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Foreword

Sustainable strategies for managing *Brassica napus* (oilseed rape) resistance to *Leptosphaeria maculans* (phoma stem canker)

The interaction between the fungus *Leptosphaeria maculans* and oilseed rape *(Brassica napus)* is becoming an excellent model system for studying genetics of host–pathogen interactions. *Leptosphaeria maculans* causes phoma stem canker (blackleg) on oilseed rape and other Brassica crops worldwide. Recently, application of molecular techniques has led to increased understanding of the genetics of this hemibiotrophic interaction. The complete sequences of the genomes of *L. maculans* and *B. rapa* (comprising the *Brassica* A genome) will be available soon. This will provide new opportunities to investigate basic metabolic pathways in the host and the pathogen, and detailed knowledge of the disease process.

Worldwide, the major strategy for control of phoma stem canker is the use of cultivars with resistance to *L. maculans*. However, serious epidemics have occurred recently in Australia and Europe when *L. maculans* populations changed such that major gene resistance in oilseed rape was overcome. Thus there is an urgent need to find and deploy sources of resistance to *L. maculans* in a manner that enhances their durability.

This topic was addressed at a workshop (phoma stem canker durable resistance workshop, 13 September 2004) attended by plant pathologists from Australia and Europe, which was held at INRA (Versailles, France) immediately before the second annual meeting of the European Union-funded SECURE (QLK5-CT-2002-01813) project. This special issue of the European Journal of Plant Pathology is based on papers presented at the workshop, with additional contributions from scientists in Canada, Australia and Europe who were not able to attend. To provide an international perspective on each topic, authors of most of the papers are from several countries. We hope that these papers will provide researchers with a synthesis of the recent studies relating to strategies for management of resistance genes to provide effective control of *L. maculans*, and will stimulate further research on this important model system.

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