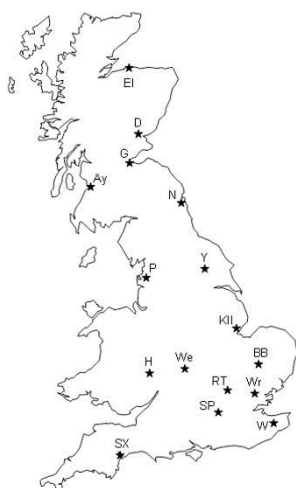


1 December 2017



Up-to-date results from the Rothamsted/SASA suction-trap (ST) network.

This will be the last AHDB Aphid News for 2017 but we will update you, if necessary, during the winter. Aphid forecasts for 2018 will be issued in early March 2018 and daily trapping will recommence around Easter 2018.

During this bulletin week (20 November to 26 November) aphid flight activity has all but stopped and, thus, the threat of **primary infections** by aphid-borne viruses (BYDV and TuYV) is reduced.

Bird cherry–oat aphid numbers have decreased in **ST** sites across the country. Apart from Preston, where numbers are still unusually high. Most sites are at or near their ten-year mean. The numbers accumulated from an early emergence date have presented a mixed picture of the build-up of virus vector pressure. Peach–potato aphids numbers have also fallen, with only two individuals being caught. With regards to cereals and oilseed rape, it's hard to be precise about the level of frost needed to deliver a knock-out blow but three to five consecutive days with grass minima dropping below -6°C should cause high mortality. Until then, 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>				20/11 - 26/11	<i>Rhopalosiphum padi</i> - females only				
Compared to last week	2017	2016	10-year average 2007-16		Compared to last week	2017	10-year average 2007-16	2017 Acc from 18/09	2007-2016 Acc from 18/09
	0	0	0	Dundee		0	0	1136	1341
	0	0	0	Gogarbank (Edinburgh)		0	0	4060	2677
	*0	0	0	Newcastle		*0	2	1536	2355
↓	0	0	/	York	↓	2	/	5942	/
↓	0	0	0	Preston	↓	31	11	4798	9680
	0	0	0	Kirton	↓	0	3	3224	2275
↓	0	0	0	Broom's Barn (Bury St Edmunds)	↓	1	2	2988	1697
	0	1	0	Wellesbourne	↓	0	2	3203	1622
↓	0	0	0	Hereford	↓	2	2	1665	2534
	*0	0	0	Rothamsted (Harpenden)		*0	1	461	1073
	0	0	0	Writtle	↓	4	3	4023	1980
	0	0	0	Silwood Park (nr Ascot)	↓	0	2	815	947
	0	0	0	Wye	↓	0	3	2386	1824
	*0	0	0	Starcross (nr Exeter)	↓	*5	17	1574	1581

- The numbers of bird cherry–oat aphid (*Rhopalosiphum padi*) have decreased in **ST** sites across the country this week. The highest number recorded was from the **ST** at Preston (31).

- No grain aphids (*Sitobion avenae*) were found at the **ST** sites this week.
- During the period **24/11 – 30/11**: no *R. padi* were found for testing at Rothamsted.
- **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. DD>3 calculations should begin on the day of emergence for untreated crops, 1 week after application of pyrethroids, or if aphids are found when neonicotinoid-treated seed protection runs out (i.e. approx. 6 weeks after emergence or 8 weeks after sowing).

The day degrees for a given site can be loosely calculated using the <http://www.degreedays.net/> website; entering the nearest weather station to the location of interest, giving a base temperature of 3°C and selecting daily data.

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>				20/11 - 26/11	<i>Myzus persicae</i>			
Compared to last week	2017	2016	10-year average 2007-16		Compared to last week	2017	2016	10-year average 2007-16
	0	0	0	Dundee		0	0	0
	0	0	0	Gogarbank (Edinburgh)		0	0	0
	*0	0	0	Newcastle		*0	0	0
	0	0	/	York		1	2	/
	0	0	0	Preston		0	0	0
	0	0	0	Kirton	↓	0	0	1
	0	0	0	Broom's Barn (Bury St Edmunds)	↓	0	0	1
	0	0	0	Wellesbourne	↓	1	0	0
	0	0	0	Hereford	↓	0	0	1
	*0	0	0	Rothamsted (Harpenden)		*0	0	0
	0	0	0	Writtle	↓	0	0	1
	0	0	0	Silwood Park (nr Ascot)		0	0	0
	0	0	0	Wye	↓	0	0	0
	*0	0	0	Starcross (nr Exeter)		*0	3	1

- Single Peach–potato aphids (*Myzus persicae*) were recorded from York and Wellesbourne **ST** sites.
- No Mealy cabbage aphids (*Brevicoryne brassicae*) were recorded from the **ST** sites this week.
- **Monitoring crops for aphids maybe useful.**

OTHERS

Female Willow-carrot aphids (*Cavariella aegopodii*) were found at two **ST** this week with one male individual recorded from Preston.

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](#)

AHDB Potatoes: [Click here](#)

AHDB Horticulture: [Click here](#)

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

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