

NEW DISEASE REPORT

***Leptosphaeria maculans* causing stem canker of oilseed rape in China**

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Leptosphaeria maculans occurs on oilseed rape (*Brassica napus*) as two types: the aggressive A-group and less damaging B-group (West *et al.*, 1999). The disease occurs worldwide, but little is known of *L. maculans* from China.

Stems with early stem lesion symptoms were collected from three field-sites in central China, Wuhan, Hefei and Guiyang, in April 1999. Pseudothecia appeared on stem surfaces after three months incubation in natural conditions. The ascospores produced in the pseudothecia fit the description of *Leptosphaeria maculans* (Knashnobish & Shearer 1996; Punithalingam & Holliday, 1972) and were similar to ascospores produced from UK debris. Pseudothecia did not develop on stems from Wuhan.

Eight single ascospore cultures were made from two stems collected in Hefei, and 10 were made from two stems collected in Guiyang. All isolates were classified in the B-group of *L. maculans*, based on colony growth rate and production of a yellow pigment (Williams & Fitt, 1999). Leaves two and four of oilseed rape plants cv. Lipton, grown in 9-cm pots, with four leaves expanded, were wounded with three adjacent pinpricks. Conidial suspensions (2×10^7 mL⁻¹) of two isolates from Hefei (HefA1 and HefB2), two from Guiyang (Gui2b3 and Gui2a2), a UK B-group isolate (UK11) and a UK A-Group isolate (96M5) were sprayed on to two plants, per isolate. Plants were grown at 15°C, initially under polyethylene to maintain high humidity. Small lesions appeared at the wound sites after 12 days on all

inoculated leaves and 'pin-point' lesions appeared on unwounded areas. Isolations from wound-site lesions confirmed the presence of the inoculated pathogen. After 14 days, some 'pin-point' lesions expanded occasionally coalescing and producing pycnidia, with a bright pink cirrus.

In central China in April 1999, stem canker was found rarely but only the less aggressive, B-group was found. This, and cultural practices that result in the removal of most potential inoculum, suggests why stem canker is not currently considered to be a problem in central China.

References

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