

Abstract

A *Rhodotorula* strain (*Rhodotorula glutinis* ySL 30) in combination with a siderophore was evaluated for postharvest control of a *Botrytis cinerea* strain resistant to iprodione on apple. The biocontrol yeast was less effective for the control of iprodione-resistant *B. cinerea* than the iprodione-sensitive *B. cinerea*. A combination of *R. glutinis* and rhodotorulic acid, a siderophore produced by yeasts belonging to *Rhodotorula* genus, was evaluated as a way to improve the control of the resistant strain. In experiments “in vitro”, rhodotorulic acid retarded the spore germination of the fungus, and in biocontrol experiments on apple wounds, the disease was more effectively controlled by the antagonistic agent in combination with the siderophore than by the antagonistic agent alone. *R. glutinis* reduced decay severity by 54% and *R. glutinis* in combination with siderophore reduced decay severity by 72%, in comparison with the non-treated control.