Are Primocane Fruiting Blackberries More Resistant to Redberry Mites than Floricane Types?

Maria E. Murrietta
UC Cooperative Extension
San Luis Obispo County
Redberry Mite

- Family of very small mites
- Feeds between drupelets
- Interferes with ripening = uneven coloration
Initial Sampling – Sept/Oct 2014

- Ouachita and Prime Ark 45
- Collected 5 canes from 5 rows
- Removed and examined subsamples of fruit and vegetative buds
- Recorded presence/absence
Results – Sept/Oct 2014

• Ouachita
  – Present in 100% of samples

• Prime Ark 45
  – Absent in 100% samples
Sampling – Nov 2014

• 5 canes from 5 rows
• Tape capture method
• One sheet per subsample
• Emergence
  • 2 weeks for fruit
  • 2 months for buds
Housed in bug tent

Emergence
Results – Nov 2014

Ouachita
- 32 vegetative buds
  - 3% presence
  - Avg 1 mite
- 19 fruit/flowers
  - 53% presence
  - Avg 12 mites

Prime Ark 45
- 24 vegetative buds
  - 16% presence
  - Avg 6 mites
- 33 fruit/flowers
  - 6% presence
  - Avg 7.5 mites
Current Sampling

- 2 fields
- Sample monthly
- Tape capture method - revised
- Follow population through the year
Tape Capture Method

- Material taped to glass panel
- Metal shelf
- Housed in bug tents
- Dry for a week or more
- Examine for RBM
Tape Capture Method

Benefits
• Population density
• Determine distribution among canes
• Photos

Limitations
• Vegetative material is slow to dry
• Mites reluctant to exit vegetative material
Management Practices

Primocane Fruiting
- Cutting back canes interrupts the lifecycle of RBM
- Present but minimal
- Minimal damage

Floricane Fruiting
- Canes not cut back = a continuous source of food and shelter
- Populations build up
- Significant damage
Questions Remain

• When is RBM most susceptible to control measures?
  – Better understanding of biology and behavior

• Would predatory mites be a viable tool?
  – Two surveys confirm the presence of predatory mites