AHDB Aphid News (10 Oct 2014 No.27)

# APHID ALERT SUMMARY

**GENERAL**

The weather for this bulletin week (29th September to 5th October) continued to be highly conducive to aphid flight. Numbers and the diversity of insects in the samples have again led to some backlogs and we have concentrated on traps in the main arable areas. With the recent change in weather, normal service should be resumed for next week's bulletin.

**WINTER CEREALS**

Numbers of bird cherry–oat aphid (*Rhopalosiphum padi*) in suction-traps have risen further and are above average at most sites examined. Of 48 tested in the current week (3rd- 9th October) from the trap at Rothamsted, 9 were of the cereal-colonising form. The weekly average for this time of year is 5. Numbers of grain aphid (*Sitobion avenae*) are about normal. Reports of colonisers in crops and on volunteers are increasing.

*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 3oC (DD>3) have accumulated. For example, if the average temperature on a particular day was 13oC, 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 eastern England and about normal elsewhere. 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. We are not testing our samples for the virus itself. Reports of the mealy cabbage aphid (*Brevicoryne brassicae*) in crops have also been received for the first time this week.

**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

Numbers of **female bird cherry–oat aphid,** *Rhopalosiphum padi*, flying this bulletin week have increased across the Country. The table below shows the combined total of both forms of **female** bird cherry–oat aphids caught during the week **29/9-05/10** 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 thus gives 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 **03/10 – 9/10 48** *R. padi* were tested at Rothamsted, **9** were of the cereal colonising form (28 year weekly mean = 5). 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 were above the ten year means at all sites this week except Writtle which is probably because of a trap malfunction (has now been sorted out).
- 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 three of the six sites, with a hotspot at Kirton.

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.

| ***Sitobion avenae*** | | | | **29/09-05/10** | ***Rhopalosiphum padi* - 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** |
| ↑ | 3 | 0 | 3 | Gogarbank (Edinburgh) | ↓ | 764 | 743 | | 1829 | 1602 |
| | / | / | 0 | Newcastle | | / | 785 | | / | 1560 |
| | / | 0 | 0 | Preston | | / | 2165 | | / | 4531 |
| ↑ | *16 | 1 | 0 | Kirton | ↑ | *2055 | 272 | | 3517 | 768 |
| ↓ | 0 | 0 | 1 | Broom's Barn (nr Bury St Edmunds) | ↓ | 1245 | 315 | | 2830 | 802 |
| | / | / | / | Wellesbourne | | / | 159 | | / | 433 |
| ↓ | 0 | 0 | 1 | Hereford | ↑ | 2081 | 463 | | 3817 | 1023 |
| ↓ | 3 | 0 | 0 | Rothamsted (Harpenden) | ↑ | 1093 | 374 | | 1682 | 699 |
| | 0 | 0 | 2 | Writtle | ↑ | 402 | 603 | | 406 | 1196 |
| | / | / | 1 | Silwood Park (nr Ascot) | | / | 289 | | / | 505 |
| | / | / | 2 | Wye | | / | 456 | | / | 1031 |
| | / | / | 3 | Starcross (nr Exeter) | | / | 516 | | / | 750 |

## 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.

- Numbers of the peach–potato aphid and the cabbage aphid in the suction-traps this week are about normal, except for a hotspot for both species at Kirton.

| *Brevicoryne brassicae* | | | | 29/09-05/10 | *Myzus persicae* | | | |
|---|---|---|---|---|---|---|---|---|
| Compared to last week | 2014 | 2013 | 04-13 | | Compared to last week | 2014 | 2013 | 04-13 |
| ↓ | 0 | 0 | 0 | Gogarbank (Edinburgh) | ↑ | 1 | 0 | 0 |
| | / | / | 0 | Newcastle | | / | / | 0 |
| | / | 0 | 1 | Preston | | / | 1 | 2 |
| ↑ | *47 | 0 | 4 | Kirton | ↑ | *77 | 5 | 11 |
| ↑ | 2 | 0 | 1 | Broom's Barn (nr Bury St Edmunds) | ↓ | 3 | 2 | 3 |
| | / | / | / | Wellesbourne | | / | / | / |
| | 0 | 2 | 2 | Hereford | ↑ | 9 | 18 | 5 |
| ↓ | 0 | 0 | 0 | Rothamsted (Harpenden) | ↑ | 9 | 0 | 1 |
| | 0 | 0 | 1 | Writtle | ↑ | 3 | 1 | 4 |
| | / | / | 0 | Silwood Park (nr Ascot) | | / | / | 0 |
| | / | / | 0 | Wye | | / | / | 2 |
| | / | / | 2 | Starcross (nr Exeter) | | / | / | 5 |

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## Further information

www.hgca.com/pests

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

mark-s.taylor@rothamsted.ac.uk richard.harrington@rothamsted.ac.uk

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