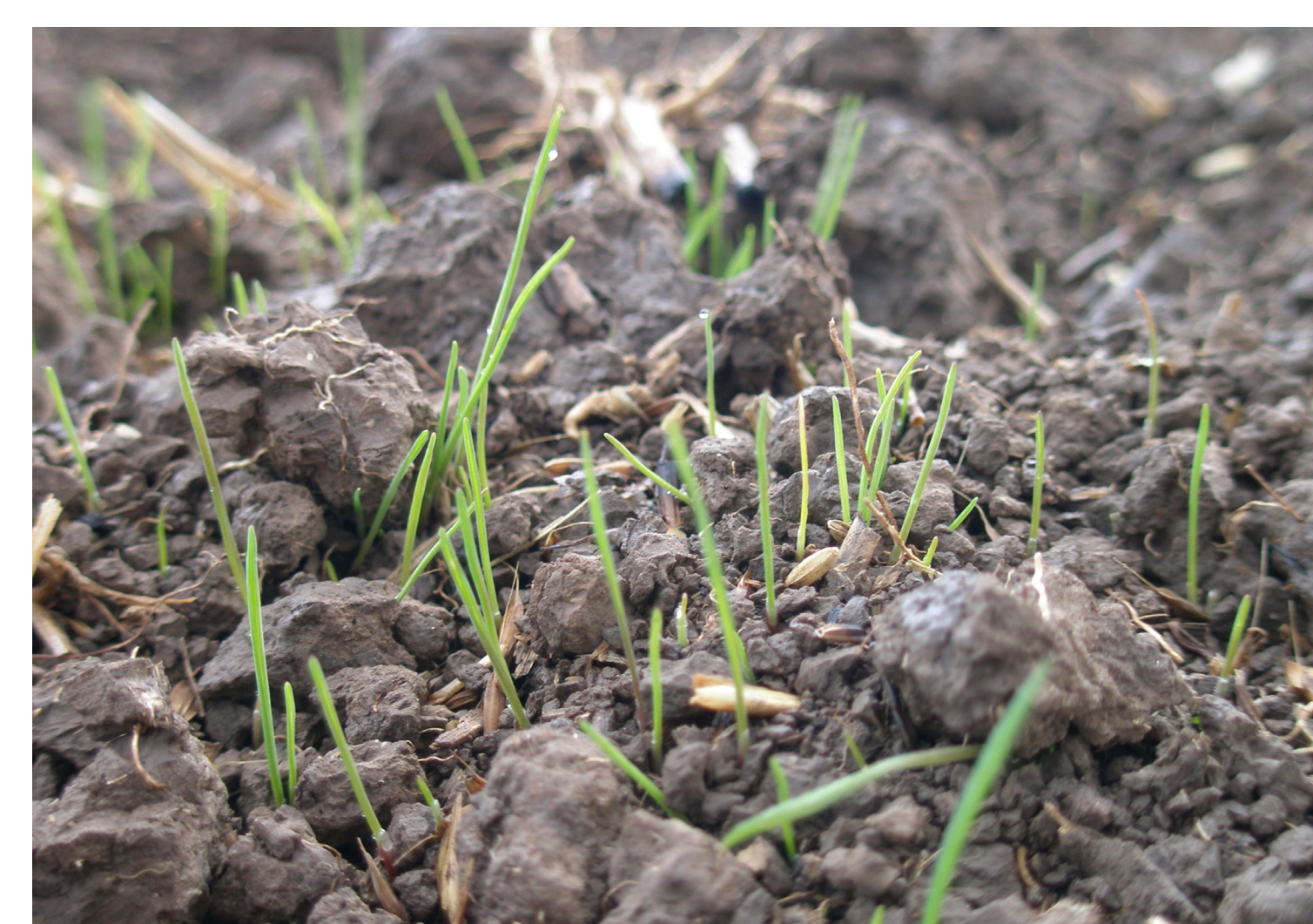


Black-grass (*Alopecurus myosuroides*)

Why is black-grass a threat?

- **Impact on crops:** Black-grass (*Alopecurus myosuroides*) is one of the most damaging invasive weeds worldwide. It competes strongly with cereal crops, reducing yield by up to 60% in severe cases. It also reduces seed quality and purity. Crop choices in affected paddocks will be limited until eradication is confirmed.
- **Economic risks:** Infestations increase costs through extra agchem applications, cultivation, and monitoring. Seed contamination threatens New Zealand's export reputation in global grain and seed markets.
- **Herbicide resistance:** Overseas, black-grass has developed resistance to multiple herbicide modes of action. This has left many farmers in Europe with very limited chemical control options. A similar resistance pattern in New Zealand would have major consequences for crop production.



Recent cases

New Zealand has faced multiple incursions: 2013, 2016, 2021, and 2025.

- In January 2023, black-grass plants were discovered in a mid-Canterbury wheat crop. This incursion was traced to contaminated linseed seed linked to the earlier 2021 incursion.
- In 2025, black-grass was detected during standard export testing of a perennial ryegrass crop grown in South Canterbury.

These incidents highlight ongoing vulnerabilities in the seed pathway. Sustained vigilance, strict biosecurity measures, and targeted research are essential to protect the arable sector.



When is black-grass visible?

- **Germination:** Most emergence occurs in autumn after rain (about 80%), with a smaller spring flush.
- **Detection window:** Plants are most visible from November to April once tillered and flowering.
- **Seed shed and dormancy:** Seed is shed in late spring-summer. It's primary dormancy period is short, just weeks to a few months, so fresh seed can germinate quickly when conditions allow.
- **Time to maturity:** Under favourable conditions, plants can reach maturity in about 100 days. Thus, late spring finds often relate to autumn emergence, while late-summer finds are more likely related to spring emergence.

What does black-grass look like?

- **Habit:** Black-grass is an annual grass up to around 1 metre tall. Erect, and often visible above winter crops.
- **Leaves and sheath:** Leaves are narrow, smooth and hairless. The leaf sheath is open, sometimes green-purplish and leaf buds are usually rolled.
- **Ligule:** Present, blunt or finely serrated and typically around 2–5 mm.
- **Seed heads:** Slender, spike-like heads turn purplish to near-black as they mature. Seed heads are commonly 2–12 cm long.
- **Seed production:** Typically, 80–150 seeds per head, with 2–20 heads per plant being common in field conditions.

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