AHDB Aphid News







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

Bird cherry–oat aphid numbers, accumulated from a start date (17/09), are included this week. This period represents the **early emergence** of cereal seedlings and gives an indication of the build-up of virus vector pressure.

During bulletin week 17–23 September, the autumn migration has continued. The total number of aphids flying rose by nearly 50% of that of last week. Most of this increase in aphid number can be attributed to the bird cherry–oat aphid, which has more than doubled compared to last week and was generally the most abundant aphid in catches. Bird cherry–oat aphid numbers are similar to or lower than the ten-year mean, apart from Preston where numbers were 60% higher. Peach-potato aphids and mealy cabbage aphids were 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.

Sitobion avenae					Rhopalosiphum padi - females only					
Compared to last week	2018	2017	10-year average 2008-17	17/09-23/09	Compared to last week	2018	10-year average 2008-17		2018 Acc from 17/09	2008- 2017 Acc from 17/09
	0	7	2	Dundee	1	53	607		53	607
	0	1	1	Gogarbank (Edinburgh)	1	199	726		199	726
	0	0	1	Newcastle	1	134	356		134	356
	0	0	/	York	1	620	/		620	/
\checkmark	0	0	0	Preston	1	3525	1441		3525	1441
	0	0	0	Kirton	1	143	192		143	192
	0	1	2	Broom's Barn (Bury St Edmunds)	↓	176	171		176	171
	0	0	1	Wellesbourne	1	242	225		242	225
	*0	0	1	Hereford	1	*247	358		247	358
	0	0	1	Rothamsted (Harpenden)	\checkmark	36	111		36	111
	0	1	1	Writtle	1	151	146		151	146
	0	0	0	Silwood Park (nr Ascot)	1	64	107		64	107
	0	0	1	Wye	↓	138	238		138	238
	0	0	2	Starcross (nr Exeter)	↓	73	206		73	206

- The numbers of bird cherry–oat aphid increased at ten ST sites this week, this trend was particularly evident towards the north of Britain.
- No grain aphids were recorded this week.
- During the period **21/09 27/09**, 142 bird cherry–oat aphids were tested at Rothamsted, only two 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 <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	17/09-23/09	Compared to last week	2018	2017	10-year average 2008-17		
	0	0	0	Dundee	Ϋ́	1	5	4		
	1	1	0	Gogarbank (Edinburgh)		0	0	0		
1	1	0	0	Newcastle		0	0	0		
	0	0	/	York	1	2	0	/		
	0	0	0	Preston		0	0	1		
\checkmark	0	5	2	Kirton	↓	1	12	5		
	0	0	0	Broom's Barn (Bury St Edmunds)	1	1	2	4		
	0	0	1	Wellesbourne		0	14	6		
\checkmark	*0	0	2	Hereford	1	*5	3	3		
	0	0	0	Rothamsted (Harpenden)		0	4	2		
	0	1	1	Writtle		0	2	3		
¥	0	0	0	Silwood Park (nr Ascot)	1	1	0	0		
¥	0	0	1	Wye		0	3	3		
	0	0	1	Starcross (nr Exeter)	1	4	3	1		

• Peach-potato aphids were recorded from seven ST sites this week and increasing at six.

• Single mealy cabbage aphids were recorded from Gogarbank and Newcastle ST sites this week.

• Monitoring crops is recommended.

OTHERS

Willow-carrot aphids (*Cavariella aegopodii*) were recorded from Dundee (13) and Silwood (1) 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 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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