AHDB Aphid News

Suction-trap period 12 October – 18 October 2020

General

The Rothamsted Insect Survey have a new BYDV text messaging service to inform cereal growers about the number of aphid vectors in their area. The service is free, see: https://insectsurvey.com/aphid-alert.

- Due to technical difficulties relating to the current situation, 10-year average data will be displayed on the data tables below and on the Rothamsted Insect Survey website from 2009 – 2018.
- As the autumn migration continues; the total number of aphids reported upon has declined by 43% of that of the previous period.
- Bird cherry-oat aphid numbers decreased by 47% of the previous period. Numbers at York and Preston are much more subdued than the last reporting period but there have been increases at four sites elsewhere. Included on the table this week are numbers accumulated from 14/09, representing the early emergence and from 28/9 representing an average emergence of cereal seedlings to give an indication of the build-up of virus vector pressure. During the period 16/10 – 22/10; ten of the fifteen aphids tested (67%*) at Rothamsted were of the cereal colonising form (the 10-year weekly mean is 16%). *Note: the number of non-cereal colonising aphids tested this week was less than quarter of the 10-year mean.
- Grain aphids were recorded in single figures from four sites.
- BYDV testing continued at Rothamsted on a number of cereal aphids from selected sites captured during the previous bulletin period.
- 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 that was originally colonised. Very approximately this begins when 170 day degrees above a threshold of 3ºC (DD>3) have accumulated. The AHDB BYDV management tool can be used to calculate this.
- Peach-potato aphids were recorded from nine sites in single figures. This is the main vector of TuYV but seldom reaches numbers high enough to cause direct feeding damage.
- A single Cabbage aphid was recorded from Kirton. This species can cause direct feeding damage to isolated plants but is a poor vector of TuYV and is more of a problem in spring than in autumn.
- Willow-carrot aphids were found from eight sites reaching double figures from Gogarbank and Broom's Barn with a hotspot at Dundee. Two male individuals were recorded from Dundee as well as single individuals from Preston and Broom's Barn.
- Aphids that have colonised unprotected crops will continue to do well at temperatures above 3°C.

Crop inspections are advised.

BYDV test results

Number of aphids* with BYDV positive test results. Total number tested indicated in brackets.

Bird cherry–oat aphid
York: **7** (30)
Broom's Barn: **6** (30)
Starcross: **10** (32)

Total: **23** (92)

Grain aphid
York: **0** (0)
Broom's Barn: **0** (0)
Starcross: **0** (0)

Total: **0** (0)

* *Samples collected during period 5 - 11 October 2020*

Suction-trap data

'*' indicates where totals have been corrected proportionally to seven days, fewer days' samples having been processed, "#" indicates the first occurrence of this aphid species this year and **0 = none so far this year.**

Red text indicates an increase (↑) and blue text indicates a decrease (↓) in aphid numbers compared to last week. "/" indicates that we have no data from this trap.

Rose-grain aphid *(Metopolophium dirhodum)*	**Bulletin Week Totals**		**12/10-18/10**
	2020	2018	10-year average 2009-18
Dundee	*2	0	0
Gogarbank (Edinburgh)	0	3	2
Newcastle	0	3	1
York	0	0	
Preston	*0	0	4
Kirton	0	0	0
Broom's Barn (Bury St Edmunds)	0	8	2
Wellesbourne	0	0	0
Hereford	*0	0	0
Rothamsted (Harpenden)	0	0	0
Writtle	0	0	1
Silwood Park (nr Ascot)	0	0	0
East Malling	0		
Starcross (nr Exeter)	0	4	1

Bird cherry-oat aphid – females only *(Rhopalosiphum padi)*	**Bulletin Week Totals**		**12/10-18/10**	**Accumulated from 14/09**		**Accumulated from 28/09**	
	2020	2018	10-year average 2009-18	2020	10-year average 2009-18	2020	10-year average 2009-18
Dundee	*119	125	27	205	903	205	165
Gogarbank (Edinburgh)	43	110	162	728	2271	204	752
Newcastle	20	59	198	851	1551	605	886
York	166	3837		4048		3066	
Preston	*288	2164	984	5656	8493	3323	4713
Kirton	66	2273	447	1003	2475	619	1644
Broom's Barn (Bury St Edmunds)	34	2062	399	720	2227	488	1481
Wellesbourne	53	1137	369	1067	2502	487	1558
Hereford	*37	231	307	541	2660	238	1523
Rothamsted (Harpenden)	34	905	167	421	1080	222	698
Writtle	73	1784	380	937	2459	462	1716
Silwood Park (nr Ascot)	29	458	152	447	1010	164	663
East Malling	51			542		251	
Starcross (nr Exeter)	218	868	193	2210	1414	1055	899

