

Comparison of Two Fruit Fly Control Regimes in Six Crops Across Israel

Dr. Shaul Ben-Yehuda¹ and Dr. Nimrod Israely²

- 1. Plant Protection Division, Extension Service, Ministry of Agriculture, Israel, shaul_by@k-h.org.il
- 2. Biofeed Ltd, Israel. nisraely@biofeed.co.il





Survey Data: Sources and Collection Method

- Data presented hereby were collected during the years 2004-2010, regarding six different crops and 56 orchards over an area of 1,193 hectares throughout Israel.
- ☐ All data were standardized.
- ☐ Farmers growing 56 orchards participating in this survey have used each of the following regimes for two years or more:
 - 'Spraying-regime' for the control of fruit flies.
 - o 'Biofeed-regime' for the control of fruit flies.
- 'Biofeed-regime' is based on biological & IPM control and includes three components:
 - (1) Product, (2) Method of use, (3) Professional support.
- ☐ Three types of data were collected:
 - Number of sprayings for the control of fruit flies ('Fruit fly sprays').
 - Number of sprayings for the control of pests other than fruit flies ('Other pest sprays').
 - o Fruit infestation caused by fruit flies (% Infestation).
- Data was collected and analyzed by Dr. Nimrod Israely and Dr. Shaul Ben-Yehuda.





A Biofeed Device in the Orchard







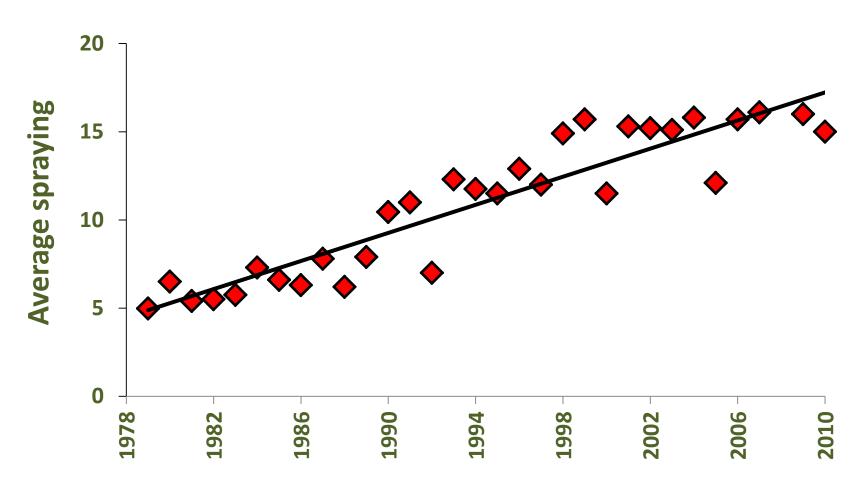
Fruit Flies Feeding on Biofeed Devices







Citrus: Aerial Fruit Fly Control

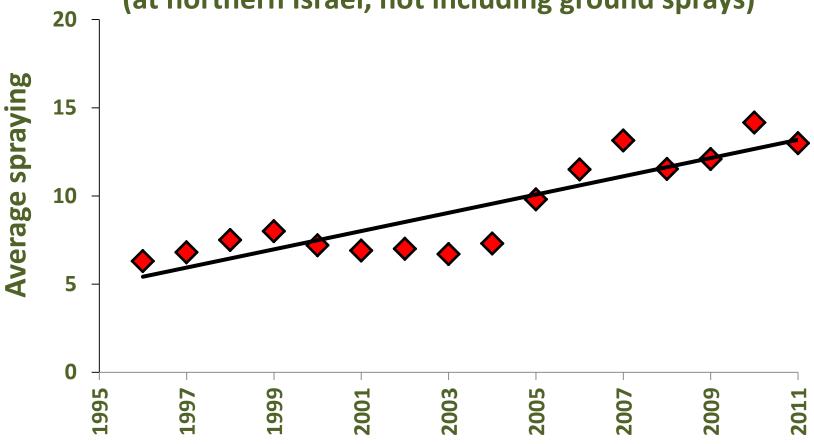






Deciduous: Aerial Fruit Fly Control

(at northern Israel, not including ground sprays)

