

Table grapes' new ally: *Muscodor albus*

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Small but mighty, a beneficial microbe called *Muscodor albus* may help protect fresh grapes from troublesome gray mold. Experiments conducted over the past several years by Agricultural Research Service (ARS) plant pathologist Joseph L. Smilanick and his ARS and industry colleagues have shown that *M. albus* can combat *Botrytis cinerea*, the organism that causes gray mold.

Gray mold can ruin the taste and appearance of fresh-market grapes, according to Smilanick.

For organic growers, *Botrytis* is especially troublesome because these producers can't use the typical treatment, [sulfur dioxide](#), to quell it. That's why, if commercialized, *M. albus* could benefit conventional and organic growers alike.

Smilanick, who is based at the ARS San Joaquin Valley [Agricultural Sciences](#) Center near Parlier, Calif., collaborated in *Muscodor* experiments with microbiologist Monir Mansour and visiting scientist Franka M. Gabler--both at Parlier--and with industry colleagues.

Muscodor acts as a natural fumigant by emitting compounds, harmless to people and animals, that can kill or inhibit the spread of certain other [microbes](#), such as *B. cinerea*. For example, in experiments with packaged Thompson Seedless grapes, Smilanick and co-investigators found that *Muscodor* reduced the incidence of *Botrytis*-infected grapes by up to 85 percent.

A 2009 article in the journal *Plant Disease* documents their findings.

Provided by United States Department of Agriculture

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