S.K. Oxenham *et al.*(2005) *Phytoparasitica* 33(3):247-252

Eugenol Reduces Growth and Increases Activity of S-adenosylmethionine Decarboxylase in the Phytopathogenic Fungus *Botrytis fabae*

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This study was undertaken to examine the possibility that eugenol-induced reductions in growth of *Botrytis fabae* are associated with alterations in polyamine metabolism. *B. fabae* was grown in liquid medium amended with different concentrations of eugenol. Changes in fungal biomass, and activities of enzymes of polyamine biosynthesis and catabolism were studied. An examination was also made of the incorporation of radioactivity from ornithine into polyamines. Activity of the polyamine biosynthetic enzyme S-adenosylmethionine decarboxylase (AdoMetDC) and flux of label from ornithine into the polyamine spermine were greatly increased in *B. fabae* grown in the presence of eugenol. However, no significant changes were observed in polyamine catabolism or in the concentrations of free polyamines in treated fungal tissue.
KEY WORDS: *Botrytis fabae;* eugenol; polyamines; spermine; polyamine oxidation.

Received Nov. 13, 2004; accepted Feb. 1, 2005; http://www.phytoparasitica.org posting May 17, 2005.
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