

Papaya Pest Management

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Objectives

- Develop management strategies that target multiple pests in papaya
- Seek treatments that have minimal environmental and non-target impacts

Pests targeted

- Papaya thrips – *Thrips parvispinus*
- Spider mites – *Tetranychus* spp.
- Papaya mealybug – *Paracoccus marginatus*
- White peach scale - *Pseudaulacaspis pentagona*

Treatments

- Farmer's standard practice (Applaud, Vendex, Provado, Sulfur)
- Kaolin clay – Surround WP (50 lb/50 gal)
- Horticultural Oil – Pure Spray Green (1 %)

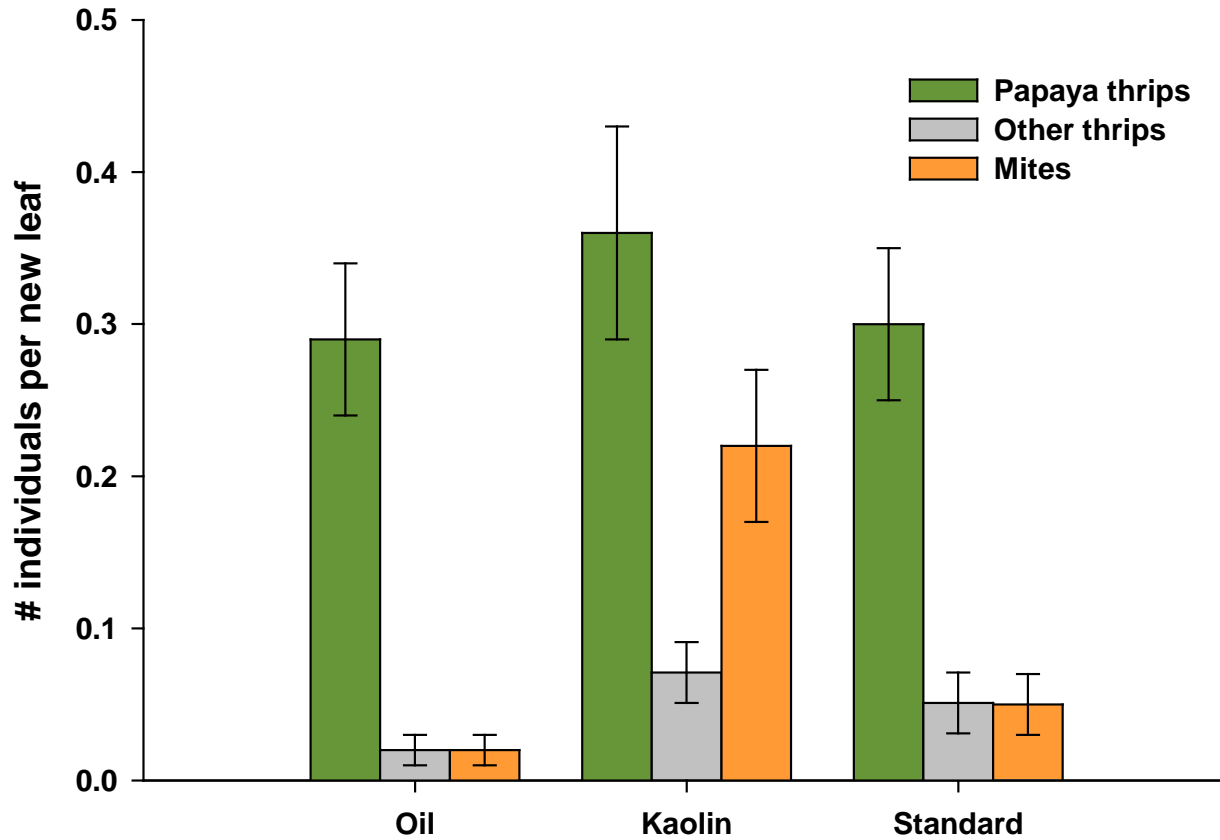
Data collection

- October 2011 to June 2012
- Pest monitoring done at monthly intervals for 7 months & weekly intervals at harvest period
- Harvest period – 9 weeks