Grain aphid *(Sitobion avenae)*	**Bulletin Week Totals**		**12/10-18/10**
	2020	2018	10-year average 2009-18
Dundee	*2	0	0
Gogarbank (Edinburgh)	1	0	1
Newcastle	0	0	0
York	0	0	
Preston	*0	0	0
Kirton	0	8	1
Broom's Barn (Bury St Edmunds)	1	0	0
Wellesbourne	0	1	1
Hereford	*0	0	1
Rothamsted (Harpenden)	0	0	0
Writtle	0	0	1
Silwood Park (nr Ascot)	0	0	1
East Malling	1		
Starcross (nr Exeter)	0	0	1

Peach-potato aphid *(Myzus persicae)*	**Bulletin Week Totals**		**12/10-18/10**
	2020	2018	10-year average 2009-18
Dundee	*2	6	1
Gogarbank (Edinburgh)	0	0	1
Newcastle	0	0	0
York	0	16	
Preston	*0	0	1
Kirton	1	181	32
Broom's Barn (Bury St Edmunds)	2	30	8
Wellesbourne	1	101	20
Hereford	*0	18	6
Rothamsted (Harpenden)	2	18	2
Writtle	1	8	2
Silwood Park (nr Ascot)	2	26	4
East Malling	1		
Starcross (nr Exeter)	7	22	5

Potato aphid *(Macrosiphum euphorbiae)*	**Bulletin Week Totals**		**12/10-18/10**
	2020	2018	10-year average 2009-18
Dundee	*0	0	0
Gogarbank (Edinburgh)	0	0	0
Newcastle	0	0	0
York	0	0	
Preston	*3	0	1
Kirton	0	0	0
Broom's Barn (Bury St Edmunds)	0	0	0
Wellesbourne	0	0	0
Hereford	*0	0	0
Rothamsted (Harpenden)	0	0	0
Writtle	0	0	0
Silwood Park (nr Ascot)	0	0	1
East Malling	1		
Starcross (nr Exeter)	0	0	0

Cabbage aphid *(Brevicoryne brassicae)*	**Bulletin Week Totals**		**12/10-18/10**
	2020	2018	10-year average 2009-18
Dundee	*0	0	0
Gogarbank (Edinburgh)	0	0	0
Newcastle	0	0	0
York	0	0	
Preston	*0	0	0
Kirton	1	16	5
Broom's Barn (Bury St Edmunds)	0	8	1
Wellesbourne	0	0	1
Hereford	*0	0	3
Rothamsted (Harpenden)	0	0	0
Writtle	0	0	0
Silwood Park (nr Ascot)	0	0	0
East Malling	0		
Starcross (nr Exeter)	0	0	0

Willow-carrot aphid *(Cavariella aegopodii)*	**Bulletin Week Totals**		**12/10-18/10**
	2020	2018	10-year average 2009-18
Dundee	*84	313	36
Gogarbank (Edinburgh)	38	7	5
Newcastle	0	0	1
York	0	296	
Preston	*4	48	34
Kirton	3	8	52
Broom's Barn (Bury St Edmunds)	33	24	244
Wellesbourne	9	2	7
Hereford	*5	0	8
Rothamsted (Harpenden)	0	0	1
Writtle	0	0	4
Silwood Park (nr Ascot)	0	0	1
East Malling	0		
Starcross (nr Exeter)	4	27	7

Pea aphid *(Acyrthosiphon pisum)*	**Bulletin Week Totals**		**12/10-18/10**
	2020	2018	10-year average 2009-18
Dundee	*0	0	0
Gogarbank (Edinburgh)	0	0	0
Newcastle	0	0	0
York	0	0	
Preston	*0	0	0
Kirton	0	0	1
Broom's Barn (Bury St Edmunds)	0	0	1
Wellesbourne	1	1	1
Hereford	*0	0	0
Rothamsted (Harpenden)	1	4	1
Writtle	0	0	0
Silwood Park (nr Ascot)	0	0	1
East Malling	0		
Starcross (nr Exeter)	0	3	1

Black bean aphid *(Aphis fabae)*	**Bulletin Week Totals**		**12/10-18/10**
	2020	2018	10-year average 2009-18
Dundee	*0	0	0
Gogarbank (Edinburgh)	0	0	0
Newcastle	0	2	0
York	0	16	
Preston	*1	8	1
Kirton	1	62	11
Broom's Barn (Bury St Edmunds)	0	18	9
Wellesbourne	0	2	3
Hereford	*0	4	1
Rothamsted (Harpenden)	1	0	0
Writtle	3	8	1
Silwood Park (nr Ascot)	0	10	1
East Malling	1		
Starcross (nr Exeter)	0	1	1

Further information

Please send information on crop aphids to: alex.greenslade@rothamsted.ac.uk

insectsurvey.com/aphid-bulletin

ahdb.org.uk/aphid-news

In partnership with

AHDB
Stoneleigh Park
Kenilworth
Warwickshire
CV8 2TL

T 024 7 669 2051
E info@ahdb.org.uk
W ahdb.org.uk
@TheAHDB

