

**Title** *Kloeckera apiculata* strain (34-9) to control *Botrytis cinerea* during the pre- and postharvest handling of strawberries

**Author** Chao-An Long and Gao Yuan

**Citation** Annals of Microbiology, 59, Number 1, 77-81, 2009

**Keywords** biological control; *Kloeckera apiculata* strain (34-9); *Botrytis cinerea*; strawberry; pre- and postharvest handling

#### **Abstract**

The efficacy of *Kloeckera apiculata* strain (34-9) in controlling gray mould (*Botrytis cinerea*) of strawberry fruit was evaluated in pre- and postharvest handling. Dynamic growth of *K. apiculata* strain (34-9) was tested in the field on strawberry. Antagonist population was  $2.2 \times 10^6$  CFU/ml in strawberry fruit after it was treated 2 h in the field, then decreased slightly, and then the population stabilized at the concentration  $10^5$  CFU/ml during the period of strawberry growth. The effect of *K. apiculata* strain (34-9) ( $1.0 \times 10^8$  CFU/ml) on *B. cinerea* was evaluated. Preharvest (34-9) treatment was the most effective, while postharvest (34-9) and Sumilex treatment equally reduced the incidence of decay, caused by gray moulds (*B. cinerea*). Light microscopy revealed attachment of the yeast cells to the pathogen hyphae. *Kloeckera apiculata* strain (34-9) did not alter any quality parameters of fruit when assessed at the end of storage.

<http://www.springerlink.com/content/c620g03127544114/fulltext.pdf>