

SASA SA

ROTHAMSTED

# AHDB Aphid News (15 May 2015 No.5)

## 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 <u>www.potato.org.uk/online-</u> toolbox/aphid-monitoring.

#### GENERAL

The temperature in January and February was close to average at all suction-trap sites, the greatest difference from average being at Starcross, where it was 1°C above. Thus the timing and early-season abundance of winged aphids was expected to be around average, and it is largely turning out as forecast so far. Overwintering success of aphids within crops is also expected to have been average.

#### WINTER CEREALS

Numbers of cereal aphids flying are currently low and reports from crops suggest that numbers present are also low. Most winter crops are now past growth stage 31 and further BYDV infection is unlikely to be an issue.

#### SPRING CEREALS

Low numbers of aphids have been reported from spring barley in eastern England. BYDV problems in spring-sown cereals are unusual and arise generally from primary infection through large numbers of flying aphids, not through secondary spread via their offspring. Late-sown crops may be at risk if conditions produce large scale migrations soon.

#### POTATOES

Low numbers of the peach–potato aphid (*Myzus persicae*) have been caught throughout eastern and southern England, but not yet in Scotland.

The potato aphid (*Macrosiphum euphorbiae*) has been caught in low numbers as far north as Kirton.

Various other vectors of PVY and PVA are flying, for example willow–carrot aphid (*Cavariella aegopodii*), the black bean aphid (*Aphis fabae*) and the leaf-curling plum aphid (*Brachycaudus helichrysi*). These always fly early in the season when the plants are young. Further regional information on potato virus vectors can be accessed here: www.potato.org.uk/online-toolbox/aphid-monitoring.

#### WINTER OILSEED RAPE

Mealy cabbage aphid is not flying so far this year but many will have made it through the winter on the crop. The threshold for control is >13% plants infested before petal fall.

#### SPRING OILSEED RAPE

Mealy cabbage aphid is not flying so far this year. The threshold for control is >4% plants infested before petal fall.

#### FIELD BRASSICAS

Low numbers of peach-potato aphid are flying in central and southern England. Mealy cabbage aphid has overwintered on some oilseed rape crops but is not flying yet.

#### CARROTS

The willow–carrot aphid is flying throughout England, with numbers highest in eastern England.

#### **PEAS and BEANS**

Pea aphid and black bean aphid have both been caught in the South East this week.

### SUCTION-TRAPPING RESULTS



The information below relates to suction-trap samples collected during Bulletin Week 5: 4/5 - 10/5.

- Three cereal aphid species have been caught in the suction-traps this week in low numbers.
- Further reports from eastern England confirm low numbers of three cereal aphid species in some spring barley crops.
- A further six peach–potato aphids (*Myzus persicae*) have been caught this week, with first arrivals at Broom's Barn, Rothamsted, Writtle, Wye and Starcross.
- Three potato aphids (*Macrosiphum euphorbiae*) have been caught this week, one each at Kirton, Writtle and Starcross.
- Numbers of the willow–carrot aphid (*Cavariella aegopodii*) have increased this week, with highest numbers in eastern England.
- No mealy cabbage aphids (*Brevicoryne brassicae*) have been caught so far this year.
- The first pea aphids (*Acyrthosiphon pisum*) and black bean aphids (*Aphis fabae*) have been caught this week.

The tables below show species of importance which have appeared for the first time at specific sites, together with forecast dates where available, their time of first arrival last year, and the average time of their first arrival over the last ten years.