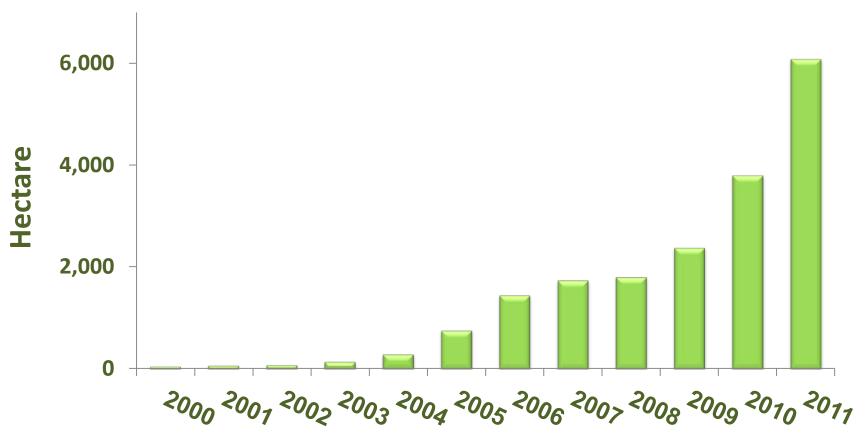






Total Area treated by 'Traps' for Fruit Fly Control

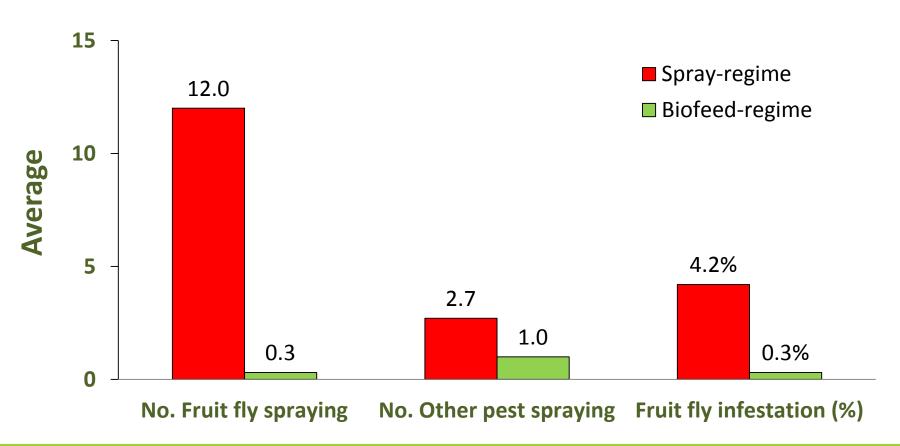
Estimation for all types of devices used in Israel







Survey Data (2004-2010): Citrus, Peach, Apple, Mango, Persimmon, Olive



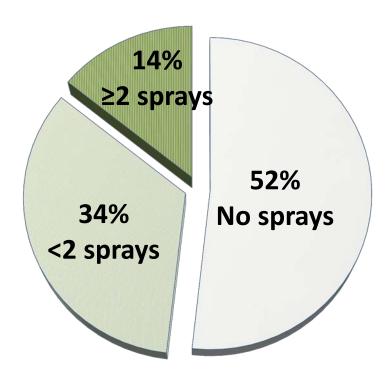
n=56; 1,193 Hectare





Survey Data (2004-2010): Orchards Under 'Biofeed Regime'

