST. However, the willow-carrot aphid numbers have continued to decrease in relation to last week.
- The black bean aphid was caught at 11 ST sites this week but increasing in number at only five across Britain. They were also recorded across Britain in the YWT, 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

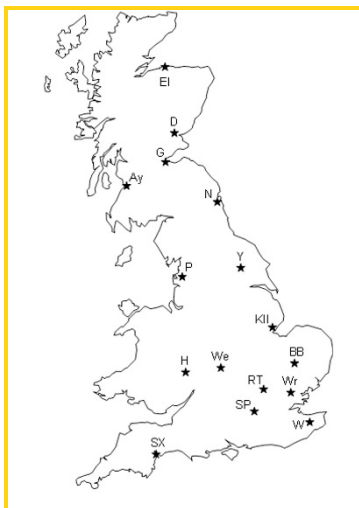
- The peach–potato aphid was caught at 13 ST sites this week, with numbers increasing at 12. There was a hotspot at Broom’s Barn (746). They were also found in the Grampian region and across England in YWT, with the highest number recorded from one particular site in the Midlands.
- The mealy cabbage aphid was recorded from 11 ST sites this week and increasing at 10. There was a hotspot at Writtle (839).
- Single currant-lettuce aphids were recorded from STs at Ayr and Hereford this week.

CARROTS

- The willow–carrot aphid was caught at eight ST sites this week, but with numbers increasing at only four. The highest number found was from Wellesbourne.

PEAS and BEANS

- The pea aphid was recorded from all 14 ST sites this week and increasing in number at 11. Particularly high numbers were recorded from Wellesbourne, Writtle, Broom’s Barn and Rothamsted.
- We have had field reports that colonies have started to build up in peas across the country this week. 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 11 ST sites this week but increasing in number at only five across Britain. We have had field reports that colonies have started to build up in beans across the country this week. 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 **13: 2/7 – 8/7**.

‘*’ 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		02/07-08/07		Accumulated until		08/07
	2018	Compared to last Bulletin week	2017	10-year average 2008-17	2018	2017	10-year average 2008-17
Dundee	541	↑	0	232	574	46	338
Gogarbank (Edinburgh)	64	↑	3	150	90	298	278
Newcastle	12	↑	3	13	15	59	63
York	36	↓	4	/	105	153	/
Preston	50	↑	4	11	108	203	293
Kirton	28	↑	18	380	65	236	774
Broom’s Barn (Bury St Edmunds)	196	↑	36	205	322	190	628
Wellesbourne	80	↑	84	78	195	264	251
Hereford	42	↑	23	111	106	157	319
Rothamsted (Harpenden)	78	↑	14	154	171	83	329
Writtle	159	↑	4	125	313	79	380
Silwood Park (nr Ascot)	19	↓	6	5	125	32	98
Wye	65	↑	28	54	100	85	103
Starcross (nr Exeter)	13	↑	18	20	81	148	272

The rose-grain aphid was recorded from all sites and increased in number at twelve this bulletin week. There was also a hotspot at Dundee (541).

Bird cherry–oat aphid (<i>Rhopalosiphum padi</i>)	Bulletin Week Totals		02/07-08/07		Accumulated until		08/07
	2018	Compared to last Bulletin week	2017	10-year average 2008-17	2018	2017	10-year average 2008-17
Dundee	1430	↑	3	200	1579	52	429
Gogarbank (Edinburgh)	347	↑	2	375	463	163	557
Newcastle	105	↑	3	60	115	93	240
York	101	↑	8	/	181	116	/
Preston	19	↑	20	10	47	883	158
Kirton	39	↑	12	159	108	81	565
Broom's Barn (nr Bury St Edmunds)	51	↑	16	137	114	91	614
Wellesbourne	129	↑	50	20	181	147	149
Hereford	5	↓	12	40	20	121	163
Rothamsted (Harpenden)	39	↑	8	73	86	45	257
Writtle	38	↓	6	96	110	87	360
Silwood Park (nr Ascot)	28	↓	4	14	103	56	161
Wye	26	↑	12	27	52	103	191
Starcross (nr Exeter)	62	↑	9	23	297	173	284

The bird cherry–oat aphid was recorded from all sites this bulletin week, with numbers increasing at eleven sites. There was a hotspot at Dundee (1430).