Rose-grain aphid (Met	opolophium	dirhodum)
-----------------------	------------	-----------

Rose–grain aphid	FIRST ARRIVALS			
	2015	forecast	2014	05-14
D= Dundee	0	4/6	17/5	20/5
G= Edinburgh	0	24/5	28/4	21/5
N= Newcastle	0	30/5	28/5	25/5
Y = York	16/4	N/A	N/A	N/A
P = Preston	0	5/5	6/3	23/4
K = Kirton	4/5	10/5	30/4	13/5
BB = Bury St Edmunds	0	16/5	24/4	2/5
We = Wellesbourne	0	N/A	18/5	2/5
H = Hereford	0	18/5	27/5	16/5
RT = Harpenden	0	10/5	24/4	4/5
WR = Writtle	0	23/4	19/4	25/4
SP = nr Ascot	20/4	8/5	24/4	25/4
W = Wye	7/5	7/5	1/5	1/5
SX = nr Exeter	15/4	30/3	20/2	31/3

The rose–grain aphid was caught at two sites this week in low numbers, with first arrivals at Kirton and Wye, both close to the 10-year average, and the individual at Wye spot on the forecast date.

#### Bird cherry-oat aphid (Rhopalosiphum padi)

Bird cherry–oat aphid	FIRST ARRIVALS			
	2015	forecast	2014	05-14
D= Dundee	0	21/5	17/5	17/5
G= Edinburgh	0	17/5	13/5	11/5
N= Newcastle	0	19/5	18/5	11/5
Y = York	22/4	N/A	N/A	N/A
P = Preston	0	3/5	10/4	2/5
K = Kirton	27/4	15/4	16/4	14/4
BB = Bury St Edmunds	0	2/5	13/4	22/4
We = Wellesbourne	0	N/A	27/4	11/4
H = Hereford	16/4	24/4	10/4	12/3
RT = Harpenden	4/5	6/5	23/4	28/4
WR = Writtle	4/5	25/4	16/1	9/4
SP = nr Ascot	10/5	1/5	28/4	25/4
W = Wye	2-8/3	21/4	8/4	8/4
SX = nr Exeter	19-25/1	24/3	13/3	11/3

The bird cherry–oat aphid has been caught at four sites this week, including first arrivals at three sites all later than the 10-yr averages.

Grain aphid (Sitobion avenae)

Grain aphid	FIRST ARRIVALS			
	2015	forecast	2014	05-14
D= Dundee	0	5/6	23/5	31/5
G= Edinburgh	0	28/5	25/5	22/5
N= Newcastle	0	28/5	22/5	2/6
Y = York	0	N/A	N/A	N/A
P = Preston	0	17/5	23/4	16/5
K = Kirton	0	8/5	14/5	17/5
BB = Bury St Edmunds	0	15/5	25/4	11/5
We = Wellesbourne	0	N/A	31/3	16/4
H = Hereford	0	14/5	21/5	17/5
RT = Harpenden	0	12/5	16/4	17/5
WR = Writtle	15/4	3/5	9/4	27/4
SP = nr Ascot	0	13/5	24/4	4/5
W = Wye	0	7/5	14/4	18/5
SX = nr Exeter	1/5	15/4	18/4	13/4

Two grain aphids have been caught this week (Writtle 1 and Starcross 1).

#### Peach-potato aphid (Myzus persicae)

Peach-potato aphid	FIRST ARRIVALS			
	2015	forecast	2014	05-14
D= Dundee	0	13/6	18/6	13/6
G= Edinburgh	0	12/6	12/6	23/6
N= Newcastle	0	12/6	7/6	15/6
Y = York	0	NA	NA	NA
P = Preston	0	17/5	16/4	26/5
K = Kirton	30/4	8/5	20/3	12/5
BB = Bury St Edmunds	7/5	17/5	9/4	11/5
We = Wellesbourne	0	NA	29/4	29/4
H = Hereford	2/5	27/5	17/5	25/5
RT = Harpenden	7/5	15/5	29/4	21/5
WR = Writtle	9/5	30/4	19/4	30/4
SP = nr Ascot	0	15/5	29/4	9/5
W = Wye	9/5	7/5	27/3	22/4
SX = nr Exeter	10/5	20/4	31/3	15/4

Six peach–potato aphids have been caught this week, including five first arrivals mostly within two weeks of the 10-yr averages and our forecasts, the exception being Starcross which was somewhat later.

