Lentil anthracnose

Plant Health AUSTRALIA

EXOTIC PEST – CALL THE EXOTIC PLANT PEST HOTLINE IF SUSPECTED

What is lentil anthracnose?

Lentil anthracnose (*Colletotrichum truncatum)* is a major fungal pest of lentils, as well as other legumes such as peas, beans, soybean and peanuts. Lentil anthracnose is most serious in Canada where it causes damage by the formation of necrotic lesions on stems, leaves and pods, resulting in plant damage and dead patches in the crop, with yield losses as high as 60-70%. While *C. truncataum* has been found on other pulse crops in Australia the lentil-attacking strain has not been recorded.

What does it look like?

Lentil anthracnose can first be seen as green-white lesions on the leaves. As the plant matures, the leaf lesions become brown-coloured and are often followed by leaf drop and with similar lesions forming on the stems. Older lesions will form microsclerotia, black pinhead-sized structures that blacken the stems. Over time, the stem lesions will girdle the stem, causing wilting. Anthracnose kills the lower leaves, resulting in defoliation, and may cause death of affected plants.

What can it be confused with?

Lesions and wilting can be easily confused with other fungal and bacterial diseases or insect attacks, such as Grey mould (*Botrytis cinerea*) which is present in Australia and Stem rot (*Sclerotinia sclerotiorum*). The distinguishing feature of lentil anthracnose is the blackened stems that engulf and ultimately kill the plant.

What should I look for?

The first symptoms are green-white lesions on leaves after the first tendril forms but before flowering. As infection advances, lesions change in colour, enlarge then girdle stems and kill the growth above the stem. The blackening of stems is caused by tiny microsclerotia, the resting stage of the anthracnose spore. Lesions will have these microsclerotia (small dark pinhead sized bodies) within the lesions.

How does it spread?

Anthracnose spores are small and light. Infected stubble can spread spores to new plants through rain splash.

Early infection on lentil leaf (note spots)

R. Morrall, University of Saskatchewan

Early infection on leaves (note spots)

R. Morrall, University of Saskatchewan

Moderate infection (note leaf loss)

L. Buchwaldt, Agriculture and Agri-Food Canada

EXOTIC PEST – CALL THE EXOTIC PLANT PEST HOTLINE IF SUSPECTED

Spores can be viable for five years or more in the soil, so can infect successive lentil or other host crops. It can be spread long distances during harvest, with infested material blown by wind to surrounding paddocks. Spores and infected soil can also be spread by machinery, clothing and animals, or by seed contamination.

Where is it now?

The strain of *C. truncatum* that causes lentil anthracnose has been identified in Bangladesh, Bulgaria, Canada, Ethiopia, Morocco, Pakistan, Syria and the USA. Strains of *C. truncatum* are present in Australia; however the lentil attacking strain has not been recorded.

How can I protect my farm from lentil anthracnose?

Check your farm and lentil crops frequently for the presence of new pests and unusual symptoms. Make sure you are familiar with common grain pests so you can tell if you see something different.

About the Grains Farm Biosecurity Program

The Grains Farm Biosecurity Program (GFBP) is an initiative to improve the management of, and preparedness for, biosecurity risks in the grains industry at the farm and industry levels.

Launched in 2007, the program is managed by **Plant Health Australia** (PHA) and funded by growers through Grain Producers Australia (GPA) together with the New South Wales, Queensland, South Australian, Victorian and Western Australian governments.

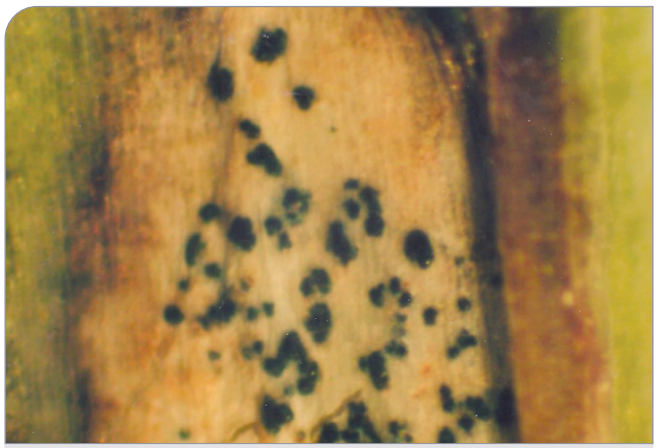
Visit the **Grains Farm Biosecurity website** for more practical resources that include fact sheets, videos, how to guides, online training and strategies to assist in the management of grains farm biosecurity risks.

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

EXOTIC PLANT PEST HOTLINE
1800 084 881

Heavy anthracnose infection showing black stems

R. Morrall, University of Saskatchewan



Close up of stem lesion showing black "microsclerotia"

L. Buchwaldt, Agriculture and Agri-Food Canada

GRAINS FARM BIOSECURITY PROGRAM

An initiative of Plant Health Australia and Grain Producers Australia

Plant Health AUSTRALIA

GPA Grain Producers Australia

PHA24-031