

Investigation of apple fruit rot control and of the diversity of wild yeast populations on cider and dessert apple varieties and outcomes on fermentation

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**ABSTRACT**

Bitter rot, a fruit rot caused by multiple species of the fungus *Colletotrichum*, affect a reliable apple supply every season. There is little information on the susceptibility of hard cider apple cultivars to bitter rot infection, and little information on fungicide control in cider apple cultivars. In this project, susceptibility ratings were assigned to 25 cider cultivars. Standard and reduced fungicides schedules including biocontrols showed effective control of bitter rot in the first-year trial. Wild yeasts may also have value in the biological control of fruit rots in the orchard. Understanding seasonal yeast population dynamics on cider apple cultivars and correlations with rot incidence, and their influence on fermentation will impact the emerging craft cider industry in Michigan.