

The use of a benomyl-resistant mutant to demonstrate latency of *Colletotrichum gloeosporioides* in avocado fruit

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Abstract

A benomyl-resistant mutant of *Colletotrichum gloeosporioides* (Penz.) Penz. & Sacc., generated by irradiating a wild-type isolate of the fungus with ultraviolet light, was used as a marker organism to demonstrate latency under field conditions. This mutant could be easily distinguished from wild-type isolates of *C. gloeosporioides* on the basis of growth rates on benomyl-amended media, and was as virulent in avocado fruit as wild-type isolates. Through the use of this mutant in field inoculations of avocado fruit, it was possible to demonstrate conclusively the existence, for the first time, of latency in the life cycle of *C. gloeosporioides* in this host. It was also shown that the fungus was able to remain latent for periods of at least 6 months.

Keywords: latency; benomyl-resistance; anthracnose; *Colletotrichum gloeosporioides*; avocado; *Persea americana*

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