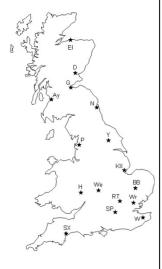
# **AHDB Aphid News**





16 November 2018



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

Unusually mild air temperatures (at around the aphid flight threshold) have been maintained. This prevented a decline in the total number of aphids flying into ST during this bulletin week (5–11 November).

This was reflected in bird cherry—oat aphid numbers. Accumulated numbers present a North/South split in the build-up of virus vector pressure. Southern sites (up to Preston) are possibly at a higher risk and sites at Newcastle northwards are at a lower risk than average. Caution is advised when interpreting these data — the same number of cereal colonising aphids was found in tests compared to that of the equivalent week last year, despite a larger total number in flight.

Peach—potato aphids increased at 10 sites this week. There was a hotspot for mealy cabbage aphid at Wye. Grain aphids were recorded from four sites. 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 **grain aphid**, *Sitobion avenae*.

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

Sitobion avenae					Rhopalosiphum padi - females only					
Compared to last week	2018	2017	10-year average 2008-17	05/11-11/11	Compared to last week	2018	10-year average 2008-17		2018 Acc from 17/09	2008- 2017 Acc from 17/09
	0	0	0	Dundee		5	2		513	1498
	0	0	0	Gogarbank (Edinburgh)	<b>↑</b>	2	3		643	2708
	0	0	0	Newcastle	<b>\</b>	2	9		382	1822
<b>↑</b>	1	0	/	York	<b>\</b>	64	/		10840	/
	*0	0	0	Preston	<b>\</b>	*32	45		11425	8667
	0	0	0	Kirton	<b>↑</b>	213	14		7708	2112
<b>↑</b>	1	0	0	Broom's Barn (Bury St Edmunds)	<b>↑</b>	63	8		6116	1912
	*0	0	0	Wellesbourne	<b>↑</b>	*341	8		8831	1896
<b>\</b>	0	0	0	Hereford	<b>↑</b>	44	12		5229	2518
<b>1</b>	2	0	0	Rothamsted (Harpenden)	<b>\</b>	32	7		2314	1051
	0	0	0	Writtle	<b>\</b>	85	12		6585	2252
<b>↑</b>	1	0	0	Silwood Park (nr Ascot)	1	20	7		1937	990
	0	0	0	Wye	<b>↑</b>	132	15		4537	2047
	0	0	0	Starcross (nr Exeter)	<b>↑</b>	38	12		3195	1527

- Bird cherry—oat aphid increased at eight ST sites this week, including a hotspot at Wellesbourne (\*341).
- Grain aphids were found this week at York (1), Broom's Barn (1), Rothamsted (2) and Silwood Park (1).
- During the period **09/11 15/11**, one (~4%) bird cherry—oat aphid was of the cereal colonising form (of 26 tested at Rothamsted). For comparison, testing in 2017 during an equivalent week (10/11 16/11) found that 54% of bird cherry—oat aphids tested were of the cereal colonising form (7 of 13 tested).
- 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.

Brevicoryne brassicae					Myzus persicae					
Compared to last week	2018	2017	10-year average 2008-17	05/11-11/11	Compared to last week	2018	2017	10-year average 2008-17		
	0	0	0	Dundee	<b>↑</b>	1	0	0		
	0	0	0	Gogarbank (Edinburgh)	<b>1</b>	1	0	0		
	0	0	0	Newcastle		0	0	0		
	0	0	/	York		3	1	/		
	*0	0	0	Preston	<b>V</b>	*0	0	0		
	0	0	0	Kirton	<b>1</b>	26	0	3		
	0	0	0	Broom's Barn (Bury St Edmunds)	<b>1</b>	27	2	2		
	*0	0	0	Wellesbourne	<b>1</b>	*40	7	1		
	0	0	0	Hereford		0	2	1		
<b>1</b>	1	0	0	Rothamsted (Harpenden)	<b>1</b>	13	0	1		
	0	0	0	Writtle	<b>1</b>	45	11	2		
	0	0	0	Silwood Park (nr Ascot)	<b>1</b>	36	1	0		
<b>1</b>	30	0	0	Wye	<b>1</b>	37	5	1		
	0	0	0	Starcross (nr Exeter)	<b>↑</b>	9	0	1		

- Peach-potato aphids were recorded from 11 ST sites this week and increasing at 10.
- Mealy cabbage aphid was recorded from the ST at Rothamsted (1) with a hotspot at Wye (30) this week.
- Monitoring crops is recommended.

#### **OTHERS**

Willow-carrot aphids (*Cavariella aegopodii*) were recorded from Dundee (99), Gogarbank (1), York (3), Preston (1), Kirton (7), Hereford (1), Rothamsted (1), Wye (2) and Starcross (5). Male individuals were recorded from York (3), Preston (1), Kirton (5), Rothamsted (1) and Starcross (3) with a hotspot at Dundee (75). It should be noted that the high numbers of males recorded from Dundee will likely be moving away from crops.

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: <a href="mailto:alex.greenslade@rothamsted.ac.uk">alex.greenslade@rothamsted.ac.uk</a>

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