AHDB Aphid News

19 October 2018





Latest results from the Rothamsted/SASA suction-trap (ST) network

During the current bulletin week (8–14 October), despite continued higher than average mean air temperatures across Britain, the total number of aphids flying have decreased to 68% of last week for English suction traps (excluding Newcastle).

Bird cherry—oat aphid numbers also decreased to 68% of last week from these traps. Many sites are still recording bird cherry—oat aphid numbers above the 10-year mean and accumulated numbers are exceeding the 10-year average for most sites, apart from the north of Britain. Caution is advised when interpreting these data since the number of cereal colonising aphids found from testing at Rothamsted this week is far lower, when compared to that of the equivalent week last year.

There was a hot spot for peach-potato aphids at Wellesbourne. Mealy cabbage aphids have remained 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.

Sitobion avenae					Rhopalosiphum padi - females only					
Compared to last week	2018	2017	10-year average 2008-17	08/10-14/10	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		*289	139		389	1429
	0	0	1	Gogarbank (Edinburgh)		282	323		556	2489
	/	0	0	Newcastle		/	284		333	1569
	0	1	/	York	\checkmark	882	/		6224	/
	0	8	1	Preston	1	1948	1507		9388	7398
	*0	0	0	Kirton	\checkmark	*338	520		4196	1794
	0	0	0	Broom's Barn (Bury St Edmunds)	4	652	375		3487	1596
↓	*0	4	1	Wellesbourne	\checkmark	*2420	454		6526	1543
	0	8	2	Hereford	\checkmark	741	460		4906	2121
	0	0	1	Rothamsted (Harpenden)	\checkmark	144	193		1232	897
↓	0	2	1	Writtle	\checkmark	611	468		3982	1844
	0	1	0	Silwood Park (nr Ascot)	\checkmark	158	192		1313	819
	0	0	1	Wye	1	985	361		2733	1625
↓	0	0	1	Starcross (nr Exeter)	↓	560	207		1956	1259

- Bird cherry–oat aphid increased at two ST sites this week.
- No grain aphids were recorded this week.
- During the period 12/10 18/10 only a single bird cherry–oat aphid was of the cereal colonising form (one of 173 tested at Rothamsted). For comparison; testing in 2017 during an equivalent week (13/10 19/10) found that 22% of bird cherry–oat aphids tested were of the cereal colonising form (29 of 133 tested).
- 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 <u>AHDB BYDV management tool</u>.

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	08/10-14/10	Compared to last week	2018	2017	10-year average 2008-17		
	*2	0	0	Dundee		*2	0	1		
	4	0	0	Gogarbank (Edinburgh)		1	0	0		
	/	0	0	Newcastle		/	1	1		
1	4	0	/	York	1	2	1	/		
	0	0	0	Preston		0	16	4		
↓	*0	2	4	Kirton	↓	*16	24	18		
	0	0	0	Broom's Barn (Bury St Edmunds)	\checkmark	7	2	4		
¥	*0	0	1	Wellesbourne	\checkmark	*107	10	5		
	0	1	5	Hereford	1	43	54	9		
	0	0	0	Rothamsted (Harpenden)	→	4	0	1		
1	1	0	0	Writtle	1	23	2	2		
	0	0	0	Silwood Park (nr Ascot)		0	2	1		
	0	0	0	Wye	1	35	27	6		
1	1	0	0	Starcross (nr Exeter)	1	44	6	3		

• Peach–potato aphids were recorded from 11 ST sites this week and increasing at five with a hotspot at Wellesbourne.

- Mealy cabbage aphids were recorded from five ST sites this week and increasing at three.
- Monitoring crops is recommended.

OTHERS

Willow-carrot aphids (*Cavariella aegopodii*) were recorded from Gogarbank (93), York (5), Preston (32), Broom's Barn (10), Wye (33) and Starcross (2) ST this week with a hotspot at Dundee (*469). Five male individuals were recorded from Dundee and four were recorded from Gogarbank.

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: <u>alex.greenslade@rothamsted.ac.uk</u> AHDB Cereals and Oilseeds: <u>Click here</u> AHDB Potatoes: <u>Click here</u> AHDB Horticulture: <u>Click here</u> Rothamsted Insect Survey: <u>Click here</u> Science and Advice for Scottish Agriculture (SASA): <u>Click here</u>

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