**Potato aphid** (*Macrosiphum euphorbiae*)

Potato aphid	FIRST ARRIVALS			
	2015	forecast	2014	05-14
D= Dundee	0	31/5	17/5	30/5
G= Edinburgh	0	20/5	29/4	19/5
N= Newcastle	0	30/5	3/6	3/6
Y = York	0	N/A	N/A	N/A
P = Preston	0	19/5	10/5	17/5
K = Kirton	23/4	5/5	12/4	17/5
BB = Bury St Edmunds	21/4	20/5	1/4	15/5
We = Wellesbourne	0	N/A	12/5	10/5
H = Hereford	0	15/5	18/4	12/5
RT = Harpenden	0	14/5	11/4	12/5
WR = Writtle	24/4	29/4	24/4	30/4
SP = nr Ascot	23/4	10/5	29/4	5/5
W = Wye	0	11/5	27/4	16/5
SX = nr Exeter	20/4	24/4	16/5	2/5

Single potato aphids have been caught at three sites this week.

Willow-carrot aphid (Cavariella aegopodii)

Willow–carrot aphid	FIRST ARRIVALS			
	2015	2014	05-14	
D= Dundee	0	12/5	22/5	
G= Edinburgh	20-26/4	25/5	11/5	
N= Newcastle	0	16/5	20/5	
Y = York	4/5	N/A	N/A	
P = Preston	8/5	29/4	9/5	
K = Kirton	21/4	30/4	4/5	
BB = Bury St Edmunds	4/5	24/4	30/4	
We = Wellesbourne	19/4	24/4	2/5	
H = Hereford	0	2/5	26/4	
RT = Harpenden	23/4	24/4	30/4	
WR = Writtle	7/5	28/4	28/4	
SP = nr Ascot	1/5	27/4	29/4	
W = Wye	7/5	24/4	30/4	
SX = nr Exeter	30/4	5/4	27/4	

The willow–carrot aphid has been caught at ten sites this week, including first arrivals at five sites, all within about a week of the 10-yr averages. Numbers flying were highest in eastern England.

#### **Pea aphid** (Acyrthosiphon pisum)

Pea aphid	FIRST ARRIVALS			
	2015	2014	05-14	
D= Dundee	0	8/6	16/6	
G= Edinburgh	0	26/5	3/6	
N= Newcastle	0	31/5	11/6	
Y = York	0	NA	NA	
P = Preston	0	18/5	27/5	
K = Kirton	0	15/5	24/5	
BB = Bury St Edmunds	0	29/4	18/5	
We = Wellesbourne	0	21/4	7/5	
H = Hereford	0	17/5	11/5	
RT = Harpenden	0	24/4	19/5	
WR = Writtle	4/5	23/4	6/5	
SP = nr Ascot	0	28/4	5/5	
W = Wye	0	14/4	8/5	
SX = nr Exeter	0	18/5	10/5	

The first pea aphids were caught at Writtle this week very close to the 10-yr average.



#### www.hgca.com/pests

www.potato.org.uk/onlinetoolbox/aphid-monitoring Rothamsted Insect Survey HDC pest bulletin

#### Please send information on crop aphids to

mark-s.taylor@rothamsted.ac.uk



© Agriculture and Horticulture Development Board 2013. All rights reserved.

While the Agriculture and Horticulture Development Board, operating through its HGCA division, seeks to ensure that the information contained within this document is accurate at the time of printing, no warranty is given in respect thereof and, to the maximum extent permitted by law, the Agriculture and Horticulture Development Board accepts no liability for loss, damage or injury howsoever caused (including that caused by negligence) or suffered directly or indirectly in relation to information and opinions contained in or omitted from this document. Reference herein to trade names and proprietary products without stating that they are protected does not imply that they may be regarded as unprotected and thus free for general use. No endorsement of named products is intended, nor is any criticism implied of other alternative but unnamed products. HGCA is the cereals and oilseeds division of the Agriculture and Horticulture Development Board.