

Foliar and Fruit Disease Management for Strawberries

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Introduction

- Fruit and foliar pathogens of strawberry

Powdery mildew

Botrytis gray mold

Leather rot caused by *Phytophthora* spp.

Powdery mildew in strawberry





Conditions amenable to powdery mildew in strawberry

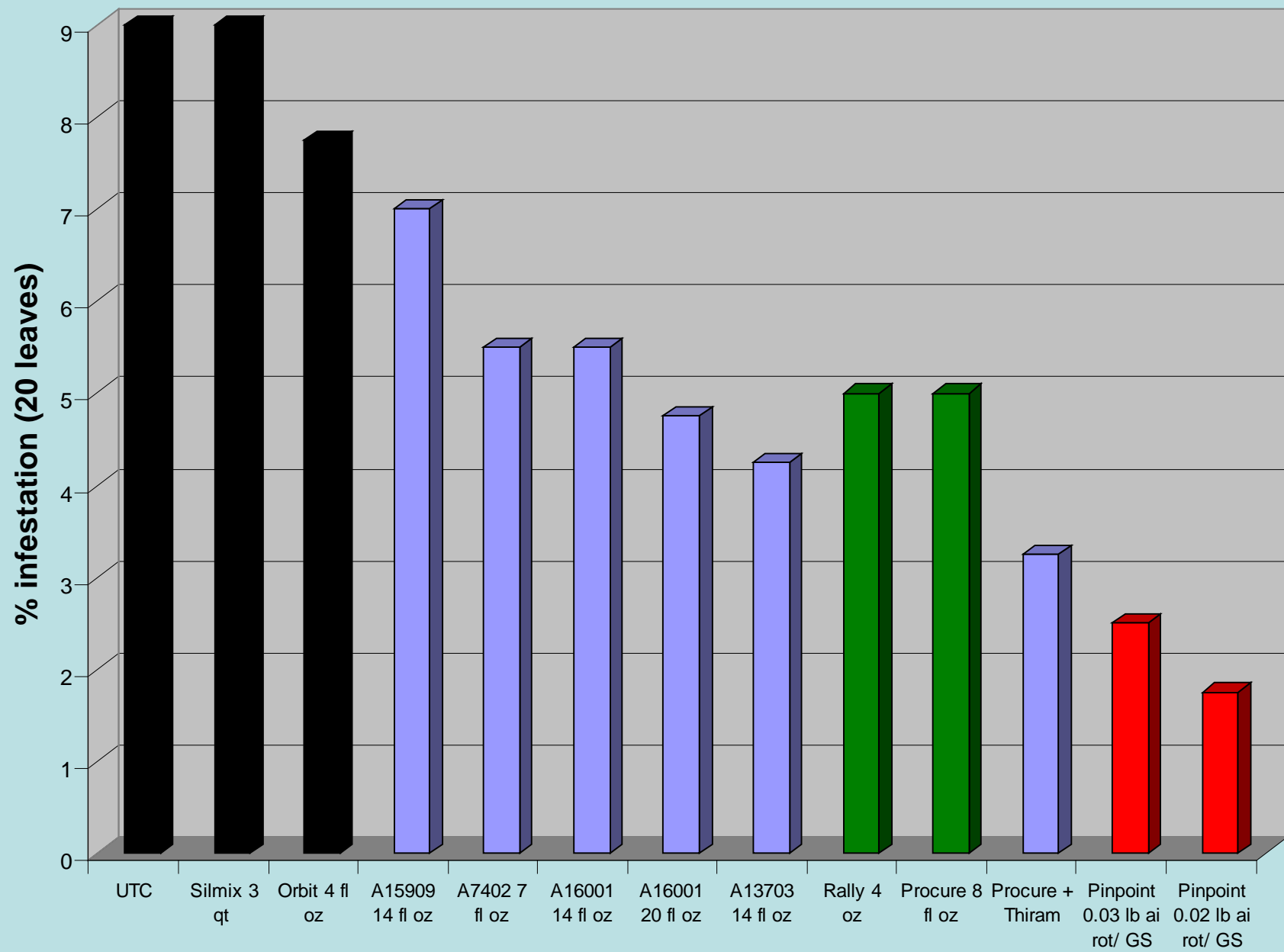
- Dry leaf surface, high relative humidity and cool to warm air temperatures.
- Spores are not long lived, mildew can come in on planting material or from neighboring fields.