Grain aphid (<i>Sitobion avenae</i>)	Bulletin Week Totals		02/07-08/07		Accumulated until		08/07
	2018	Compared to last Bulletin week	2017	10-year average 2008-17	2018	2017	10-year average 2008-17
Dundee	70	↑	1	34	83	26	50
Gogarbank (Edinburgh)	28	↑	1	66	46	118	121
Newcastle	22	↑	7	10	28	26	38
York	64	↑	52	/	106	319	/
Preston	35	↓	14	73	91	233	145
Kirton	28	↑	10	350	53	34	462
Broom's Barn (nr Bury St Edmunds)	224	↑	36	205	389	73	479
Wellesbourne	50	↑	16	110	71	43	184
Hereford	12	↑	22	114	33	67	210
Rothamsted (Harpenden)	93	↑	44	314	125	61	449
Writtle	228	↑	54	266	276	77	490
Silwood Park (nr Ascot)	60	↑	9	8	105	45	88
Wye	34	↑	30	37	52	70	63
Starcross (nr Exeter)	48	↑	21	28	71	134	146

The grain aphid was caught at all fourteen sites this week increasing at all but Preston with hotspots at Writtle (228) and Broom's Barn (224).

Peach–potato aphid (<i>Myzus persicae</i>)	Bulletin Week Totals		02/07-08/07		Accumulated until		08/07
	2018	Compared to last Bulletin week	2017	10-year average 2008-17	2018	2017	10-year average 2008-17
Dundee	1	↑	21	5	2	74	15
Gogarbank (Edinburgh)	1	↑	5	4	1	92	20
Newcastle	0		28	4	0	252	38
York	42	↑	20	/	68	866	/
Preston	13	↓	12	61	58	63	123
Kirton	95	↑	22	181	125	738	618
Broom's Barn (nr Bury St Edmunds)	746	↑	20	99	927	1154	806
Wellesbourne	381	↑	80	33	648	898	737
Hereford	147	↑	40	32	278	449	228
Rothamsted (Harpenden)	352	↑	10	91	482	272	355
Writtle	446	↑	2	101	659	117	624
Silwood Park (nr Ascot)	43	↑	15	6	85	37	57
Wye	14	↑	26	15	79	199	199
Starcross (nr Exeter)	58	↑	6	14	150	134	158

The peach–potato aphid was caught at thirteen sites this week, with numbers increasing at twelve. There was a hotspot at Broom's Barn (746).

Potato aphid (<i>Macrosiphum euphorbiae</i>)	Bulletin Week Totals		02/07-08/07		Accumulated until		08/07
	2018	Compared to last Bulletin week	2017	10-year average 2008-17	2018	2017	10-year average 2008-17
Dundee	8	↑	0	2	16	24	11
Gogarbank (Edinburgh)	7	↑	1	11	28	72	43
Newcastle	1	↑	0	1	4	33	14
York	0		0	/	5	34	/
Preston	0	↓	0	4	11	30	28
Kirton	1		2	19	8	62	54
Broom's Barn (nr Bury St Edmunds)	0		0	2	2	21	28
Wellesbourne	0		0	2	1	52	38
Hereford	0		0	17	5	114	67
Rothamsted (Harpenden)	4	↑	4	3	13	17	18
Writtle	0		2	3	14	57	37
Silwood Park (nr Ascot)	0		0	1	5	6	17
Wye	0		2	2	2	16	11
Starcross (nr Exeter)	1		0	2	48	34	36

The potato aphid was caught at six sites in single figures this bulletin week, increasing in number at four.

Cabbage aphid (<i>Brevicoryne brassicae</i>)	Bulletin Week Totals		02/07-08/07		Accumulated until		08/07
	2018	Compared to last Bulletin week	2017	10-year average 2008-17	2018	2017	10-year average 2008-17
Dundee	0		1	0	0	6	1
Gogarbank (Edinburgh)	1	↑	2	0	1	36	6
Newcastle	0		1	0	0	18	7
York	8	↑	4	/	12	28	/
Preston	0	↓	0	2	4	22	26
Kirton	19	↑	2	55	25	44	137
Broom's Barn (nr Bury St Edmunds)	162	↑	6	18	181	109	73
Wellesbourne	147	↑	20	120	182	73	814
Hereford	117	↑	36	31	209	137	217
Rothamsted (Harpenden)	108	↑	0	13	137	4	35
Writtle	839	↑	6	39	1054	21	117
Silwood Park (nr Ascot)	30	↓	9	6	88	14	26
Wye	22	↑	24	24	48	39	57
Starcross (nr Exeter)	37	↑	16	12	125	74	138

The mealy cabbage aphid was recorded from eleven sites this week and increasing at ten. There was also a hotspot at Writtle (839).

