Survey and pathogen identification of blackleg disease on oilseed rape in China

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Surveys for stem canker / blackleg on oilseed rape have been conducted regionally at 60 sites of 16 provinces in China both winter oilseed rape (*Brassica napus*) and spring oilseed rape (*Brassica napus*) growing areas between 2008 and 2012. Infected plants were found in 42 sites of 14 provinces out of 16 provinces investigated. One tenth of the fields surveyed were found to be blackleg-infested with incidence up to 92% and with 5% dead plants in the most damaged field. The diseased plant and plant debris with blackleg symptoms was collected and the causal fungi were isolated from the infected lesions.

Cultural characteristics and PCR detection methods were used for identification of the pathogen. The results showed that only *Leptosphaeria biglobosa* was identified and no aggressive *Leptosphaeria maculans* was found from these samples. The pathogenicity of 22 *L. biglobosa* isolates from 11 provinces was evaluated using method of inoculation on *Brassica napus* cotyledons with pycnidiospores suspension. Results showed that the 22 isolates were regarded as pathogenic. All isolates except isolate CN-21, which was from Hailer, Inner Mongolia, tested were higher pathogenic than the control Polish *L. biglobosa* isolate (PL-Lb. 14 out of 22 isolates were classified as high pathogenic, 8 out of 22 isolates were moderately pathogenic).