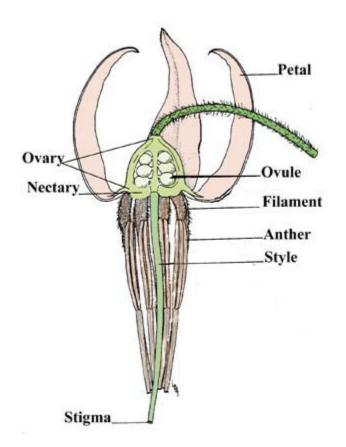


Infection of cranberry flowers by Monilinia oxycocci.

Cottonball is the most important disease affecting cranberry in Wisconsin, capable of inflicting crop losses of greater than 50% if left unchecked. For more detailed information about cottonball, view the cottonball disease page.





To determine the infection court(s) of conidia of *Monilinia oxycocci*, different flower parts were inoculated, and disease incidence in the green berries was rated 30 days later. Samples were taken for cytological observation 2 and 3 days post treatment. The results of the experiment are listed in the table below:

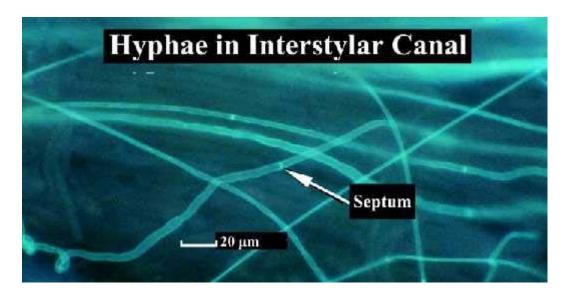
Flower Part	Berries	Cottonball
Nectary	52	0
Petals	82	0
Stigma	76	10
Style	70	2
Control	121	1

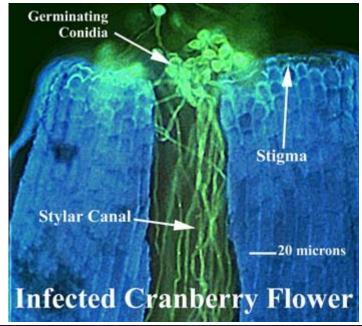
The low incidence of disease reported here was probably due to the use of single inoculations of the target tissue with conidia. In related experiments double inoculation of the stigma resulted in 70-100% infection. Variation in the quality or quantity of conidia can also affect disease incidence.

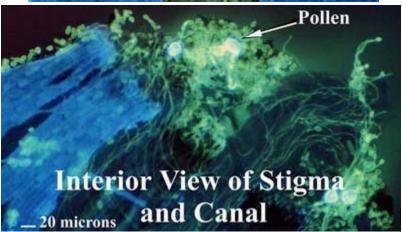
The following observations were made:

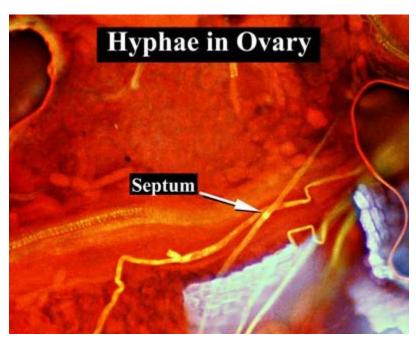
- No evidence of infection was seen microscopically except in stigma inoculations.
- No penetration of any tissue except for the stigma was seen.
- Conidia failed to germinate on the epidermis of the style.

These results provide strong evidence that conidia of *Monilinia oxycocci* can only infect through the stigma. Diseased berries from style inoculations were probably caused by accidental or insect contamination of the stigma.









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Questions or comments? Please contact <u>Vi Best</u> or <u>Patty McManus</u> at the University of Wisconsin-Madison Fruit Pathology Laboratory.