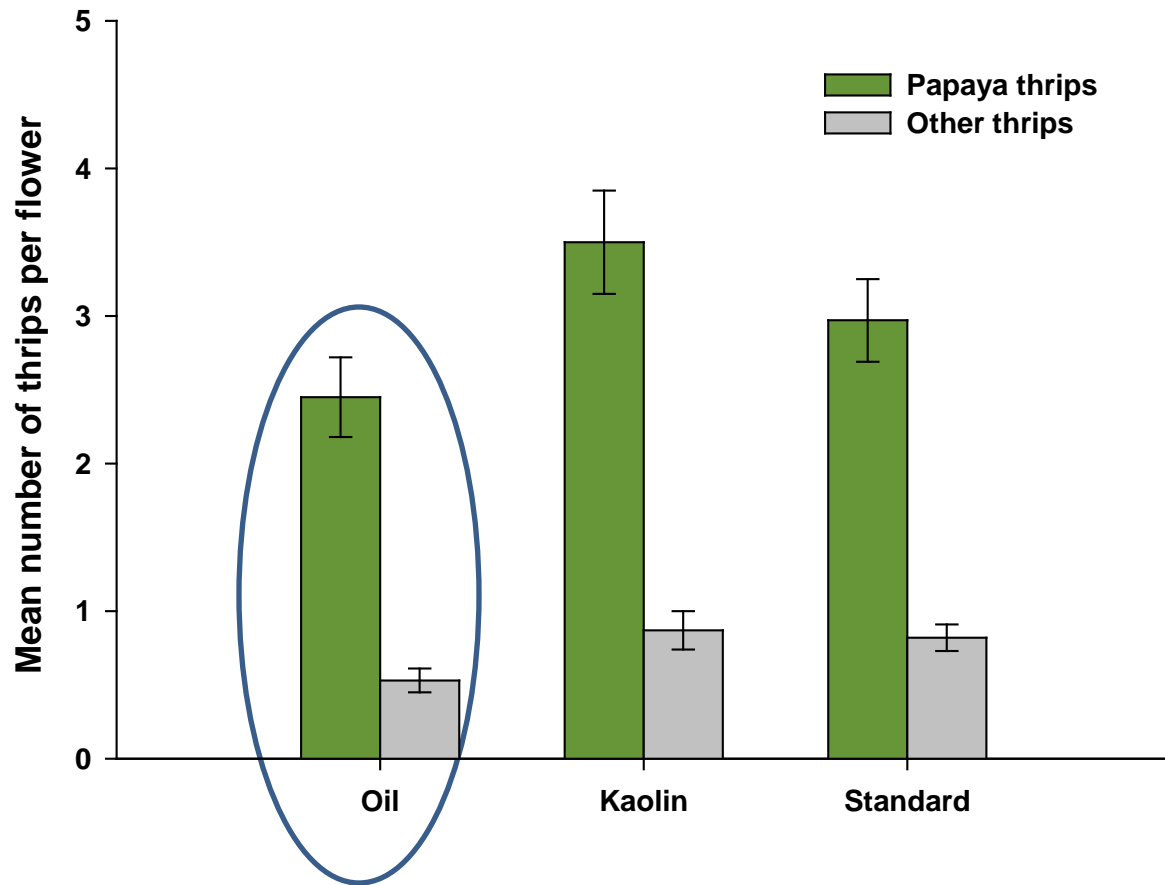
Sampling

- New leaves – Thrips & mites
- Flowers – Thrips & mites
- Old leaves – Mealybug & mites
- Tree trunk – White peach scale

