

What is greenbug?

Greenbug (*Schizaphis graminum*) is a major aphid pest of sorghum, as well as being found on over 70 grass species, major grains and cereal crops.

Greenbug can cause damage during the seedling phase, however its greatest effect occurs during the reproductive phase of the crop. As it feeds toxins are injected into the plant causing damage. Greenbug infestation leads to smaller kernels and reduced yield. Wheat is the primary winter host, but the pest can also affect oats and barley. Volunteers and grass weeds (e.g. Johnson grass) can act as interim hosts.

What does it look like?

Adult greenbugs are pear shaped and grow up to 1.6 mm in length. Both adults and nymphs (immature) are pale green to yellow with a darker green stripe along their back. Tips of the siphuncles (exhaust pipes) and legs are black. Antennae are as long or longer than the body length. Both winged and wingless forms may be present in a colony.

What can it be confused with?

Greenbug is similar in appearance to other cereal aphid species, such as the rose grain, corn or oat aphids (*Rhopalosiphum* species) which are present in Australia and 2-3 mm in size. The corn aphid is light to dark green with dark siphuncles and feeds on sorghum, maize, winter cereals and grasses.

Rose grain aphids and oat aphids feed on wheat, barley and oat crops. Rose grain aphids are light green with a darker stripe along their back. They have long pale siphunculi whilst the oat aphid is olive green in colour with a pear shaped body.

What should I look for?

Like all aphids, greenbugs are usually found in colonies. They colonise the underside of leaves and produce sticky honeydew when in high numbers. Whilst feeding, aphids inject salivary toxins into plant tissue. Red to rusty brown spots on sorghum leaves can be caused by the aphid feeding resulting in the injection of a chlorophyll destroying toxin.



Leaf discolouration typical of greenbug infestation

Alton N Sparks Jr, University of Georgia, Bugwood.org



Adult greenbug on wheat blade

Frank Peairs, Colorado State University, Bugwood.org

Feeding activity in wheat appears as yellow or orange spots on leaves. Damaged leaves begin to die, turning yellow then brown from the outer edges.

Greenbugs can also vector barley yellow dwarf virus and the exotic maize dwarf mosaic virus and may predispose sorghum to charcoal rot.

How does it spread?

Adults can spread by actively flying throughout the crop or using wind currents. Long distance dispersal also occurs by 'hitchhiking' on machinery, clothes or plant material. Like all aphids, greenbug has a range of alternate (summer and winter) hosts for carry over between crops.

Where is it now?

Greenbug is widespread in Europe, Africa, Asia and North, South and Central America.

How can I protect my farm from greenbug?

Check your crops frequently, including the underside of leaves, for the presence of new pests and unusual symptoms.

Make sure you are familiar with common pests of your crops so you can tell if you see something different.

If you see anything unusual, call the **Exotic Plant Pest Hotline** on **1800 084 881**.



Infestation of greenbugs on sorghum, with reddish discolouration from feeding

Frank Peairs, Colorado State University, Bugwood.org



Adult greenbug

D.C. Peters, CAB International

GRAINS FARM BIOSECURITY PROGRAM

An initiative of Plant Health Australia and Grain Producers Australia



**IF YOU SEE ANYTHING UNUSUAL,
CALL THE EXOTIC PLANT PEST HOTLINE**

1800 084 881

DISCLAIMER: The material in this publication is for general information only and no person should act, or fail to act on the basis of this material without first obtaining professional advice. Plant Health Australia and all persons acting for Plant Health Australia expressly disclaim liability with respect to anything done in reliance on this publication.