



HELP STOP black-grass

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Black-grass (*Alopecurus myosuroides*) may be present in Canterbury.

An “Unwanted Organism” under the Biosecurity Act 1993, this invasive weed must be eradicated before it has a chance to establish and damage New Zealand’s grain and seed industry.

Farmers can help keep New Zealand free of the weed by keeping their eyes open and reporting any suspicious finds. This guide outlines what to look for.

The Ministry for Primary Industries (MPI) and industry take this risk very seriously. MPI is working with Federated Farmers, Foundation for Arable Research (FAR), Environment Canterbury Regional Council (ECAN) and NZ Grain and Seed Trade Association (NTGSTA) to determine if there is any black-grass in New Zealand and to mitigate any biosecurity risk.

HOW CAN YOU HELP?

Farmers can assist with surveillance and reduce the chance of black-grass becoming established in the area by keeping an eye out for any sign of the pest and, if found, by reporting it immediately to the Ministry for Primary Industries

– Exotic Pest & Disease Hotline 0800 80 99 66.



ABOUT BLACK-GRASS

Black-grass (*Alopecurus myosuroides*) is a small-seeded and narrow-leaved annual grass weed that can grow up to a metre high. The first newly emerged leaves are delicate and corkscrewed. The leaves are hairless. The open and rolled sheaths of young plants can be green or purplish.

For those familiar with plant growth stages, a distinguishing feature is the long and irregular ligule. There are no auricles. The seed heads are green (particularly when newly emerged) to reddish-purple in colour, giving a “black” appearance from a distance.

Black-grass can germinate in either autumn or spring, but experience from the northern hemisphere suggests that autumn germination is much more common (more than 80 percent). This means that in New Zealand we could expect most seeds to germinate from March to May, but some could germinate any time from September onwards. Black-grass populations appear to persist longer in wet soils. In favourable conditions, seeds can survive for up to two to three years but a small percentage may survive for a longer period.



Black-grass seedlings and young plants are hard to distinguish from other grass seedlings

BLACK-GRASS – what it looks like



Mature plants are easier to distinguish as their reddish purple seed heads emerge. Plants typically produce 5-12 seed heads and each seed head can produce up to 100 seeds.

WHY BLACK-GRASS IS A THREAT

Black-grass is a serious invasive weed of winter crops in the UK and Europe where it has developed resistance to many herbicides. This resistance makes it difficult to control in a number of crops.

If black-grass were to establish in New Zealand it would have serious economic and environmental impacts for the growers of grain and seed crops.

These would include:

- » reduced yields through competition for nutrients, light, water and space;
- » increased herbicide use and associated costs;
- » increased tillage costs because infestations increase more rapidly with shallow tillage;
- » crop rotation changes to avoid peak black-grass germination periods.

Black-grass photos supplied by the National Institute of Agricultural Botany, The Arable Group (UK)

SIMILAR GRASSES

Black-grass seed heads can easily be mistaken for other common grass weeds. In particular they are very similar to Timothy (*Phleum pratens*), Meadow foxtail (*Alopecurus pratensis*), *Phalaris aquatica* and Sweet vernal (*Anthoxanthum odoratum*).

Meadow foxtail flowers in the spring, but the other three could be flowering at the same time as black-grass. Sweet vernal is a smaller plant, but could flower at the same height as a mown black-grass plant.

Please report your find if there is any doubt about what you are looking at.



Timothy (*Phleum pratens*)



Phalaris aquatica



Sweet vernal (*Anthoxanthum odoratum*)



Meadow foxtail (*Alopecurus pratensis*)

HIGH RISK AREAS

Black-grass seeds need **disturbed soil** to germinate. Plants are more likely to be found where seed has dropped on bare patches caused by animals treading, or vehicles and machinery moving.

The table below outlines the risk of black-grass establishing in different areas.

High Risk	Medium Risk	Low Risk	Very Low Risk
Cultivated heavy wet soils	Cultivated light soils	River beds	Lawns
Seed contact with soil – stock trampled	Sparsely vegetated wet roadsides	Established well managed pasture	Commercial areas
Disturbed soil heaps	Rank wet open pasture	Tall grass on roadsides	Stony ground/stock races
Disturbed soil on roadside	Wet bare soil adjacent to water races	Shaded areas under shelter belts	
	Gravel pits	Sprayed fence lines and marker posts	

WHAT SHOULD YOU DO IF YOU THINK YOU HAVE SEEN BLACK-GRASS?

Do not disturb the seed head or attempt to harvest any crop around the potential black grass.

If you have seen black-grass or suspect you have seen it, please contact:

- » Ministry for Primary Industries – Exotic Pest & Disease Hotline 0800 80 99 66; or
- » Environment Canterbury Regional Council Customer Services Line 0800 324 636 (0800 EC INFO); or
- » Foundation for Arable Research 03 345 5783

For more information, go to www.mpi.govt.nz



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