Annual Fruit Fly Sprays

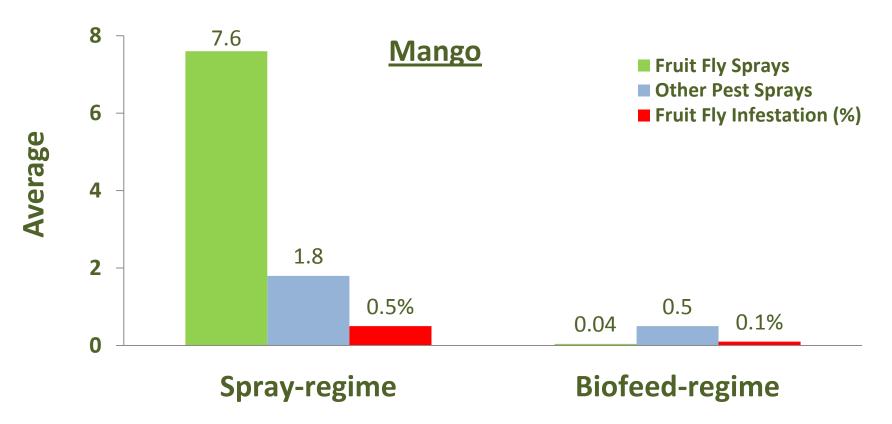


□ 0 □ ≤ 2 □ ≥ 2

n=56; 1,193 Hectare





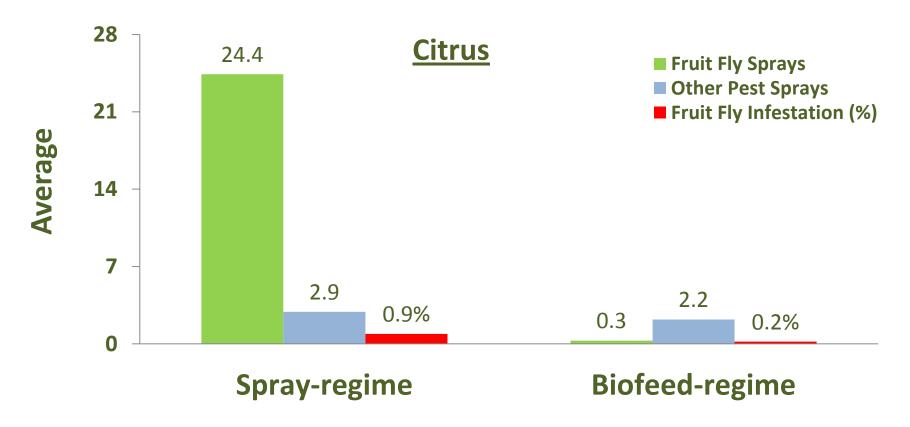


<u>Using Biofeed reduced</u>: **99.4**% fruit fly spraying, **71.5**% other pest spraying and **78**% less infestation!

n=20; 288.2 Hectare





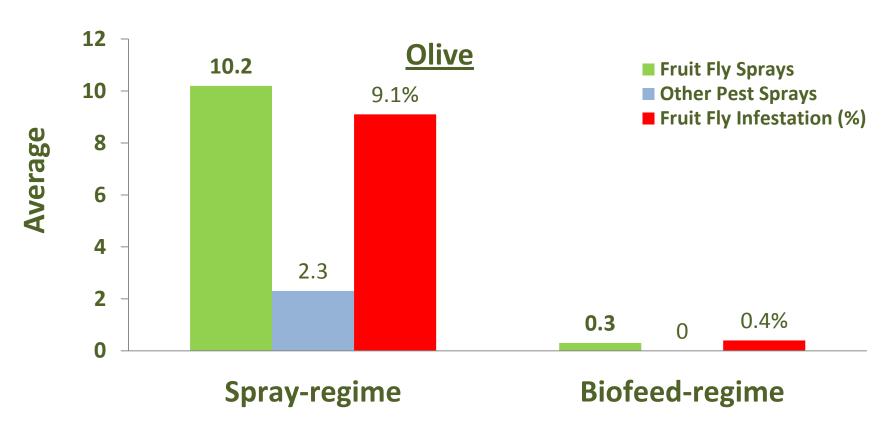


<u>Using Biofeed reduced</u>: **98.8**% fruit fly spraying, **24.5**% other pest spraying and **78**% less infestation!

