

Biocontrol agents to manage brown rot disease on cherry

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Abstract

This review focuses on biological control as a management strategy for brown rot disease on cherry. Specifically, the strain *Monilina laxa* as much of the research so far has been focused on *Monilina fructicola* and other stone fruit. Brown rot is one of the most economically important stone fruit diseases worldwide. Current control methods rely heavily on fungicide and costly physical controls. Biological control agents (BCAs) have been found which antagonise *M. laxa* and other *Monilinia* species. However, only a few have been developed into commercial products. This is primarily because they are still not as effective and consistent as the fungicides currently available to growers. Current biocontrol research focuses heavily on post-harvest applications but more could be done to look at the potential for BCAs to be used in the field to protect blossoms and fruits, reducing post-harvest losses. Future research needs to understand the ecology of these BCAs and their population dynamics in relation to external conditions, in order to optimise their use in integration with other management strategies. Disease management in the near future will rely more on the use of BCAs than conventional fungicides.