

# ACTIVE YEASTS IMPROVE SELECTIVE INSECTICIDES FOR CODLING MOTH CONTROL IN PEARS



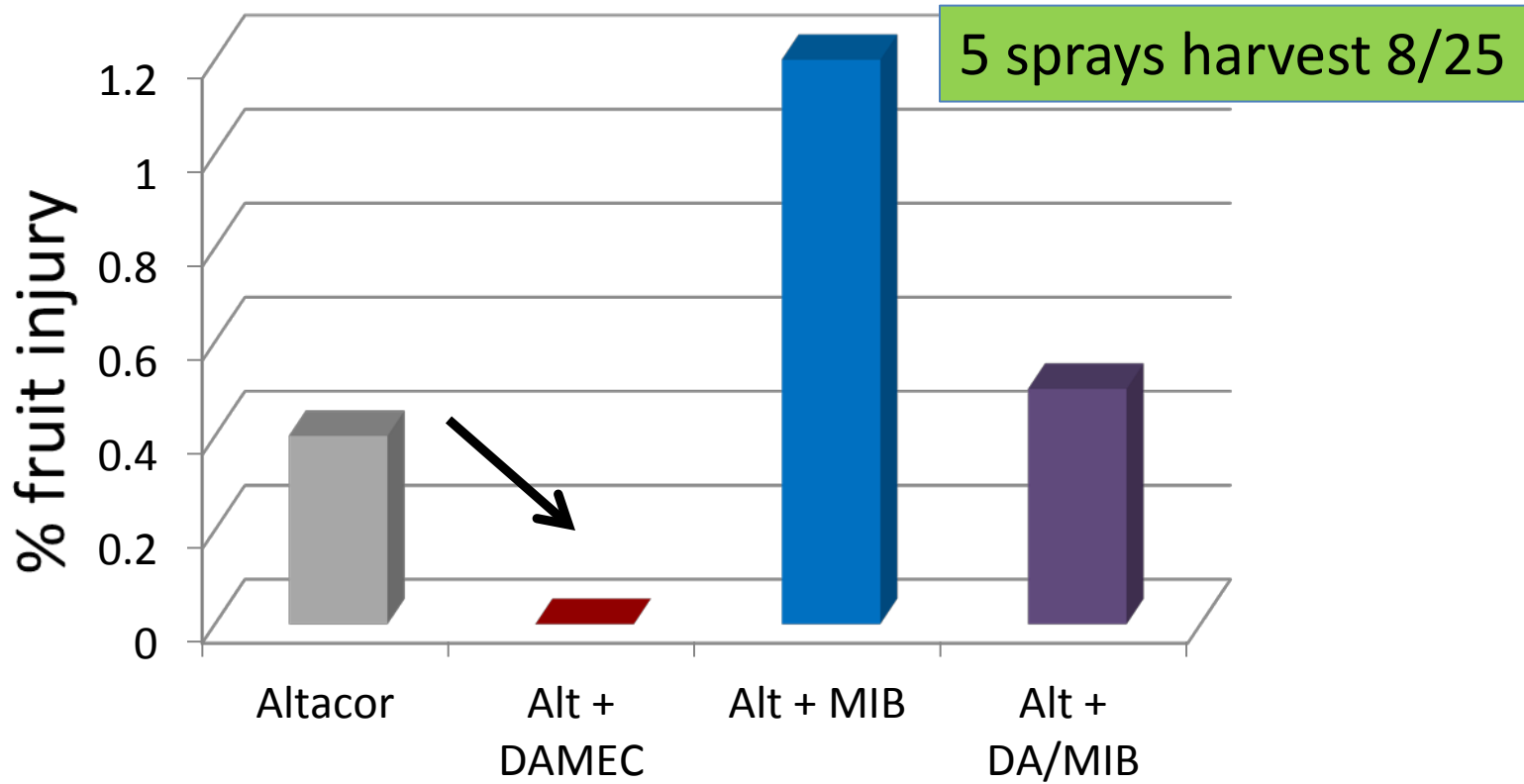
Alan Knight, USDA, ARS, Wapato, WA

# Will Pear Ester Work in Pears?

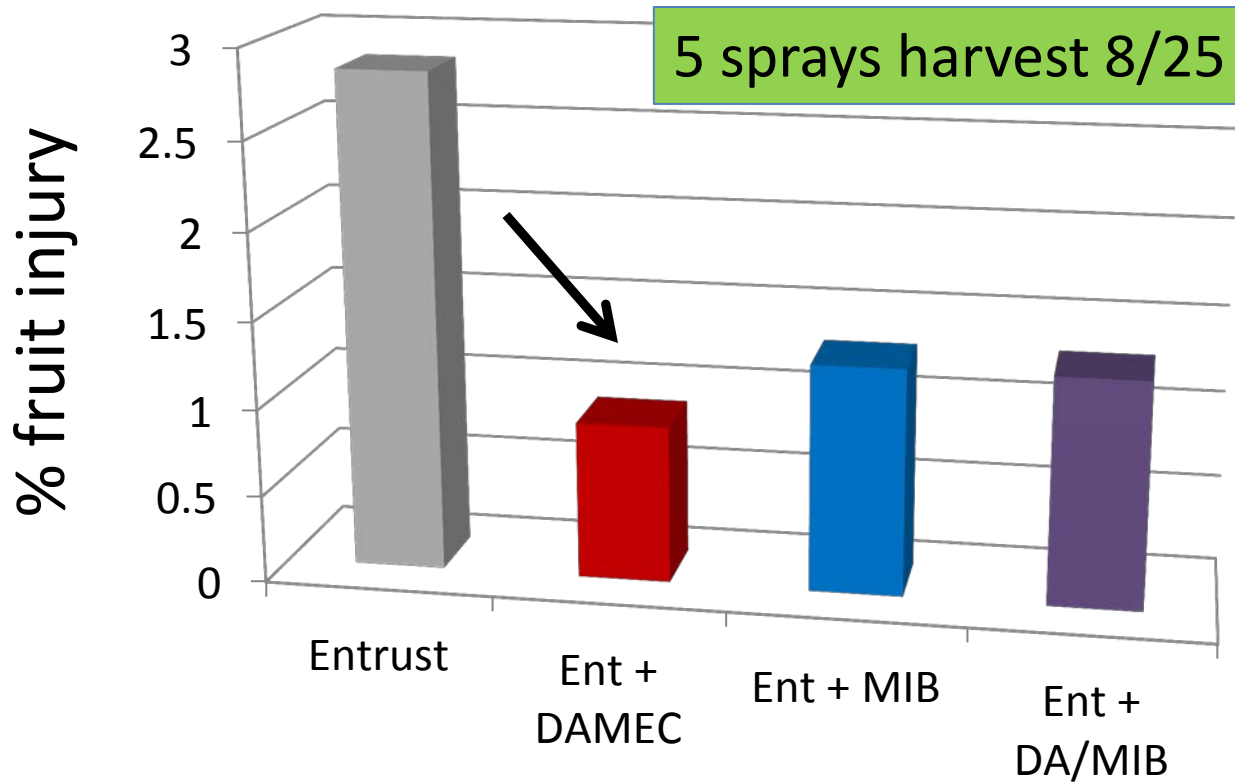


Cidetrak DA MEC  
12 ml/Ac

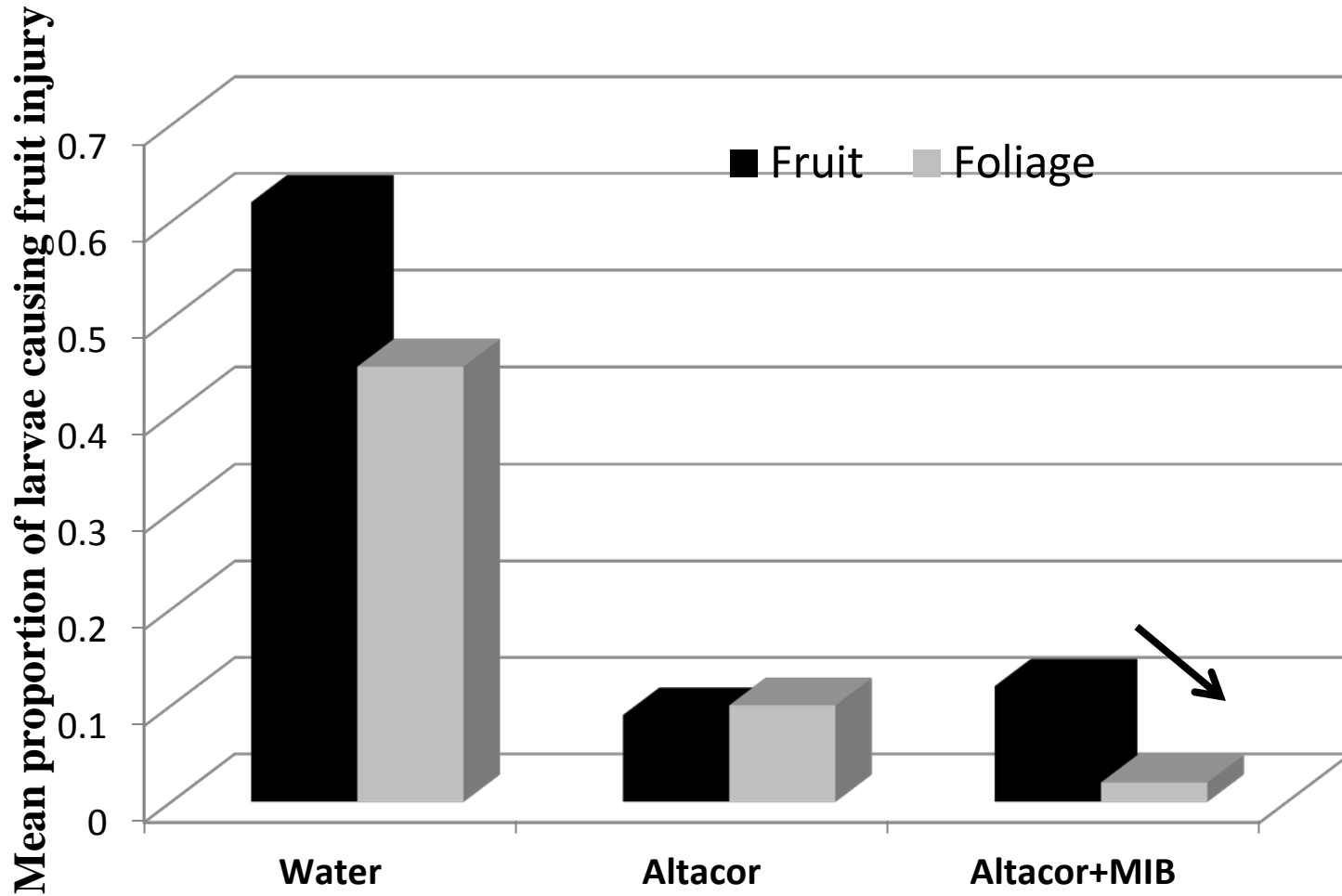
# Altacor in Pear



# Entrust in Pear

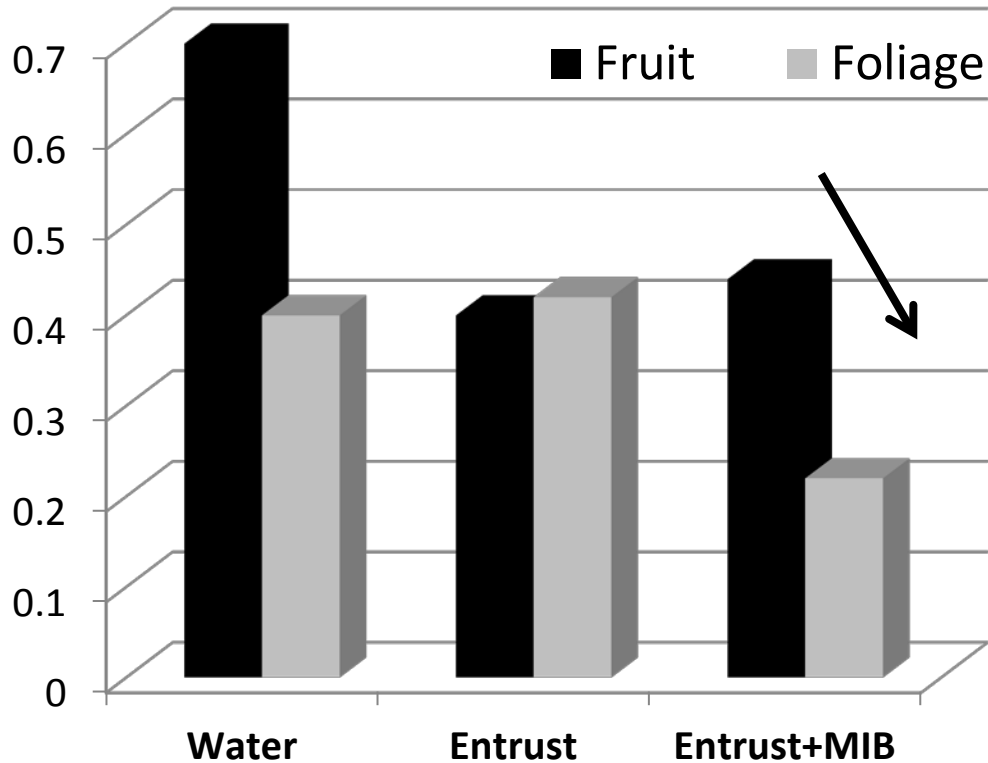


