

5 October 2018



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

The autumn migration has continued during bulletin week 24–30 September, with the total number of aphids flying doubling in number, compared to last week.

Most of this increase can, once again, be attributed to the bird cherry–oat aphid, which has increased by around 55% and is still the most abundant aphid in samples. Bird cherry–oat aphid numbers have risen to above the 10-year mean at many sites, particularly towards the south of Britain. It should be noted, however, that of the 185 aphids tested at Rothamsted this week, less than 3% were cereal colonising individuals. For the bird cherry–oat aphid, the tables include numbers accumulated from a start date (17/09). This represents the **early emergence** of cereal seedlings and, hence, gives an indication of the build-up of virus vector pressure.

Peach-potato aphids have also increased considerably, compared to last week, at many sites. Mealy cabbage aphids were still only found in single figures. No grain aphids were found. 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>				24/09-30/09	<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	3	0	Dundee	↓	47	474	100	1081
	0	2	2	Gogarbank (Edinburgh)	↓	75	885	274	1611
	/	0	0	Newcastle		/	476	134	831
	0	0	/	York	↑	2310	/	2930	/
	0	0	1	Preston	↓	2168	2199	5693	3639
	0	0	1	Kirton	↑	1341	592	1484	784
	0	0	0	Broom’s Barn (Bury St Edmunds)	↑	944	575	1120	745
	*0	0	1	Wellesbourne	↑	*1335	576	1577	801
	0	0	1	Hereford	↑	1989	743	2236	1100
	0	0	1	Rothamsted (Harpenden)	↑	465	305	501	416
	0	0	1	Writtle	↑	1042	605	1193	751
	0	0	0	Silwood Park (nr Ascot)	↑	492	263	556	370
	0	0	1	Wye	↑	825	586	963	824
	0	2	1	Starcross (nr Exeter)	↑	526	373	599	579

- Bird cherry–oat aphid increased at 10 ST sites this week, though numbers have declined at some sites in Northern Britain.
- No grain aphids were recorded this week.
- During the period **28/09 – 04/10**, 185 bird cherry–oat aphids were tested at Rothamsted, only five were of the cereal colonising form.
- **Monitoring is recommended while 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>				24/09-30/09	<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	0	Dundee	↓	0	2	3
↓	0	0	0	Gogarbank (Edinburgh)		0	0	0
	/	0	0	Newcastle		/	0	0
	0	0	/	York	↑	4	0	/
	0	0	0	Preston	↑	4	16	2
↑	6	6	4	Kirton	↑	38	30	16
↑	2	0	0	Broom's Barn (Bury St Edmunds)	↑	8	10	5
↑	*5	0	1	Wellesbourne	↑	*14	20	13
	0	0	1	Hereford	↑	92	42	6
	0	0	0	Rothamsted (Harpenden)	↑	7	10	3
	0	0	1	Writtle	↑	6	12	3
	0	0	0	Silwood Park (nr Ascot)		1	1	1
	0	4	1	Wye	↑	1	10	7
↑	1	0	0	Starcross (nr Exeter)	↑	17	27	5

- Peach–potato aphids were recorded from 11 ST sites this week and increasing at 10.
- Mealy cabbage aphids were recorded from and increasing at four ST sites this week.
- **Monitoring crops is recommended.**

### **OTHERS**

Willow-carrot aphids (*Cavariella aegopodii*) were recorded from Dundee (34), Preston (4), Kirton (1), Hereford (2), Rothamsted (3) and Wye ST this week. No male individuals were recorded.

**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](mailto:alex.greenslade@rothamsted.ac.uk)

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

AHDB Potatoes: [Click here](#)

AHDB Horticulture: [Click here](#)

Rothamsted Insect Survey: [Click here](#)

Science and Advice for Scottish Agriculture (SASA): [Click here](#)

In partnership with



AHDB publications are free to levy payers  
Electronic version can be downloaded at [cereals.ahdb.org.uk/aphidnews](http://cereals.ahdb.org.uk/aphidnews)  
To join the mailing lists, contact: [comms@ahdb.org.uk](mailto:comms@ahdb.org.uk)

While the Agriculture and Horticulture Development Board seeks to ensure that the information contained within this document is accurate at the time of printing, no warranty is given in respect thereof and, to the maximum extent permitted by law, the Agriculture and Horticulture Development Board accepts no liability for loss, damage or injury howsoever caused (including that caused by negligence) or suffered directly or indirectly in relation to information and opinions contained in or omitted from this document. Reference herein to trade names and proprietary products without stating that they are protected does not imply that they may be regarded as unprotected and thus free for general use. No endorsement of named products is intended, nor is any criticism implied of other alternative but unnamed products.

© Agriculture and Horticulture Development Board 2018. All rights reserved