



APHID ALERT SUMMARY

This alert summarises up-to-date results from the Rothamsted/SASA suction-trap (ST) network and the FERA yellow water-pan trap (YWT) network. Further details of the ST results can be found below and further details of the YWT results can be found at www.potato.org.uk/online-toolbox/aphid-monitoring.

GENERAL

Gradually falling temperatures have led to less aphid flight activity during bulletin week 10th - 16th October. If aphids have located unprotected crops, reproduction and movement will continue apace, the rate increasing in proportion to temperatures 3°C and above. It is important that vigilance is maintained into early November, when colder weather should cause the autumn flights to end.

WINTER CEREALS

Numbers of bird cherry–oat aphid (*Rhopalosiphum padi*) fell at 10 of the 12 suction-trap sites this week and are low for the time of year. Single grain aphids (*Sitobion avenae*) were caught at Edinburgh and Silwood. Typical early sown crops have reached 1-4 true leaves (GS11-14), while some are yet to emerge. We have received reports of aphid colonies on newly emerged cereals in south west England, the West Midlands and a few from eastern counties. Presumably these crops are not seed dressed. Reports also suggest that cereal aphids are widespread on cereal volunteers and green stubbles left to encourage blackgrass to chit. **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).

WINTER OILSEED RAPE and VEGETABLE BRASSICAS

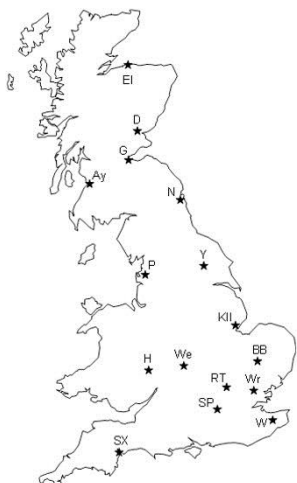
Peach–potato aphids (*Myzus persicae*) were caught at eight suction-trap sites in low numbers, with decreases at seven sites. A single mealy cabbage aphid (*Brevicoryne brassicae*) was caught at Silwood. Typical winter oilseed rape crops have reached GS1,6 but range from GS1,3 – 1,10. Peach–potato aphids in oilseed rape crops have been seen from parts of central, eastern and southern England. In some crops, numbers are high enough for spraying to prevent the potential secondary spread of Turnip Yellows virus (TuYV). **We strongly recommend monitoring crops now.**

OTHERS

The willow-carrot aphid (*Cavariella aegopodii*) was caught in eight suction-traps this week, with numbers highest at Broom's Barn.

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

SUCTION-TRAPPING RESULTS



Winter Cereal Aphids

Numbers of **female bird cherry–oat aphid**, *Rhopalosiphum padi*, flying this bulletin week fell and are low for the time of year. The table below shows the combined total of both forms of **female** bird cherry–oat aphids caught during the week **10/10 - 16/10** and compares them to last year and a ten year mean. The table also includes numbers accumulated from a start date (**26/09**) representing **early emergence** and thus gives an indication of the build-up of virus vector pressure. English grain aphids (*Sitobion avenae*) always fly in much lower numbers than bird cherry–oat aphids in the autumn.

During the period **14/10 – 20/10** **five** *R. padi* were tested at Rothamsted, **four** were of the cereal colonising form (30 year weekly mean = **4**). 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.

- Numbers of bird cherry–oat aphid fell at 10 of the 12 suction-trap sites this week.
- Numbers were highest at Edinburgh and Preston, but are well below the 10-yr means for this time of year throughout England.
- This week the number of cereal-colonising bird cherry–oat aphids are normal for the time of year at Rothamsted.
- Single grain aphids were caught at Edinburgh and Silwood.

'*' indicates where totals have been corrected proportionally to seven days, fewer days' samples having been processed. '/' indicates that identification have not been completed.

<i>Sitobion avenae</i>				10/10-16/10	<i>Rhopalosiphum padi</i> - females only				
Compared to last week	2016	2015	2006-2015		Compared to last week	2016	2006-2015	2016 Acc from 26/09	2006-2015 Acc from 26/09
	/	/	0	Dundee		/	153	/	705
↑	*1	0	2	Gogarbank (Edinburgh)	↓	*147	284	1270	1725
	*0	0	0	Newcastle	↓	*9	226	82	1585
	*0	1	/	York	↓	*40	/	189	/
	*0	0	0	Preston	↓	*413	1793	1902	6847
	*0	0	1	Kirton	↓	*36	618	129	1694
	*0	0	0	Broom's Barn (Bury St Edmunds)	↓	*40	337	98	1441
	*0	0	0	Wellesbourne	↑	*35	362	75	1128
	*0	0	2	Hereford	↓	*25	527	116	1985
	*0	1	1	Rothamsted (Harpenden)	↑	*12	244	46	1105
↓	*0	0	0	Writtle	↓	*16	421	66	1596
↓	*1	0	1	Silwood Park (nr Ascot)	↓	*8	195	44	743
↓	*0	1	2	Wye	↓	*26	352	149	1391
↑	1	0	0	Starcross (nr Exeter)	↑	64	221	230	1175

Winter Oilseed Rape and Vegetable Brassica 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 **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.

- The peach–potato aphid was caught at eight suction-trap sites, with decreases at seven sites.
- A single mealy cabbage aphid was caught at Silwood.

<i>Brevicoryne brassicae</i>				10/10-16/10	<i>Myzus persicae</i>			
Compared to last week	2016	2015	2006-2015		Compared to last week	2016	2015	2006-2015
	/	/	4	Dundee		/	/	2
↓	*0	0	0	Gogarbank (Edinburgh)	↓	*0	2	1
	*0	0	0	Newcastle		*0	0	0
	*0	0	/	York		*0	0	/
	*0	0	0	Preston		*0	0	3
	*0	0	7	Kirton	↓	*1	1	28
↓	*0	0	0	Broom's Barn (Bury St Edmunds)	↑	*5	2	5
	*0	0	1	Wellesbourne	↓	*4	0	5
	*0	0	5	Hereford	↓	*1	0	4
	*0	0	0	Rothamsted (Harpenden)	↓	*1	0	2
↓	*0	0	0	Writtle	↓	*2	0	3
↑	*1	0	0	Silwood Park (nr Ascot)	↑	*1	0	1
	*0	0	0	Wye	↓	*0	0	3
	*0	1	0	Starcross (nr Exeter)		*1	1	4

Further information

Please send information on crop aphids to: mark-s.taylor@rothamsted.ac.uk

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