n=6; 189 Hectare





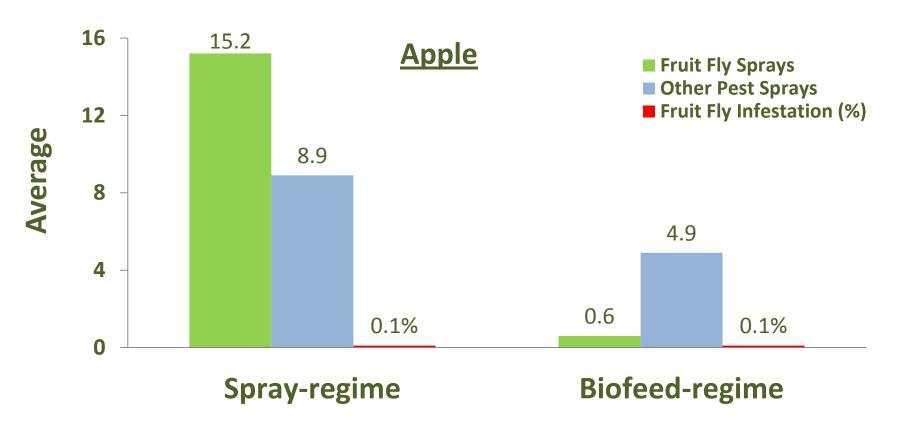


<u>Using Biofeed reduced</u>: **97.5**% fruit fly spraying, **100**% other pest spraying and **96**% less infestation!

n=5; 490 Hectare





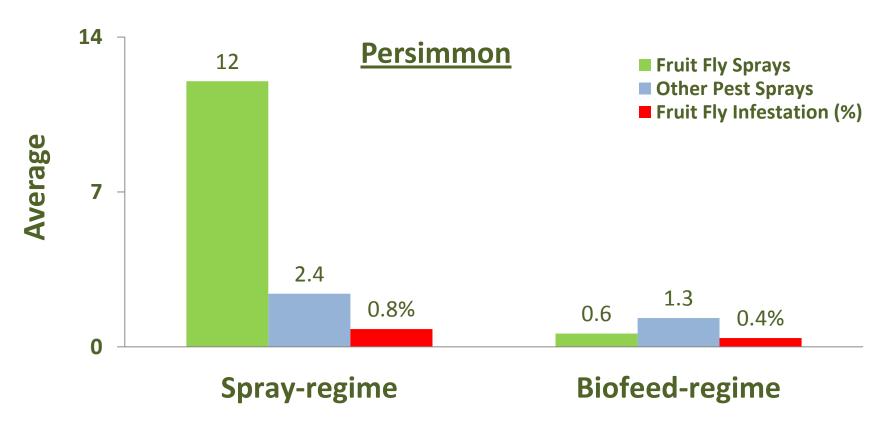


<u>Using Biofeed reduced</u>: **95.8**% fruit fly spraying, **44.8**% other pest spraying and **49**% less infestation!

n=7; 56.5 Hectare





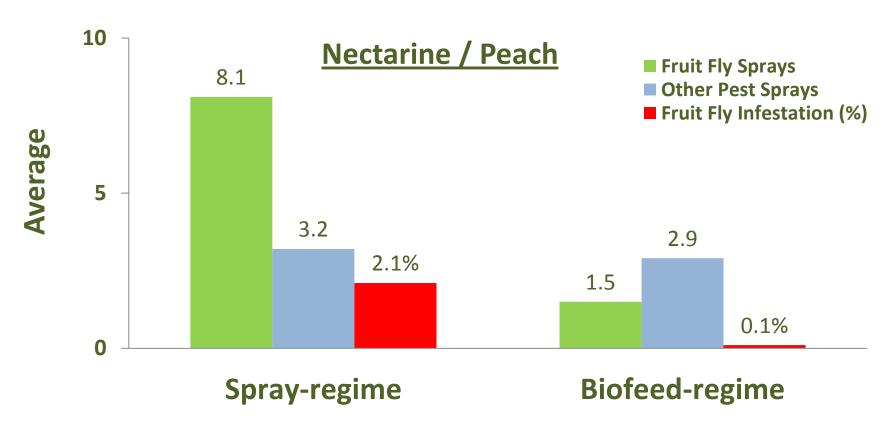


<u>Using Biofeed reduced</u>: **94.6**% fruit fly spraying, **45.4**% other pest spraying and **44**% less infestation!

n=6; 96.4 Hectare







<u>Using Biofeed reduced</u>: **81.7**% fruit fly spraying, **9.1**% other pest spraying and **95**% less infestation!

n=15; 73.0 Hectare



