

**Management of the
Redberry Mite in
Blackberry**



Redberry Mite



Redberry mite – unripe cluster



2003

Identifying Materials

Trial testing efficacy of 13 different materials, mixes and rotations for control of redberry mite.

Lime Sulfur

Guthion/Carbaryl

Agricultural Oils

Carbaryl/Dzn/Guthion

Dzn/Malathion/Carbaryl

Valero+GCMite+

Hexacide

Mesa

Agrimek

M-Pede

Acramite

Aza-Direct

Untreated Control

Savey

Management of the redberry mite

Collaborative work with **Ed Show**, Driscoll's Berry Associates

- Carbaryl, Diazinon, Guthion, Lime Sulfur, and agricultural oils (Natur'l Oil, JMS, Erase) applied up to six times prior to harvest significantly controlled damage by redberry mite.
- Question: Was it necessary to apply these materials so early and so often?

Plant physiological stages as triggers for oil application

Oils applied as 2% concentration

1. Spring bud break.
2. 25-50% flowering + first green fruit.
3. First pink fruit.
4. No application

Results of timing study with oils

- When using oils, it appears that delaying application until flowers and green fruit will result in highest fruit yield, and low numbers of redberry mite affected fruit.
- Golden Pest Spray Oil allows for high concentration (2%) and rate per acre

**Effect of increasing gallonage of water carrier to
increase efficacy of oils for control of redberry
mite**

Treatments

Four treatments of 5 applications each

2% concentration of Golden Pest Spray Oil

- 200 gallons
- 200 to 325 gallons
- 200 to 450 gallons
- 200 to 575 gallons

High gallonage sprays



Effect of Gallonage on Oil Applications for Redberry Mite

- Raising gallonage did not result in enhanced control of redberry mite, nor were there any effects on blackberry marketable fruit yield.

Lowering Carrier Gallonage to Control Redberry Mite

Four treatments of 4 applications each

2% concentration of Golden Pest Spray Oil

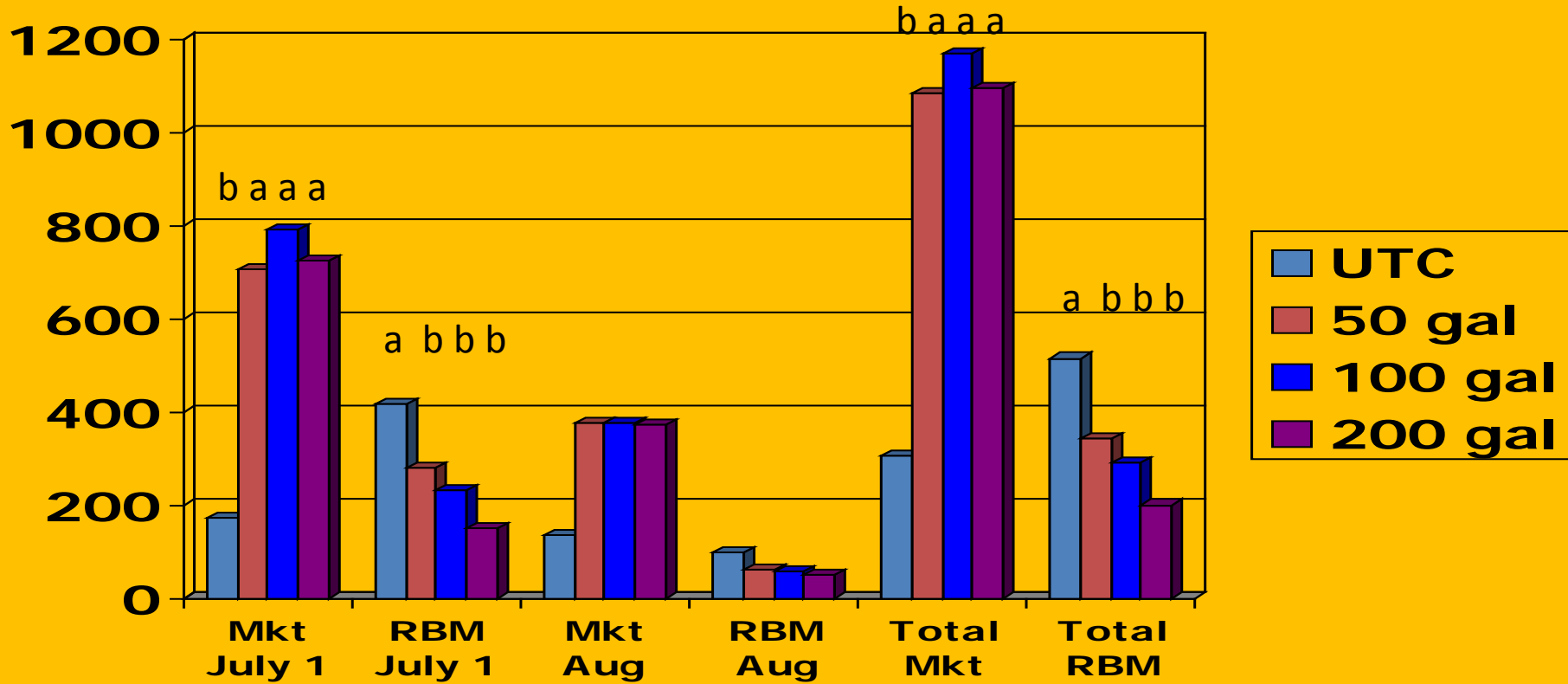
- 200 gallons
- 100 gallons
- 50 gallons
- Untreated control (UTC)



