

Management of ascochyta blight on processing peas

2004 Report to the Ontario Processing Vegetable Growers

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Summary

Ascochyta blight, caused by *Mycosphaerella pinodes* (anamorph *Ascochyta pinodes*), *Ascochyta pisi*, and *Phoma medicaginis*, is a serious disease of dry peas in western Canada. Ascochyta blight was also suspected of causing severe losses in processing pea fields in Ontario during 2003. In a survey of 17 pea fields in southern Ontario during 2004, *M. pinodes* was isolated from disease tissue in two fields, and *A. pisi* was isolated from one field. The blight reaction of several processing pea and dry pea varieties was assessed at two sites in Ontario and one site in Saskatchewan during 2004. Disease was most severe on the processing varieties 'Mr. Big', 'Bolero' and 'Genie' and less severe on 'Estancia', 'Paso' and 'Gemini'. The disease was also severe on dry pea cultivars 'Miami' and 'Montana'. Powdery mildew caused by *Erysiphe pisi* was severe on 'Estancia' where as 'Genie' and 'Mr. Big' appeared to be resistant. To assess fungicide efficacy on ascochyta blight severity, pyrimethanil (Scala at 740 gai/ha), azoxystrobin (Quadris Flowable, 115 gai/ha), pyraclostrobin (Headline EC, 150 gai/ha) and boscalid (Lance WDG, 294 gai/ha) were applied to 'Genie' once at early bloom or twice at early and late bloom. Headline and Scala significantly reduced the ascochyta blight Area Under the Disease Progress Curve compared to the untreated check. Applying a fungicide either once at early bloom or twice at both early and late bloom significantly reduced ascochyta blight severity compared to the untreated check.