Efficacy of Plant Dip Treatments for Control of Anthracnose

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Annual Santa Maria Strawberry and Vegetable Meeting

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Outline

- Anthracnose and strawberries
- Our trial
- Conclusions
Anthracnose crown rot and fruit rot

- Caused by *Colletotrichum acutatum*
Anthracnose crown rot
Anthracnose crown rot
Anthracnose crown rot and fruit rot

Control options

• Pathogen-free planting stock
• Fumigation
• Pre-plant fungicide dip
• Foliar fungicide application before rain event for fruit rot
• *C. acutatum* can be resistant to fungicides
Azoxystrobin resistance
The trial

- **Day 1:** Strawberry transplants inoculated with *Colletotrichum acutatum*
  - 4 strobilurin (QoI) resistant strains
  - 4 QoI sensitive strains
- **Day 2:** Fungicide treatment: dip five minutes then drain and refrigerate overnight
- **Day 3:** Planted
Treatments

Checks

1) Non-inoculated, non-treated, non-washed
2) Non-inoculated, non-treated, washed
3) Inoculated, non-treated
4) Abound
5) Switch
6) Zivion M Low
7) Zivion M High
8) Zivion M Low + Omega 500F
9) Omega 500F
10) Kenja 400SC
11) Actinovate
QoI Sensitive

71 days after planting

QoI Resistant
Non-washed | washed | Inoculated only | Abound

Switch | Ziv low | Ziv high | Ziv + Omega

Omega | Kenja | Actinovate

71 days after planting
Conclusions

• No difference between cultivars Portola and Monterey

• This trial had much more potent inoculum than real life

• Switch, Abound, and Zivion are effective, **IF** no resistance.

• Additional resources:
  • Anthracnose Production Guideline
  • UCIPM efficacy tables
Gray mold management & fungicide resistance meetings!

- December 12 – Ottavio’s Italian Restaurant, Camarillo
  - 2 PCA CE units

- December 13 – UCCE Santa Cruz, Watsonville
  - 3 PCA CE units

- December 14 – Radisson Inn, Santa Maria
  - 2 PCA CE units

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