

## APHID ALERT SUMMARY

### GENERAL

The very large number of “Indian summer” insects in the suction-traps and the diversity of aphid species have meant that we have been unable to deal with all samples again this week. The same is likely to be true next week as we will be looking at samples collected from last Monday to the coming Sunday. With a return to more typical weather, numbers trapped in the coming week are likely to drop somewhat.

### WINTER CEREALS

Numbers of bird cherry–oat aphid (*Rhopalosiphum padi*) in suction-traps are rising and above average at all sites examined. Of 130 tested in the current week (26<sup>th</sup> September–2<sup>nd</sup> October) from the trap at Rothamsted, 18 were of the cereal-colonising form. This is a larger number than usual. Numbers of grain aphid (*Sitobion avenae*) are about normal. It is likely that colonisation will occur rapidly on unprotected crops. So far there are few reports of aphid build-up but we have had a report of large numbers from Wiltshire.

Repeated from last week: Only a small proportion of aphids entering cereals (usually less than 2%, although we no longer routinely test this) are likely to be carrying BYDV. Problems with spread arise when the offspring of the offspring of the winged colonisers are produced as, if the weather remains clement, this is usually the generation that begins moving significantly away from the plant originally colonised. Very approximately this begins after 170 day degrees above a threshold of 3°C (DD>3) have accumulated. For example, if the average temperature on a particular day was 13°C, 10DD>3 would have accumulated that day, meaning that it would take 17 days at that temperature to reach the 170DD>3. Once this generation becomes adult (after about 340DD>3) very significant spread can occur. DD>3 calculations should begin on the day of emergence for untreated crops, 1 week after application of pyrethroids or 6 weeks after emergence for crops from neonicotinoid-treated seed.

### WINTER OILSEED RAPE

Numbers of peach–potato aphid (*Myzus persicae*) found in suction-traps are above average in East Anglia and about normal elsewhere. If aphids can be found easily in crops it is worth considering control with one of the four products now available (Plenum, Teppeki, Biscaya, Insyst) in order to reduce levels of *Turnip yellows virus*, which is carried on average by around 1 in 4 peach–potato aphids. We are not testing our samples for the virus itself.

**As always, we appreciate any intelligence from the field and any comments on the information we provide.**

# SUCTION-TRAPPING RESULTS



Suction-trap sites

## Winter Cereal Aphids

The **bird cherry–oat aphid**, *Rhopalosiphum padi*, flies in autumn as two morphologically identical female forms, one of which colonises bird cherry and is of no consequence to BYDV spread, and one of which colonises winter cereals. A simple test requiring live aphids can distinguish these forms and is routinely done at Rothamsted, but not elsewhere in the suction-trap network. During the period **26/9-2/10** 130 *R. padi* were tested, 18 were of the cereal colonising form (28 year mean =4).

The table below shows numbers of female bird cherry–oat aphid caught during the week **22/9-28/9** and compares them to last year and a ten year mean for that week. English grain aphids always fly in much lower numbers than bird cherry–oat aphids in the autumn.

- Although 65% of the planned wheat area has been drilled, emergence is proving patchy because of the very dry conditions.
- Numbers of bird cherry–oat aphid were above the ten year means at all sites this week except Writtle which is probably because of a trap malfunction which we are currently investigating.
- The number and proportion of cereal-colonising bird cherry–oat aphids is above the long term average for the time of year.
- The grain aphid was caught at four of the six sites reported on in low numbers.

The tables below show current totals with comparisons to previous years. ‘/’ indicates that identifications have not been completed and ‘\*’ indicates where totals have been corrected proportionally to seven days, fewer days’ samples having been identified.

<i>Sitobion avenae</i>				22/09-28/09	<i>Rhopalosiphum padi</i> - females only			
Compared to last week	2014	2013	04-13		Compared to last week	2014	2013	04-13
	0	2	1	Gogarbank (Edinburgh)		1065	114	859
	/	0	1	Newcastle		/	/	775
	/	1	1	Preston		/	2287	2366
	1	0	1	Kirton	↑	1462	514	497
↓	2	0	0	Broom’s Barn (nr Bury St Edmunds)	↑	1585	304	487
	/	/	/	Wellesbourne		/	230	274
↑	4	0	1	Hereford	↑	1736	48	561
↑	4	1	1	Rothamsted (Harpenden)	↑	589	85	325
	0?	0	1	Writtle	↑	4?	123	593
	/	0	0	Silwood Park (nr Ascot)		/	/	216
	/	0	1	Wye		/	/	575
	/	0	2	Starcross (nr Exeter)		/	/	234

## Winter Oilseed Rape Aphids

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 **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.

- Numbers of peach-potato aphids are building in the suction-traps with hotspots at Kirton (43) and Broom's Barn (22), but few cabbage aphids are around this week.

<i>Brevicoryne brassicae</i>				22/09-28/09	<i>Myzus persicae</i>			
Compared to last week	2014	2013	04-13		Compared to last week	2014	2013	04-13
	1	0	0	Gogarbank (Edinburgh)		0	0	0
	/	/	0	Newcastle		/	/	1
	/	0	1	Preston		/	1	1
↑	7	1	3	Kirton	↑	43	3	11
↑	1	0	0	Broom's Barn (nr Bury St Edmunds)	↑	22	1	4
	/	/	/	Wellesbourne		/	/	/
↓	0	3	1	Hereford		6	0	2
↑	1	0	0	Rothamsted (Harpenden)	↓	2	0	1
	0?	0	1	Writtle		0?	0	4
	/	/	0	Silwood Park (nr Ascot)		/	/	1
	/	/	0	Wye		/	/	6
	/	/	1	Starcross (nr Exeter)		/	/	2



### Further information

[www.hgca.com/pests](http://www.hgca.com/pests)

[www.potato.org.uk/online-toolbox/aphid-monitoring](http://www.potato.org.uk/online-toolbox/aphid-monitoring)

[Rothamsted Insect Survey](#)

[HDC pest bulletin](#)

<http://www.sasa.gov.uk/seed-ware-potatoes/virology/virus-epidemiology>

### Please send information on crop aphids to

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