Update on Soilborne, Foliar, and Fruit Diseases of Strawberry

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Charcoal rot


Macrophomina
2005
2009


Macrophomina
2005
2013

Fusarium wilt


Fusarium oxysporum
f. sp. fragariae
2006
2013

Diagnosis:
Macrophomina
Fusarium
Verticillium

?

?

Macrophomina: May 23

Macrophomina: June 21

Macrophomina: July 5

Macrophomina: July 26

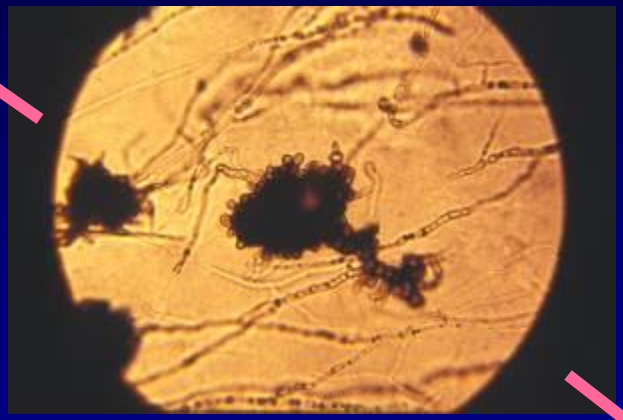
Mac./Fus.: The bad news

- *Macrophomina* and *Fusarium* both very damaging.
- Spreading in fields, counties, state.
- No truly resistant strawberry cultivars.
- Alternative fumigants not completely effective.
- Bed fumigations not sufficient.
- Post-plant fungicides do not work.

Mac./Fus.: The good news

Mac./Fus.: The good news

- *Fusarium* is host-specific to strawberry.
- *Macrophomina* from strawberry may have strawberry as a preferred host.



Treatment	% leaf w/ p. mildew
Merivon 6 oz	0.20
Quadris Top 14 fl oz	0.92
Rally 5 oz / Torino 3.4 fl oz	1.05
Merivon 7 oz	2.09
Fontelis 1 pt	2.18
Quintec 6 fl oz	2.23
IKF309 4 fl oz / Quintec 6 fl oz	2.30
Torino 3.4 fl oz / Rally 5 oz	2.45
Fontelis 1.5 pt	2.70
IKF309 5 fl oz	2.73
Untreated control	8.02
LSD (P = 0.05)	0.69

Treatment	% leaf w/ p. mildew
Tavano 13 fl oz	2.90
Fracture 24.4 fl oz / Pristine 20 oz	2.90
Rally 5 oz	2.96
Rally 5 oz / Quintec 6 fl oz	3.20
IKF5411 17 fl oz	3.64
Tavano 6 fl oz	4.07
Fracture 18.2 fl oz + Q. Top 14 fl oz	4.94
Merivon 4 oz	5.14
Fracture 18.2 fl oz / Switch 14 oz	5.25
IKF309 4 fl oz	6.38
Untreated control	8.02
LSD (P = 0.05)	0.69

Botrytis fruit rot fungicides

- 2013 trials: no significant differences in percent rot:
  - Botector, Fontelis, Fracture, Merivon, Pristine, Quadris Top, Switch, Tavano, experimentals, untreated
- Recent field surveys (Monterey/Santa Cruz): some indication of resistance to Cabrio, Elevate, and Endura (but not to Rovral) [A. D. Pokorny]

Pseudomonas blight of raspberry: Pseudomonas syringae

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