

## APHID ALERT SUMMARY

### GENERAL

With mild conditions continuing aphids are still flying, albeit in lower numbers than last week, and will be reproducing well in crops. The forecast drop in temperature is likely to lead to much less flight next week (the flight threshold is around 11°C) but reproduction will occur at temperatures of 3°C and above, the rate increasing in proportion to temperature.

### WINTER CEREALS

The risk of BYDV spread remains high.

*Repeated from last week:* Problems with BYDV spread arise when the offspring of the offspring of the winged colonisers are produced. 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

The risk of TuYV spread remains high.

*Repeated from last week:* If aphids can be found easily in crops it is worth considering control with one of the three products now available (Plenum, Teppeki, Biscaya) in order to reduce levels of *Turnip yellows virus*, which is carried on average by around 1 in 4 peach–potato aphids.

**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

Day-time temperatures remain above the aphid flight thresholds during yet another very mild week. The table below shows the combined total of both forms of **female** bird cherry–oat aphids, *Rhopalosiphum padi*, caught during the week **20/10-26/10** and compares them to last year and a ten year mean. The table also includes numbers accumulated from a start date **22/9** representing **earliest emergence**, and from **6/10** representing an **average emergence**, and these give an indication of the build-up of virus vector pressure. English grain aphids always fly in much lower numbers than bird cherry–oat aphids in the autumn.

During the period **24/10 – 30/10 20** *R. padi* were tested at Rothamsted, **4** were of the cereal colonising form (28 year weekly mean = 2). The cereal colonising/bird cherry colonising data are only available for the Rothamsted site. The proportion of cereal colonisers is likely to be higher towards the south and west, and lower towards the north and east.

- Numbers of bird cherry–oat aphid have fallen in most suction-traps this bulletin week.
- The number and proportion of cereal-colonising bird cherry–oat aphids has also fallen but remains above the long term average for the time of year.
- The grain aphid was caught at six sites in the south 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>				20/10-26/10	<i>Rhopalosiphum padi</i> - females only							
Compared to last week	2014	2013	04-13		Compared to last week	2014	04-13	2014 Acc from 22/09	04-13 Acc from 22/09	2014 Acc from 06/10	04-13 Acc from 06/10	
	0	0	0	Gogarbank (Edinburgh)	↓	11	52	2388	2241	559	639	
	0	/	0	Newcastle		35	36	/	2043	/	483	
	0	0	0	Preston	↓	584	420	/	7463	/	2932	
↓	*0	0	1	Kirton	↓	*98	127	5037	1829	1521	1060	
	0	0	1	Broom’s Barn (nr Bury St Edmunds)	↓	75	111	3330	1440	500	638	
	2	/	/	Wellesbourne		115	6	/	513	/	80	
↑	*2	0	1	Hereford	↓	*105	87	4480	1881	662.7	858	
↓	0	0	0	Rothamsted (Harpenden)	↓	52	70	2071	1201	389	502	
	1	0	1	Writtle	↓	122	172	1326	2091	920	895	
	1	/	0	Silwood Park (nr Ascot)		22	43	/	829	/	324	
	1	/	0	Wye		103	84	/	1729	/	698	
	1	/	1	Starcross (nr Exeter)	↓	63	81	/	1284	272	534	

## Winter Oilseed Rape Aphids

The main aphid vector of TuYV is the **peach-potato aphid**, *Myzus persicae*. The **cabbage aphid**, *Brevicoryne brassicae*, is a poor vector of TuYV, but can cause direct feeding damage to isolated plants.

- The peach-potato aphid was caught in ten suction-traps this week with numbers about normal, and with highest numbers at Wellesbourne (8).
- The cabbage aphid was caught at two sites this week in low numbers.

<i>Brevicoryne brassicae</i>				20/10-26/10	<i>Myzus persicae</i>			
Compared to last week	2014	2013	04-13		Compared to last week	2014	2013	04-13
	0	0	0	Gogarbank (Edinburgh)		0	0	0
	0	/	0	Newcastle		2	/	0
	0	0	0	Preston		1	0	2
↑	*2	0	2	Kirton	↓	*2	3	17
	0	0	0	Broom's Barn (nr Bury St Edmunds)	↓	2	0	2
	2	/	/	Wellesbourne		8	/	/
	*0	0	0	Hereford	↓	*2	0	1
	0	0	0	Rothamsted (Harpenden)	↑	4	0	0
	0	0	0	Writtle	↓	3	0	1
	0	/	0	Silwood Park (nr Ascot)		0	/	0
	0	/	0	Wye		5	/	1
	0	/	0	Starcross (nr Exeter)	↓	3	/	1



### 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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