AHDB Aphid News



2 November 2018



This news sheet summarises up-to-date results from the Rothamsted/SASA suction-trap (ST) network. Included on the table this week for the Bird cherry–oat aphid are

numbers accumulated from a start date (17/09), representing the **early emergence** of cereal seedlings and hence giving an indication of the build-up of virus vector pressure.

During bulletin week 22 – 28 October, with the drop in average temperature bringing frosts across many regions of Britain, the total number of bulletin aphids flying into the ST across Britain has decreased by ~84% over last week. Bird cherry–oat aphid numbers have also reflected this decrease across all sites, decreasing by 84%. Despite this, ST sites from Kirton southwards, apart from Hereford, have recorded Bird cherry–oat aphid numbers above the 10 year mean and accumulated numbers are exceeding the 10 year average for most sites apart from those in the North of Britain. Caution is advised when interpreting these data since no cereal-colonising aphids were found from testing at Rothamsted this week which is far lower when compared to that of the equivalent week last year. Peach-potato aphids increased at Writtle. Mealy cabbage aphids were recorded from 3 sites and Grain aphid from Broom's Barn. 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*.

Sitobion avenae					Rhopalosiphum padi - females only					
Compared to last week	2018	2017	10-year average 2008-17	22/10-28/10	Compared to last week	2018	10-year average 2008-17		2018 Acc from 17/09	2008- 2017 Acc from 17/09
	0	1	0	Dundee	↓	3	13		503	1491
	0	0	0	Gogarbank (Edinburgh)	\checkmark	6	45		640	2665
	0	0	0	Newcastle	↓	1	19		377	1784
	0	0	/	York	↓	288	/		10628	/
	0	0	0	Preston	↓	132	347		11292	8413
↓	0	0	0	Kirton	↓	465	93		7409	2032
1	2	0	0	Broom's Barn (Bury St Edmunds)	4	382	88		6023	1864
	*0	2	0	Wellesbourne	↓	*184	82		8465	1822
	0	0	1	Hereford	↓	50	92		5175	2456
	0	0	0	Rothamsted (Harpenden)	↓	79	48		2245	1014
	0	0	0	Writtle	↓	527	161		6413	2189
	0	0	0	Silwood Park (nr Ascot)	↓	99	48		1906	955
	0	0	0	Wye	↓	243	118		4299	1966
	0	0	1	Starcross (nr Exeter)	↓	158	77		3122	1462

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

• Bird cherry–oat aphid decreased across all the British ST sites this week.

• Two Grain aphids were found this week at Broom's Barn.

- During the period 26/10 01/11 no Bird cherry–oat aphids were found to be of the cereal colonising form (of 22 tested at Rothamsted). For comparison; testing in 2017 during an equivalent week (27/10 02/11) found that 27% of Bird cherry–oat aphids tested were of the cereal colonising form (7 of 26 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	22/10-28/10	Compared to last week	2018	2017	10-year average 2008-17		
	0	0	0	Dundee	↓	0	2	0		
	0	0	0	Gogarbank (Edinburgh)		0	0	0		
	0	0	0	Newcastle		0	4	1		
	0	0	/	York	\checkmark	0	0	/		
	0	0	0	Preston		0	8	4		
\checkmark	0	4	12	Kirton	→	21	9	26		
\checkmark	0	0	0	Broom's Barn (Bury St Edmunds)	\checkmark	18	8	6		
↑	*5	0	0	Wellesbourne	\checkmark	*9	22	4		
	0	0	0	Hereford	→	1	10	2		
↑	1	0	0	Rothamsted (Harpenden)	→	1	0	1		
	0	0	0	Writtle	1	15	35	5		
	0	0	0	Silwood Park (nr Ascot)	→	2	1	0		
	0	4	1	Wye	\checkmark	16	11	3		
1	1	0	0	Starcross (nr Exeter)	\rightarrow	3	0	1		

- Peach-potato aphids were recorded from nine ST sites this week but only increasing at Writtle.
- Mealy cabbage aphids were recorded from and increasing at Wellesbourne (*5), Rothamsted (1) and Starcross (1) ST sites this week.
- Monitoring crops is recommended.

OTHERS

Willow-carrot aphids (*Cavariella aegopodii*) were recorded from Dundee (2), Kirton (31) and Wye (34). Male individuals were recorded from Kirton (8) and Wye (4).

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 Rothamsted Insect Survey: Click here Science and Advice for Scottish Agriculture (SASA): Click here

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