Ranch 1:

Lightly foliated

Redberry Mite Control Ranch 1: Lightly Foliated

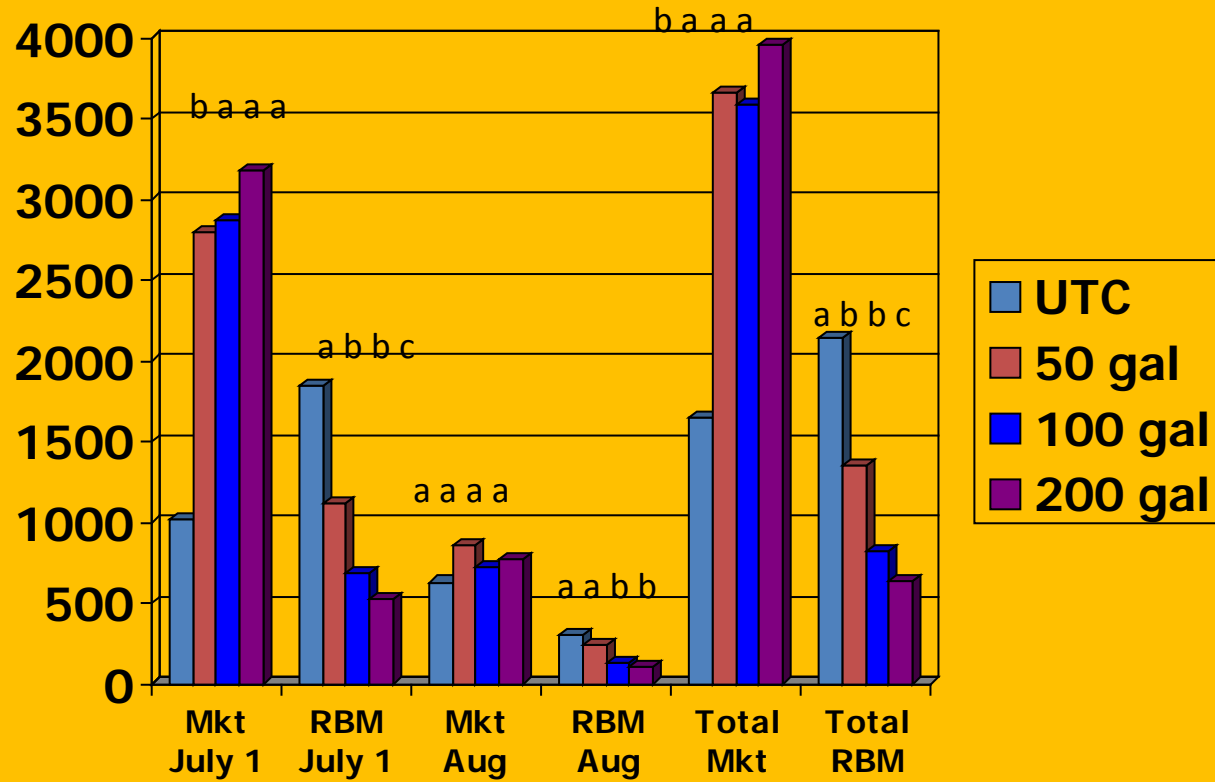


Ranch 2: Heavily foliated



Control of Redberry Mite

Ranch 2: Heavily foliated



2007 Trial Work Conclusion

- With a 2% concentration of Golden Pest Spray Oil, 50, 100 and 200 gallon per acre rates of water carrier are equally effective in controlling redberry mite and maintaining blackberry fruit yields.

Recommendations for Control of Redberry Mite in Blackberries

Three to four applications of 2% concentrations of Golden Pest Spray oil in at least 50 gallons water carrier begun at 25-50% flowering + first green fruit will significantly control redberry mite without detracting from marketable fruit yield.