

12 October 2018



This news sheet summarises up-to-date results from the Rothamsted/SASA suction-trap (ST) network.

During the current bulletin week (1–7 October), the total number of aphids flying has continued to rise. This corresponded with higher than average mean air temperatures in many areas. The rate of increase appears to be slowing, however, to around 32% of last week.

The bird cherry–oat aphid table includes numbers accumulated from a start date (17/09). This represents the early emergence of cereal seedlings and gives an indication of the build-up of virus vector pressure. During the current bulletin week, bird cherry–oat aphid numbers increased by 35% and rose to above the 10-year mean at all but two sites in England. 139 aphids were tested at Rothamsted this week but only three were cereal-colonising individuals. Peach-potato aphids and, to a lesser extent, mealy cabbage aphid have also increased considerably (compared to the 10-year means) at Kirton and Wellesbourne. Grain aphids were also found at three sites in single figures. Aphids that have located unprotected crops will continue to do well at temperatures above 3°C.

WINTER CEREALS

The main aphid vectors of **BYDV** are females of the **bird cherry–oat aphid**, *Rhopalosiphum padi*, and the **English grain aphid**, *Sitobion avenae*.

‘*’ indicates where totals have been corrected proportionally to seven days, fewer days’ samples having been processed.

<i>Sitobion avenae</i>				01/10-07/10	<i>Rhopalosiphum padi</i> - females only				
Compared to last week	2018	2017	10-year average 2008-17		Compared to last week	2018	10-year average 2008-17	2018 Acc from 17/09	2008-2017 Acc from 17/09
	/	0	0	Dundee		/	208	100	1290
	/	0	2	Gogarbank (Edinburgh)		/	555	274	2166
	*0	0	0	Newcastle	↑	*199	454	333	1285
	*0	0	/	York	↑	*2412	/	5342	/
	*0	0	0	Preston	↓	*1747	2252	7440	5891
	*0	0	1	Kirton	↑	*2374	491	3858	1274
	*0	0	0	Broom’s Barn (Bury St Edmunds)	↑	*1715	475	2835	1221
↑	*6	0	1	Wellesbourne	↑	*2529	288	4106	1089
	*0	0	1	Hereford	↓	*1930	561	4165	1661
	*0	1	1	Rothamsted (Harpenden)	↑	*587	289	1088	704
↑	*5	0	0	Writtle	↑	*2178	625	3371	1376
	*0	0	1	Silwood Park (nr Ascot)	↑	*599	258	1155	627
	*0	0	2	Wye	↓	*785	440	1748	1264
↑	*6	0	3	Starcross (nr Exeter)	↑	*797	472	1396	1052

- Bird cherry–oat aphid increased at nine ST sites this week.
- Grain aphids were recorded from Wellesbourne (6), Writtle (5) and Starcross (6) this week.
- During the period **05/10 – 11/10** around 2% of Bird cherry–oat aphids were of the cereal colonising form (three of 139 tested at Rothamsted).
- **Monitoring is recommended whilst the aphid migration continues.**

Only a small proportion of aphids entering cereals are likely to be carrying BYDV. Problems with spread arise when the second generation offspring of the original winged colonisers are produced. This is usually the generation that begins moving significantly away from the plant originally colonised. Very approximately this begins when 170 day degrees above a threshold of 3°C (DD>3) have accumulated. Find out about the new [AHDB BYDV management tool](#).

WINTER OILSEED RAPE and VEGETABLE BRASSICAS

The main aphid vector of TuYV is the **peach–potato aphid**, *Myzus persicae*, but it seldom reaches numbers high enough to cause direct feeding damage. Conversely the **mealy cabbage aphid**, *Brevicoryne brassicae*, is a poor vector of TuYV, but can cause direct feeding damage to isolated plants. This species is more of a problem in spring than in autumn.

<i>Brevicoryne brassicae</i>				01/10-07/10	<i>Myzus persicae</i>			
Compared to last week	2018	2017	10-year average 2008-17		Compared to last week	2018	2017	10-year average 2008-17
	/	0	0	Dundee		/	0	0
	/	0	0	Gogarbank (Edinburgh)		/	0	0
	*0	0	0	Newcastle		*0	0	0
	*0	0	/	York	↓	*0	2	/
	*0	0	1	Preston	↓	*0	0	1
↑	*21	0	4	Kirton	↑	*193	0	7
↓	*0	0	1	Broom's Barn (Bury St Edmunds)	↑	*26	0	2
↑	*19	0	0	Wellesbourne	↑	*212	11	5
	*0	1	1	Hereford	↓	*29	2	5
	*0	0	0	Rothamsted (Harpenden)		*7	0	2
	*0	0	0	Writtle	↓	*5	0	3
	*0	0	0	Silwood Park (nr Ascot)	↓	*0	0	1
	*0	1	0	Wye	↑	*8	32	7
↓	*0	0	0	Starcross (nr Exeter)	↑	*28	30	7

- Peach–potato aphids were recorded from eight ST sites this week and increasing at five.
- Mealy cabbage aphids were recorded from and increasing at Kirton (21) and Wellesbourne (19) ST sites this week.
- **Monitoring crops is recommended.**

OTHERS

Willow-carrot aphids (*Cavariella aegopodii*) were recorded from York (*11), Kirton (*27), Broom's Barn (*5), Wellesbourne (1) and Hereford (1) ST this week. Five male individuals were recorded from Broom's Barn.

As always, we appreciate any intelligence from the field and any comments on the information we provide.

Further information

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

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

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