Willow-carrot aphid (<i>Cavariella aegopodii</i>)	Bulletin Week Totals		02/07-08/07		Accumulated until		08/07
	2018	Compared to last Bulletin week	2017	10-year average 2008-17	2018	2017	10-year average 2008-17
Dundee	1		0	1	66	113	84
Gogarbank (Edinburgh)	0	↓	0	8	53	186	119
Newcastle	2	↑	11	7	17	165	103
York	0	↓	0	/	173	743	/
Preston	2	↓	4	13	81	608	661
Kirton	0		2	20	284	929	853
Broom's Barn (nr Bury St Edmunds)	4	↑	0	16	1088	577	874
Wellesbourne	12	↑	4	3	204	774	622
Hereford	0	↓	2	16	52	841	482
Rothamsted (Harpenden)	0	↓	0	9	135	120	468
Writtle	1	↓	0	8	685	213	983
Silwood Park (nr Ascot)	0	↓	0	1	168	101	301
Wye	1	↓	0	7	184	135	422
Starcross (nr Exeter)	6	↑	2	9	136	160	171

The willow-carrot aphid was caught at eight sites this week, but with numbers increasing at only four. The highest number found was from Wellesbourne (12).

Pea aphid (<i>Acyrtosiphon pisum</i>)	Bulletin Week Totals 02/07-08/07				Accumulated until 08/07		
	2018	Compared to last Bulletin week	2017	10-year average 2008-17	2018	2017	10-year average 2008-17
Dundee	38	↑	1	2	41	8	5
Gogarbank (Edinburgh)	6	↑	0	11	11	4	18
Newcastle	5	↑	0	2	6	9	8
York	20	↑	8	/	48	9	/
Preston	12	↑	8	14	27	17	26
Kirton	32	↑	34	136	53	101	245
Broom's Barn (nr Bury St Edmunds)	123	↑	20	81	176	76	197
Wellesbourne	127	↑	50	86	176	131	186
Hereford	21	↓	0	14	76	42	57
Rothamsted (Harpenden)	116	↑	36	47	218	97	137
Writtle	124	↑	52	112	195	131	254
Silwood Park (nr Ascot)	14	↓	9	7	64	21	47
Wye	19		34	33	92	81	66
Starcross (nr Exeter)	11	↑	0	4	44	24	71

The pea aphid was recorded from all sites this week and increasing in number at eleven. Particularly high numbers were recorded from Wellesbourne (127), Writtle (124), Broom's Barn (123) and Rothamsted (116).

Black bean aphid (<i>Aphis fabae</i>)	Bulletin Week Totals 02/07-08/07				Accumulated until 08/07		
	2018	Compared to last Bulletin week	2017	10-year average 2008-17	2018	2017	10-year average 2008-17
Dundee	6	↑	0	1	8	6	4
Gogarbank (Edinburgh)	1		0	1	4	16	6
Newcastle	0		0	1	0	5	3
York	0	↓	24	/	3	80	/
Preston	0	↓	10	6	8	59	21
Kirton	4	↓	16	57	14	30	109
Broom's Barn (nr Bury St Edmunds)	28	↑	6	118	71	106	230
Wellesbourne	10	↓	10	52	31	100	160
Hereford	7	↓	6	34	20	16	71
Rothamsted (Harpenden)	34	↑	16	86	79	101	228
Writtle	46	↑	4	82	99	84	251
Silwood Park (nr Ascot)	26	↓	0	8	80	11	56
Wye	4		8	31	27	28	69
Starcross (nr Exeter)	8	↑	46	15	53	230	111

The black bean aphid was caught at eleven sites this week but increasing in number at only five across Britain. The highest number recorded was from Writtle (46).

Further information

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

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

AHDB Potatoes: [Click here](#)

AHDB Horticulture: [Click here](#)

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