Control of Powdery Mildew in Strawberries

- Selection of varieties
- Be on the alert during optimal conditions:

Ideal conditions for infection are dry leaf surfaces, high relative humidity, and cool to warm air temperatures (60 – 80°F)

- Sulfur
- Oils
- Synthetic fungicides

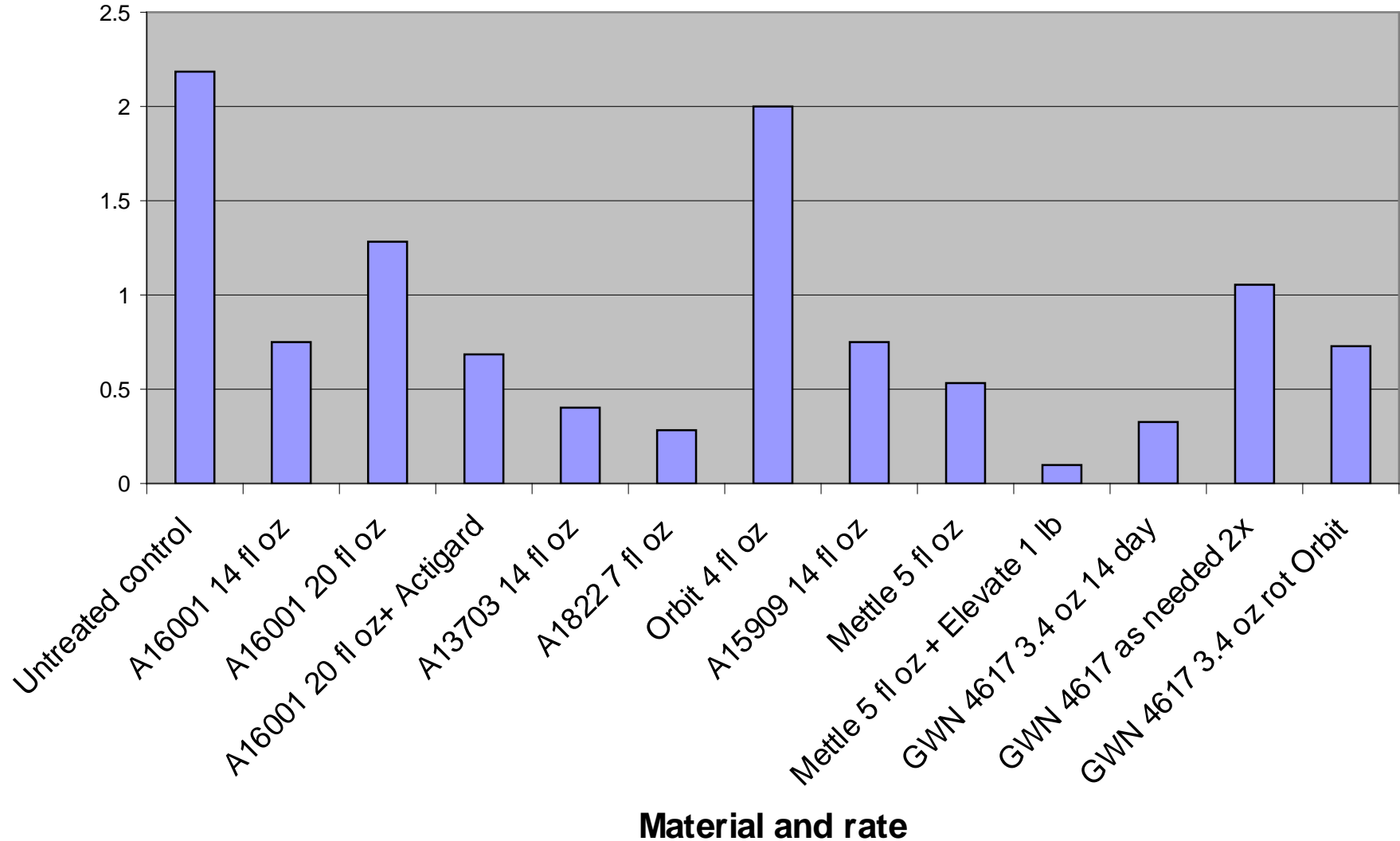


2008 Fungicide Screen

Treatment

Mildew control of various materials 2009

% infestation, average of 40 leaves



Leaf Problem #1



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Leaf Problem #1



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Leaf problem #2



Leaf problem #2



Leaf problem #3



Leaf problem #4



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Leaf problem #4



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Leaf problem #5



Leaf problem #5



Leaf problem #5



Botrytis in strawberry

Optimum conditions for Botrytis

- Humid and cool.
- Infections generally commence on the flower, either rotting it outright or remaining dormant until fruit sugars and conditions are favorable.



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Cultural management of Botrytis

- Plant hygiene.
- Nutrient management?
- Management of plant size?

