

## APHID ALERT SUMMARY

### WINTER CEREALS

Accumulated numbers of winged bird cherry–oat aphid (*Rhopalosiphum padi*) in suction-traps remain higher than average as does the proportion that are of the cereal-colonising form. Continued warm weather means that populations will be building fast and there are reports of high numbers in the field. The BYDV risk is thus high in unprotected crops.

*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

Accumulated numbers of peach–potato aphid (*Myzus persicae*) are about average but the warm weather means that populations are likely to be building strongly in oilseed rape crops.

*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

Despite being a wet week, there were a few more flight opportunities compared to the previous week and aphid numbers generally increased. The table below shows the combined total of both forms of **female** bird cherry–oat aphids, *Rhopalosiphum padi*, caught during the week **13/10-19/10** 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 **17/10 – 23/10** *R. padi* were tested at Rothamsted, **8** were of the cereal colonising form (28 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, and lower towards the north and east.

- Numbers of bird cherry–oat aphid were up across much of England and were above the ten year mean for this bulletin week.
- The number and proportion of cereal-colonising bird cherry–oat aphids also remains above the long term average for the time of year.
- The grain aphid was caught at four sites 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> |      |      |       | 13/10-19/10                       | <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    | 1     | Gogarbank (Edinburgh)             | ↓  | *63   | 137   | 2377                | 2189                 | 548                 | 587                  |  |
|                        | /    | /    | 0     | Newcastle                         |  | /     | 103   | /                   | 2007                 | /                   | 447                  |  |
|                        | 0    | 0    | 1     | Preston                           |  | 1226  | 897   | /                   | 7044                 | /                   | 2512                 |  |
| ↑                      | *2   | 0    | 1     | Kirton                            | ↑  | *1094 | 270   | 4939                | 1702                 | 1423                | 933                  |  |
| ↓                      | 0    | 0    | 0     | Broom’s Barn (nr Bury St Edmunds) | ↑  | 296   | 148   | 3255                | 1329                 | 425                 | 527                  |  |
|                        | /    | /    | /     | Wellesbourne                      |  | /     | 35    | /                   | 507                  | /                   | 74                   |  |
|                        | *0   | 1    | 1     | Hereford                          | ↑  | *306  | 233   | 4375                | 1794                 | 558                 | 770                  |  |
| ↑                      | 2    | 1    | 0     | Rothamsted (Harpenden)            | ↑  | 218   | 143   | 2019                | 1132                 | 337                 | 433                  |  |
|                        | 1    | 0    | 0     | Writtle                           | ↑  | 449   | 222   | 1204                | 1919                 | 798                 | 723                  |  |
|                        | /    | /    | 1     | Silwood Park (nr Ascot)           |  | /     | 107   | /                   | 786                  | /                   | 281                  |  |
|                        | /    | /    | 1     | Wye                               |  | /     | 246   | /                   | 1645                 | /                   | 614                  |  |
| ↑                      | 1    | /    | 1     | Starcross (nr Exeter)             | ↓  | 83    | 180   | /                   | 1203                 | 209                 | 454                  |  |

## 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 in the suction-traps this week are about normal, with highest numbers at Kirton (21). No cabbage aphids were caught this week.

| <i>Brevicoryne brassicae</i> |      |      |       | 13/10-19/10                       | <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     | Newcastle                         |                       | /    | /    | 0     |
|                              | 0    | 0    | 0     | Preston                           |                       | 1    | 0    | 2     |
| ↓                            | *0   | 0    | 7     | Kirton                            | ↑                     | *21  | 5    | 21    |
|                              | 0    | 0    | 0     | Broom's Barn (nr Bury St Edmunds) | ↑                     | 7    | 0    | 5     |
|                              | /    | /    | /     | Wellesbourne                      |                       | /    | /    | /     |
|                              | *0   | 0    | 4     | Hereford                          | ↑                     | *2   | 0    | 4     |
|                              | 0    | 0    | 0     | Rothamsted (Harpenden)            | ↓                     | 1    | 0    | 1     |
|                              | 0    | 0    | 0     | Writtle                           | ↑                     | 4    | 0    | 2     |
|                              | /    | /    | 0     | Silwood Park (nr Ascot)           |                       | /    | /    | 1     |
|                              | /    | /    | 0     | Wye                               |                       | /    | /    | 3     |
|                              | 0    | /    | 0     | Starcross (nr Exeter)             | ↓                     | 6    | /    | 2     |



### 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

[mark-s.taylor@rothamsted.ac.uk](mailto:mark-s.taylor@rothamsted.ac.uk)

[richard.harrington@rothamsted.ac.uk](mailto:richard.harrington@rothamsted.ac.uk)

