Tree Fruit Diseases

Mapping the Presence of *Erwinia amylovora* on Apple Flowers and the Subsequent Incidence of Fire Blight

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The presence of *E. amylovora* on the stigmas of healthy Rome apple flowers was determined by pressing the stigmas on CCT medium using the stigma blot technique. Apple flowers were colonized with *E. amylovora* fourteen days before any new blight symptoms were apparent in the orchard. The incidence of colonized flowers increased with time and was associated with oozing overwintering cankers. Fire blight incidence was correlated with the presence of *E. amylovora* on stigmas. Despite the increase in the number of colonized stigmas over ten days, most of the flower infections occurred on the same day. This supports the concept that a specific event triggered infection and that colonization of the stigma was not sufficient to result in disease.