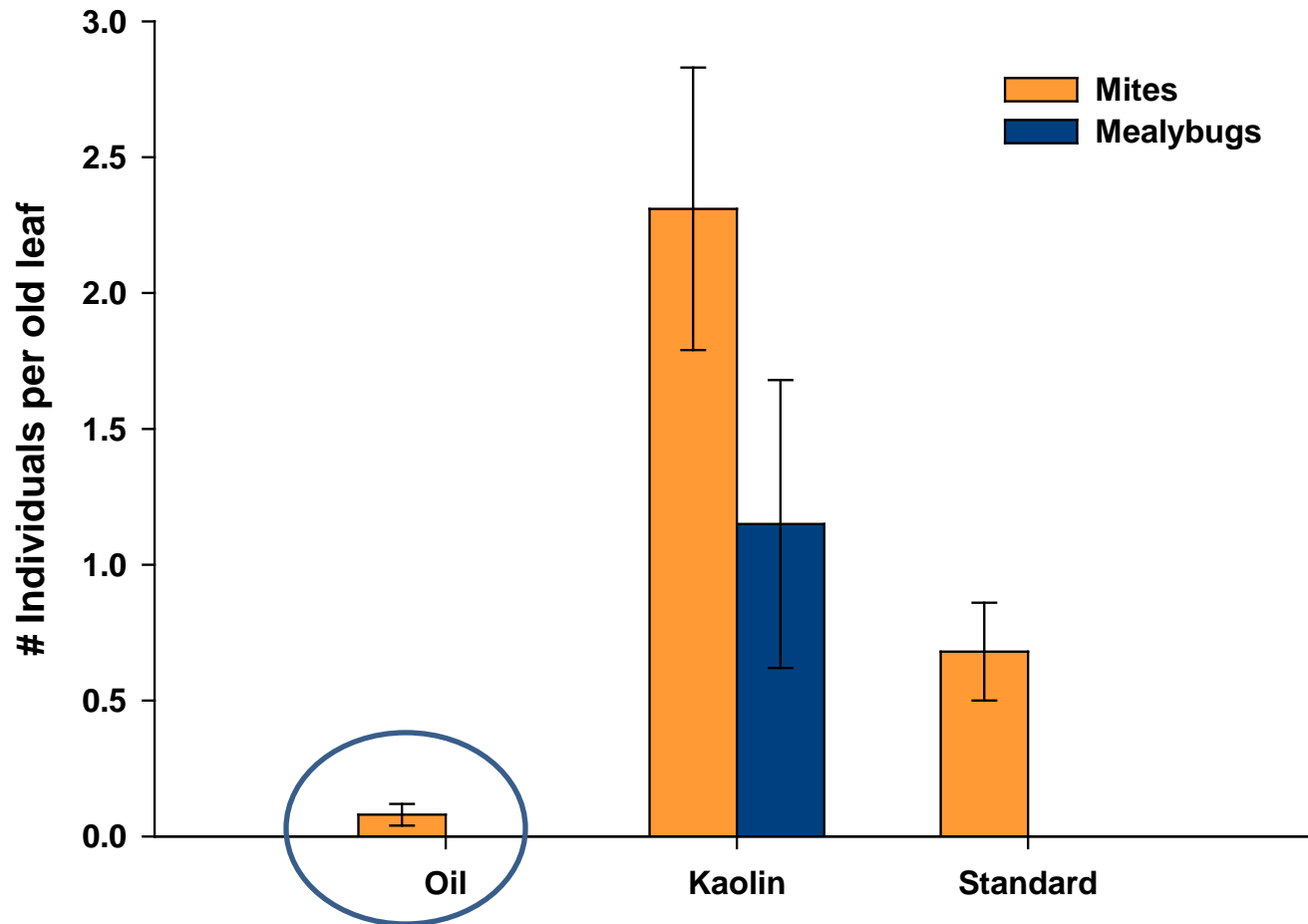
Pest density on new leaves



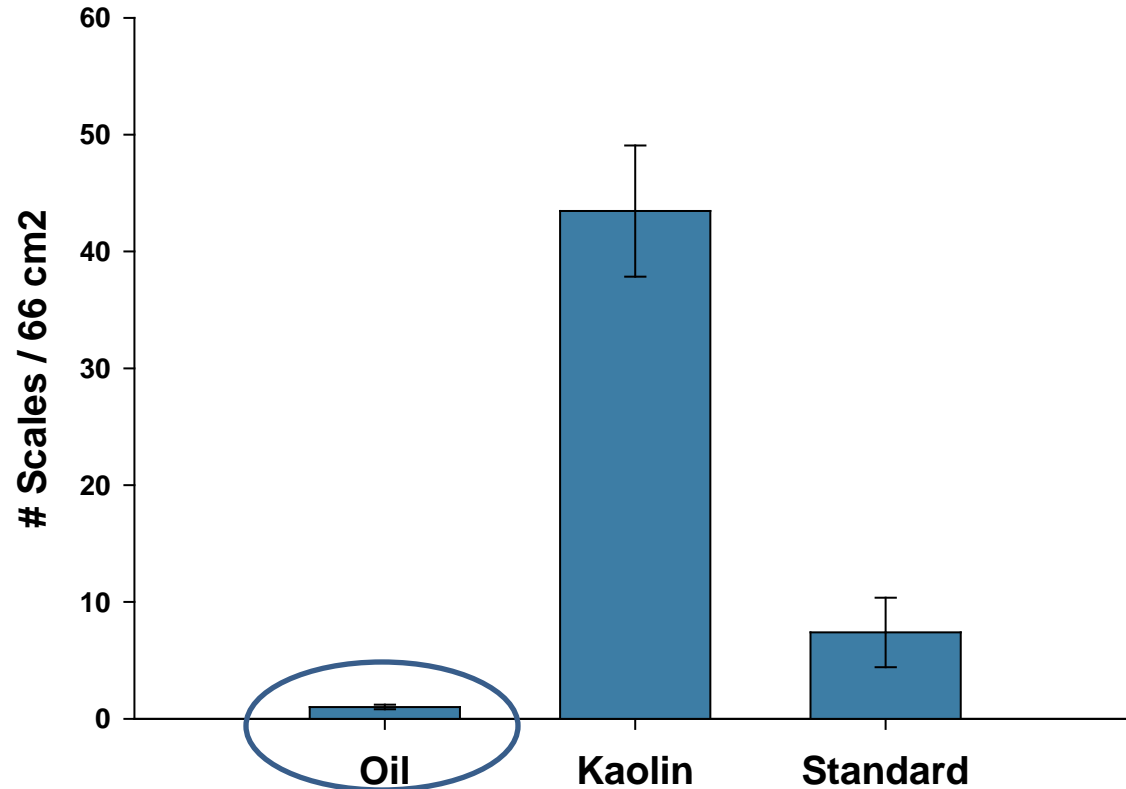
Pest density in flowers



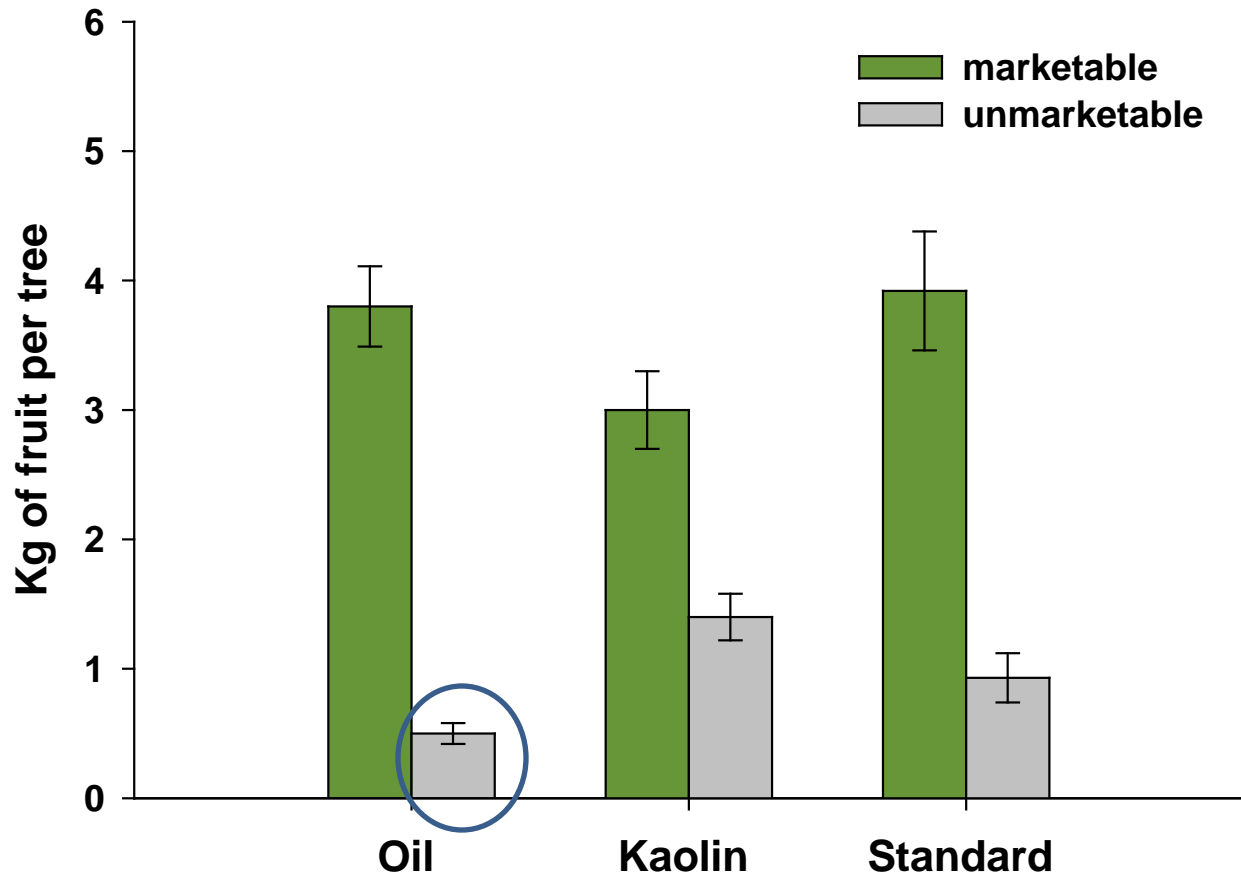
Pest density on old leaves



Pest density on tree trucks

