Mediterranean cereal cyst nematode

Plant Health AUSTRALIA

EXOTIC PEST – CALL THE EXOTIC PLANT PEST HOTLINE IF SUSPECTED

What is cereal cyst nematode?

Cereal cyst nematode is a complex of pest species that includes Mediterranean cereal cyst nematode (*Heterodera latipons*, Wollenweber).

The cereal cyst nematode, a type of soil-borne microscopic worm, affects wheat, barley, oat and triticale (but not other grain crops such as lupins, canola and chickpeas). Wild oats is also susceptible.

Cereal cyst nematodes attack roots causing yellowing, wilting and stunted growth particularly when nematode populations build up, varieties are susceptible and in paddocks that are infested with wild oats. Cereal cyst nematode can remain dormant in drought conditions.

What does it look like?

Young cereal cyst nematodes are microscopic. They invade the roots of developing plants where females develop into lemon shaped white cysts on the roots, which can be seen by the naked eye in spring.

What can it be confused with?

Mediterranean cereal cyst nematode could be confused with another nematode species that is widespread throughout south eastern Australia and present in WA, known as *Heterodera avanae*.

Symptoms are also similar to those caused by nutrient deficiencies or other root diseases or root lesion nematode.

What should I look for?

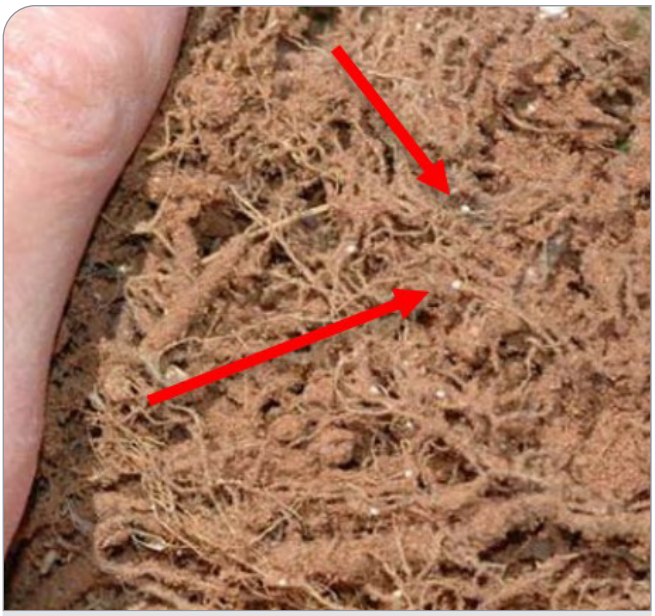
Yellowing, wilting and stunted growth of plants. Check the roots for damage and for white, oval cysts in spring. Roots will appear knotted and in some instances swollen. Towards the end of the season the cysts turn brown.

How does it spread?

As with all soil-borne diseases, this exotic nematode pest spreads in contaminated soil and plant material, as well as machinery, equipment and clothing. Brown cysts can also be windblown.

Yellowing and stunted crop growth on intolerant (1) and tolerant (2) oat varieties

John Lewis, SARDI



Look for white cysts on roots in spring

John Lewis, SARDI

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Where is it now?

Mediterranean cereal cyst nematode is present in Europe, Canada, Japan, and parts of the Middle East and Africa.

How can I protect my farm Mediterranean cereal cyst nematode?

Since the nematode is soil-borne, implement good hygiene practices on your farm to prevent spread. Keep machinery, equipment and tools clean and control people and vehicle movement in production areas to minimise the risk. People returning from overseas can pose a threat, particularly if they have visited crops or farms. Control volunteer grasses and cereals, especially wild oats.

Early detection is crucial in stopping or slowing progress of a new pest. Monitor your crops regularly for anything unusual, and call in a specialist without delay to help identify anything unfamiliar.

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

Stunted root growth on cereal plants

John Lewis, SARDI

GRAINS FARM BIOSECURITY PROGRAM

An initiative of Plant Health Australia and Grain Producers Australia

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