



[Acta Horticulturae Home](#)

[Login](#)
[Logout](#)
[Status](#)

[Help](#)

[ISHS Home](#)

[ISHS Contact](#)

[Consultation statistics index](#)

[Search](#)

[ISHS Acta Horticulturae 480: I International Symposium on Fig](#)

SPREAD OF ENDOSEPSIS DISEASE CAUSED BY *FUSARIUM MONILIFORME* IN CALIMYRNA FIG ORCHARDS IN CALIFORNIA

Authors: T.J. Michailides, D.P. Morgan

Keywords: Disease gradients, eye-end rot, pink rot, pollination, symbiosis

Abstract:

Pollination of the edible fig (*Ficus carica* cv. 'Calimyrna') is done by a small parasitic wasp, *Blastophaga psenes*, which inhabits the syconium cavity of spring crop caprifigs (fruits of pollinator trees bearing staminate flowers). Fig wasps also carry propagules of *Fusarium moniliforme*, which causes endosepsis disease, from the fruit of pollinators to those of the edible crop of Calimyrna figs. Spread of fig endosepsis was studied in one research and four commercial Calimyrna fig orchards from 1989 through 1995. Endosepsis and disease-vectoring wasps decreased with increased distance from the source, and decreased faster to the south than in other directions from the source. Negative disease gradients (second-degree polynomials) best described the disease spread from the contamination source for most directions. Positive disease gradients best described the relationship of the numbers of wasps reaching tree canopies and the incidence of endosepsis. A 3-year study in three commercial Calimyrna orchards showed that there is no evidence of secondary spread of endosepsis disease in the orchard. Therefore, endosepsis can be considered as a monocyclic, airborne disease. Endosepsis is "airborne" because its vector becomes airborne. Because fig wasps prefer to stay close to the contamination source when receptive figs are nearby, only disease sources (caprifig trees) found near (<50 m from the border) or within Calimyrna orchards could influence endosepsis incidence in commercial orchards.

- [Full Text](#) (PDF format, 339960 bytes)
- [Citation](#)

[Download Adobe Acrobat Reader](#) (free software to read PDF files)