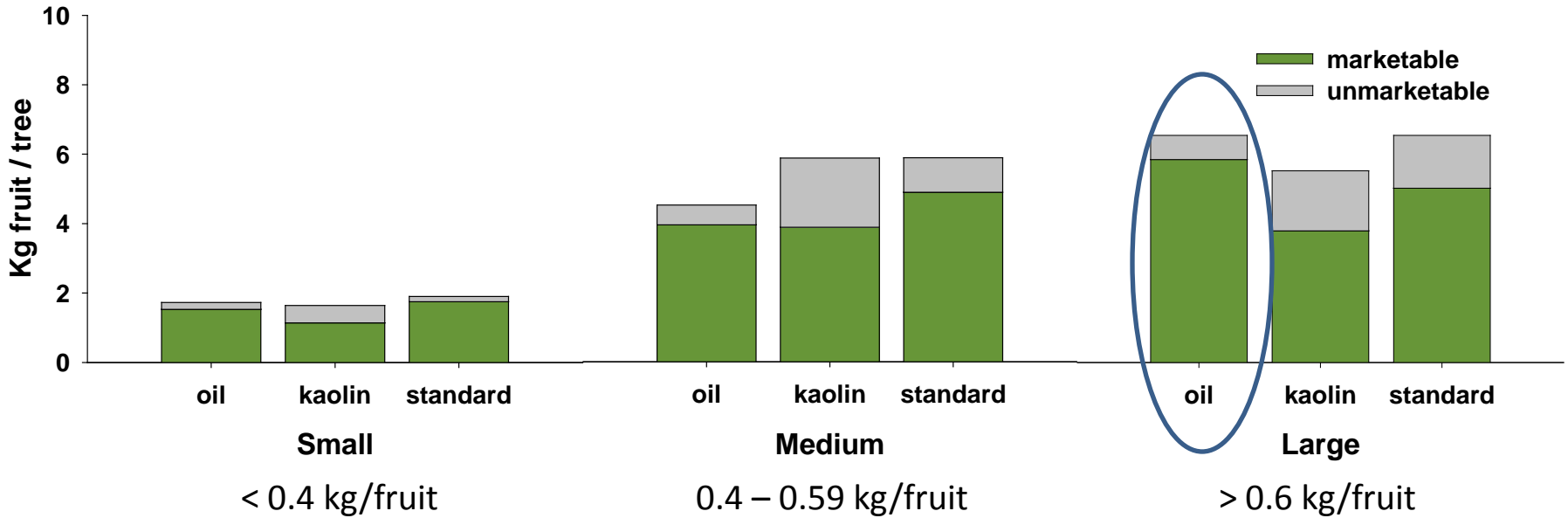


Yield by treatment (kg/tree)



* Unmarketable fruit: fruit with thrips damage and or presence of scales on fruits

Yield by fruit size



Conclusions

- Oil provided the best control against thrips, mites and white peach scale
- Kaolin clay did not provide good control against any of the pests evaluated
- Oil and standard practice had similar total marketable yield
- Oil treatments had the lowest unmarketable yield

Acknowledgments

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