Novel Fungicide Screens for Botrytis

2008-2010

- Numbered compounds from Syngenta
- V10135
- S2200
- Grower standards Elevate, Switch, Pristine

Leather Rot Caused by
Phytophthora spp.



Photo Courtesy Steven Koike



Photo Courtesy Steven Koike



Photo Courtesy Steven Koike



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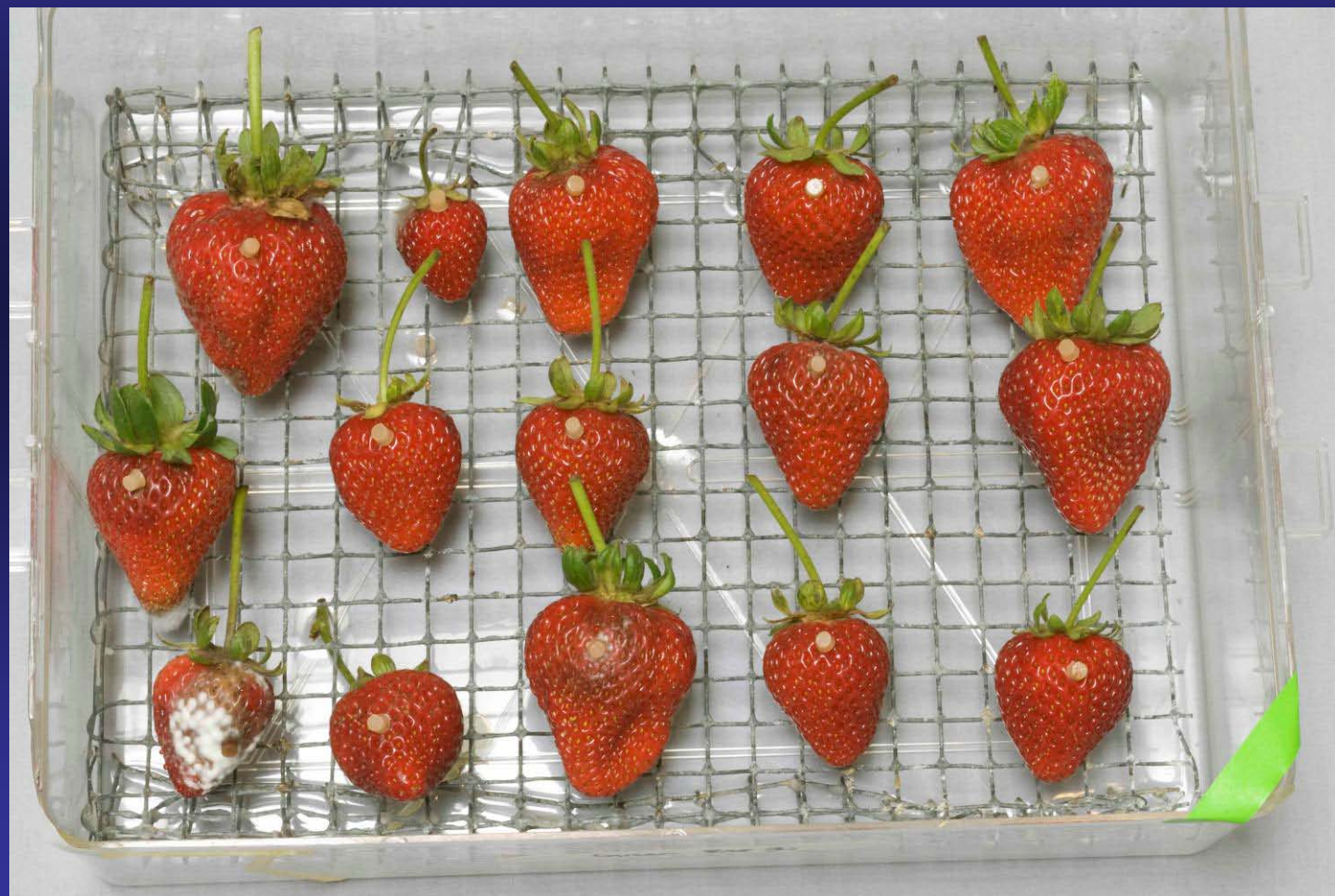
Control of Leather Rot through Fungicides

- 4 treatments applied end of May through July.
- Fruit sampled after third and fourth applications.
- Treatments foliar applied:
 - Revus 8 fl oz/A
 - Ridomil 1 pt/A
 - Quadris 15.5 fl oz/A
 - Untreated control

Treatment: Untreated



Treatment: Revus



Treatment: Quadris



Treatment: Ridomil



