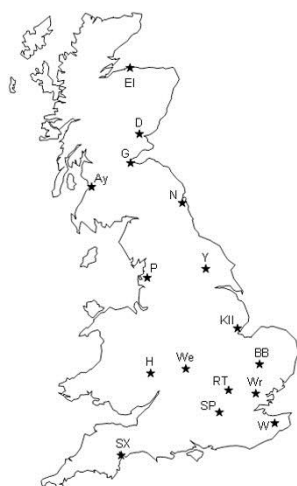


22<sup>nd</sup> September 2017



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

During bulletin week 11<sup>th</sup> - 17<sup>th</sup> September, the total number of bulletin aphids flying has risen but the diversity of these aphid species has decreased slightly. This increase in aphid numbers suggests that, despite the fall in average air temperature this week, this year's autumn aphid migration is underway and particularly so for the bird cherry-oat aphid (*Rhopalosiphum padi*) in the north of Britain. 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>				11/09-17/09	<i>Rhopalosiphum padi</i> - females only			
Compared to last week	2017	2016	10-year average 2007-16		Compared to last week	2017	2016	10-year average 2007-16
↓	2	15	2	Dundee	↑	148	680	225
↓	2	12	5	Gogarbank (Edinburgh)	↑	236	798	461
↓	0	3	2	Newcastle	↑	242	249	296
	0	0	/	York	↑	170	204	/
	0	0	1	Preston	↑	339	339	986
↑	1	6	4	Kirton	↑	17	80	164
	0	2	2	Broom's Barn (Bury St Edmunds)	↑	56	111	98
↓	0	0	3	Wellesbourne	↑	56	118	196
	0	2	3	Hereford	↓	36	118	151
	0	0	1	Rothamsted (Harpenden)	↓	6	52	53
↓	0	6	3	Writtle	↓	33	109	68
	0	4	1	Silwood Park (nr Ascot)	↓	14	44	95
	0	0	2	Wye	↑	56	73	138
	0	1	2	Starcross (nr Exeter)	↓	27	152	162

- The numbers of bird cherry-oat aphid (*Rhopalosiphum padi*) increased at nine **ST** sites this week predominantly in the north.
- Grain aphids (*Sitobion avenae*) were caught at Dundee (2), Gogarbank (2) and Kirton (1).
- During the period **15/09 – 21/09** ten *R. padi* were tested at Rothamsted, one was of the cereal colonising form.
- **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. 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>				11/09-17/09	<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	1	1	Dundee	↓	0	9	2
↑	1	0	0	Gogarbank (Edinburgh)		0	0	0
	0	0	0	Newcastle		0	0	1
	0	0	/	York		0	0	/
	0	2	1	Preston		0	0	1
↓	0	2	3	Kirton	↓	0	10	5
	0	4	0	Broom's Barn (Bury St Edmunds)		0	17	4
↓	0	1	1	Wellesbourne	↓	1	3	6
	0	3	3	Hereford		0	3	3
	0	0	0	Rothamsted (Harpenden)		0	8	2
	0	0	0	Writtle		0	14	4
	0	0	0	Silwood Park (nr Ascot)		0	0	1
↑	1	0	0	Wye		1	1	2
	0	4	2	Starcross (nr Exeter)	↓	0	6	3

- Single peach–potato aphids (*Myzus persicae*) were caught at Wellesbourne and Wye **ST** sites.
- Single Mealy cabbage aphids (*Brevicoryne brassicae*) were caught at Gogarbank and Wye **ST** sites.
- **monitoring crops for aphids maybe useful.**

## **OTHERS**

The willow-carrot aphid (*Cavariella aegopodii*) was caught in four suction-traps this week. No male individuals were caught suggesting that the start of the autumn migration back to willows to overwinter has not yet begun.

**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: [mark-s.taylor@rothamsted.ac.uk](mailto:mark-s.taylor@rothamsted.ac.uk)

AHDB Cereals and Oilseeds: [Click here](#)

AHDB Potatoes: [Click here](#)

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