# MIB Works for Eggs Laid off of Fruit

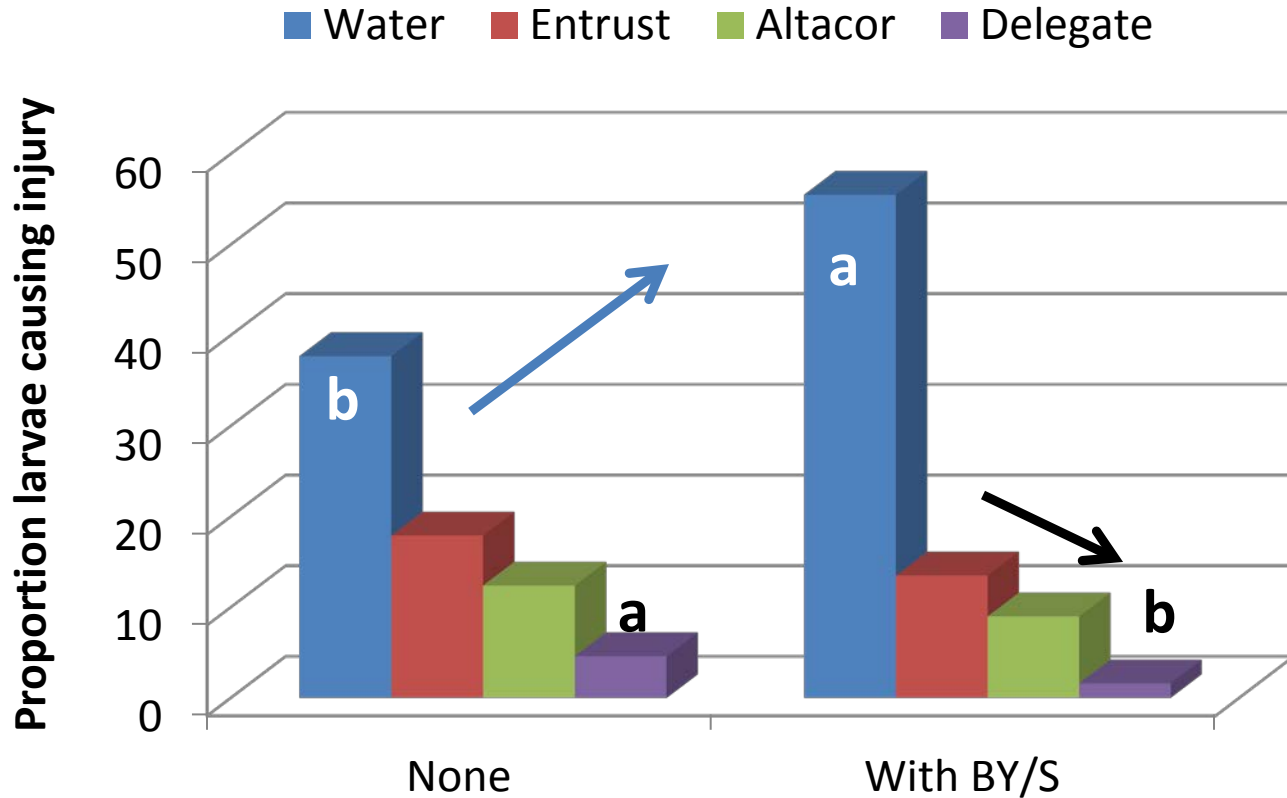


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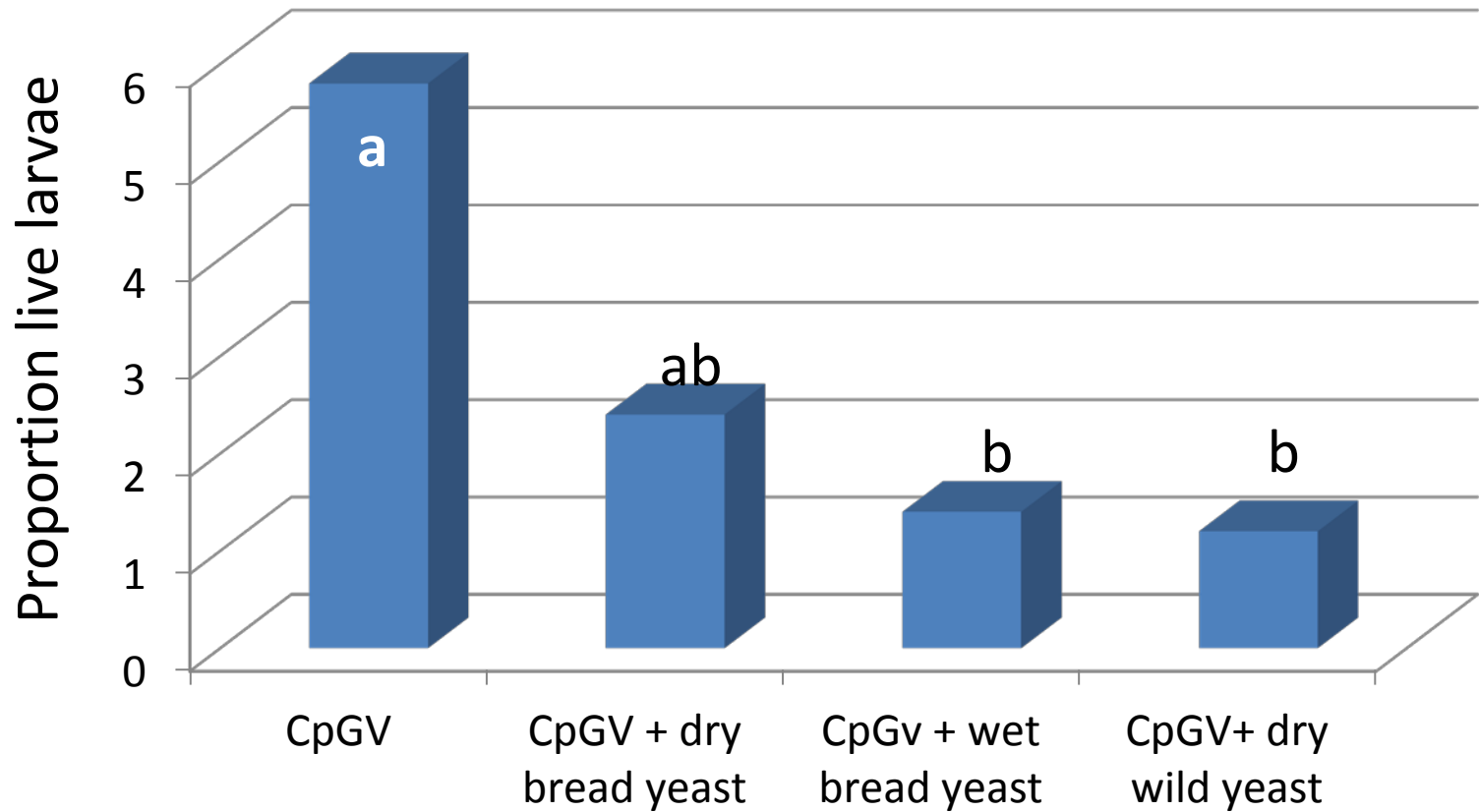
Mean proportion of larvae causing fruit injury



# Bioassays w' Bread Yeast



# *Saccharomyces cerevisiae* looks Good





# 2014 Summary

- DAMEC looked good in pear field trials!
- MIB did not help in pears.
- Combining DAMEC and MIB did not help.
- MIB had some activity early season in apple.
- Lab assays with MIB showed no improvement.
- MIB helped when larvae were placed on adjoining foliage.
- Bread yeast plus sugar looked better than MIB.
- BY+S looked good in assays with Delegate

## 2015 – Final Budget \$13,000

- ❑ Final focus is on the use of DAMEC plus yeast/sugar for CpGV, Altacor, and spinosyn insecticides in replicated field trials.
- ❑ More study of larvae placed on or adjacent to fruits to determine whether additives should be restricted to sprays applied during the first generation when eggs are mostly laid on foliage or over the entire season.

# Questions

1. Costs: This is rate dependent and we do not know the lowest effective rate that can be added.

DAMEC - \$12 @ 12 ml /acre

Brewers yeast - \$ 3 @ 1 lb/acre

Sugar - \$ 0.5 @ 1 lb/acre

2. Insecticides to be tested: Focus in 2015 will be ...

Delegate

Altacor

Virus

Others?

3. Field protocol:

Research farm has high pest pressure every year, fruit load varies.