

Economic analysis – papaya pest management using standard treatments, kaolin barrier and horticultural oil.

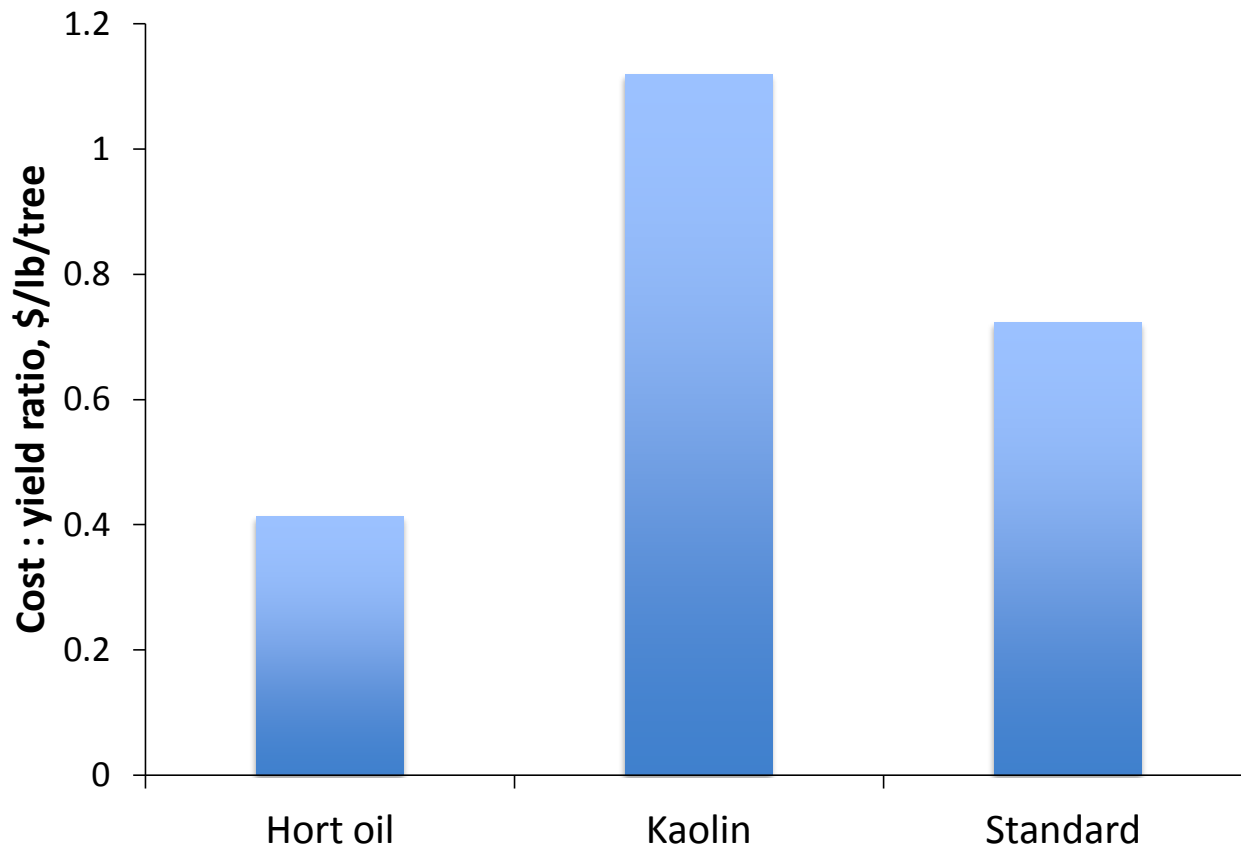
- Estimate total costs of each treatment regime;
- Mean cost per treatment, and number of applications;
- Calculate cost : yield ratio (\$/lb)

<b>Trade name</b>	<b>Active ingredient</b>	<b>Price</b>
Applaud	Buprofezin	\$39 per lb
Vendex	Hexakis	\$30 per lb
Provado	Imidacloprid	\$196 per gallon
Sulfur	S	\$1.50 per lb
Surround	Kaolin	\$1.45 per lb
PureSpray	Hort oil	\$24 per gallon

# Pesticides applied, and costs

- Pure Spray: 13 applications, \$12 per application.
- Kaolin: 13 applications, \$36.25 per application.
- Standard: 8 applications (average \$26.88 per application)
  - Applaud x3
  - Provado x1
  - Sulfur x2
  - Vendex x2

Treatment	Total cost, \$	Mean yield, kg/tree	Mean yield, lb/tree	C:Y (\$/lb) /tree
Hort oil	156	3.80	8.38	0.41
Kaolin	435	3.00	6.61	1.12
Standard	215	3.92	8.64	0.72



# Conclusions

- Horticultural oil provided the best (lowest) cost to yield ratio.
- Standard treatment required less applications, and had the highest yield, but the mean cost per application was ~\$14 greater than the oil-only treatment.
- A regular IPM program may, however, include oil sprays and other pesticides, depending on pests present.