



# Strategic Farms 2020 aphid survey



In 2020 ADAS are carrying out cereal aphid assessment on both Strategic Farms East and West. The data will be used to demonstrate the variation in pests and their natural enemies across agricultural landscapes. You can contribute by counting aphids and natural enemies in your crops.

## Why contribute?

We can build a national picture of the numbers of aphids and natural enemies by looking a lots of fields briefly, but this is only possible with your help.

The survey will take about an hour, and we will provide feedback through the AHDB Strategic farm program.

## Taking part

1. Go to into any cereal crop between the end of May and senesced, and walk about 10m into the crop.
2. Inspect at least 20 tillers, recording the following:
  - Growth stage
  - How many of the tillers had 1 or more of the following:
    - Aphids (any species)
    - Aphid mummy (parasitised by a wasp)
    - Hoverfly larvae
    - Ladybird larvae
    - Adult ladybird
    - Other invertebrates
3. Repeat this up to five times along a transect parallel to the field edge, with monitoring points about 25 meters apart.
4. Walk about 100m into the crop, and repeat the process above along a transect parallel to the first transect.
5. You can either email the data [Mark.Ramsden@adas.co.uk](mailto:Mark.Ramsden@adas.co.uk), or complete this [online form](#) (mobile friendly).

## Get in touch

A quick guide to the aphids and natural enemies you are looking for is provided below. If you have any questions, contact Mark Ramsden at ADAS.





# Cereal aphids and their natural enemies

Inspect tillers from the base of the stem to the tip of each leaf and the ear.



Grain aphids *Sitobion avenae*

Yellowish-green, green or reddish-brown to black.

Most common, mainly on underside of leaves or later on the ear.



Ladybird adults

Most common is 7-spot, about 1cm with 7 black spots on red wing covers, and slightly larger Harlequin, which has irregular black/red patterning. Others include the smaller black/red 2 spot, and black/yellow 14-spot.

Highly mobile, likely to drop to ground or fly away when disturbed



Bird cherry-oat aphids *Rhopalosiphum padi*

Green to dusky brown with rust red patches at rear

Mainly on underside of leaves, sometimes on the ear.



Ladybird larvae

Most common is 7-spot (left) and harlequin (right), dark with distinct orange markings



Rose-grain aphid *Metopolophium dirhodum*

Light green or rarely pink  
Found mainly on upper leaves, never on the ear.



Aphid mummies

Appear as a bloated, hardened brown-cream aphid, fixed to the plant  
Contains the larvae of a parasitoid wasp.



Hoverfly larvae

Patterned fly maggot, often sitting along leaf or stem. When moving, narrower head end often arches up before touching the leaf ahead to move.

Pupae resemble 'droplets', often on stem or underside of leaves



Aphid parasitoid wasps

1-5mm in length, will immediately fly if disturbed

Slender shiny black body, requires strong hand lense or microscope to ID.