Use of a Host Plant Volatile Blend to Monitor Navel Orangeworm Populations Under Mating Disruption & Conventional Management in Almond

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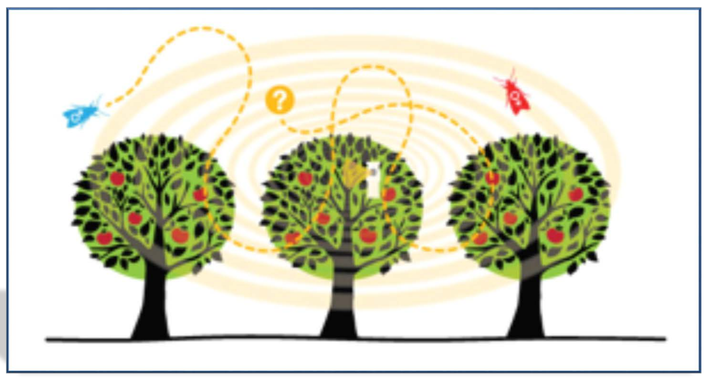
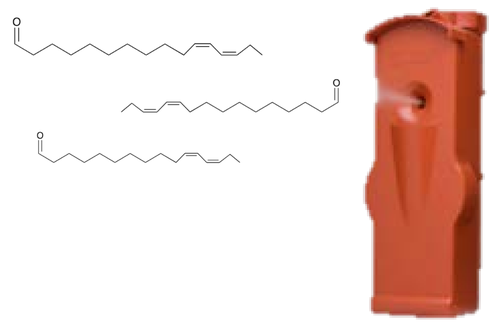
The Project:

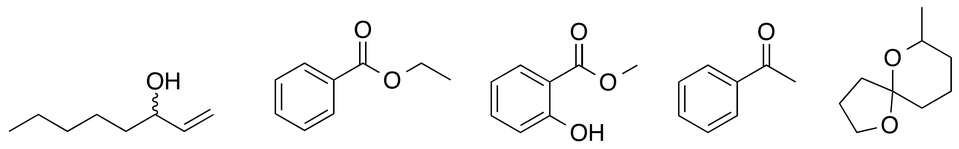
Over a multi-year experiment determine if a recently developed blend of synthetic host plant volatiles (the Blend) can efficiently monitor NOW populations during mating disruption studies in almond orchards



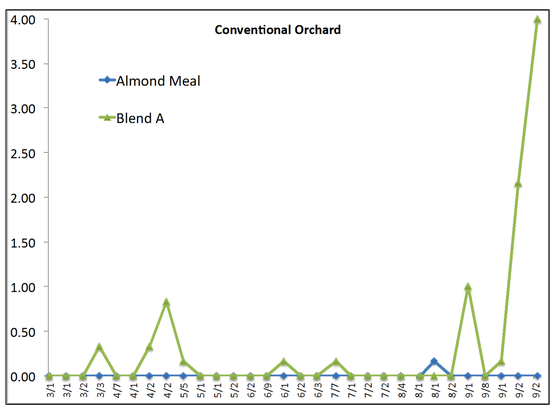
The Goal:

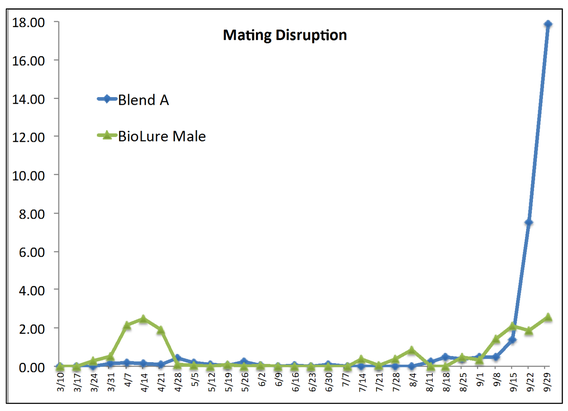
Using the Blend as a NOW monitoring tool, provide pest management practitioners with reliable guidance for making treatment decisions for navel orangeworm

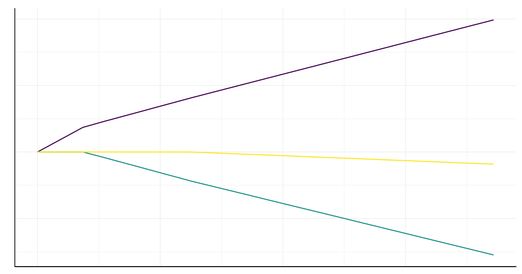


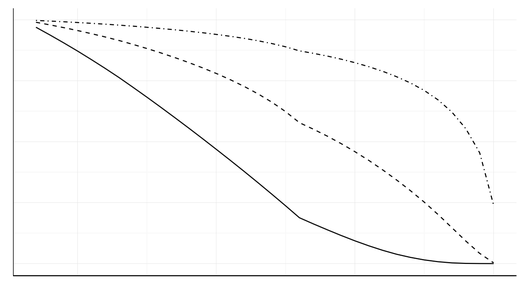


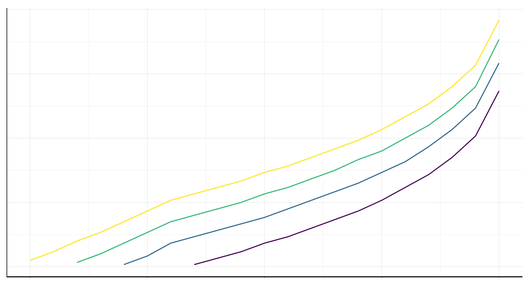
2016 Results (year 3)







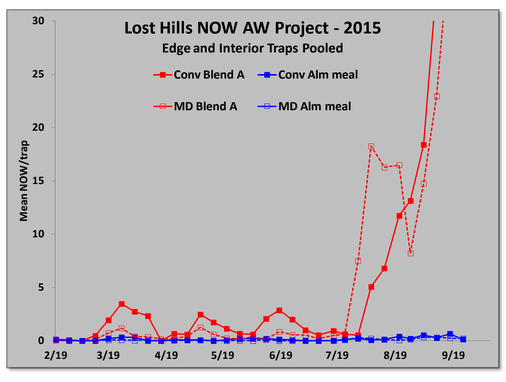


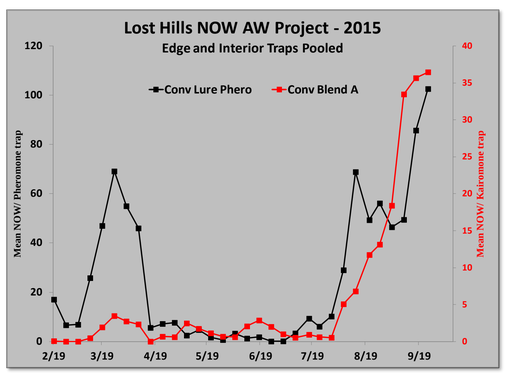


30-30-30 Rule: The Blend

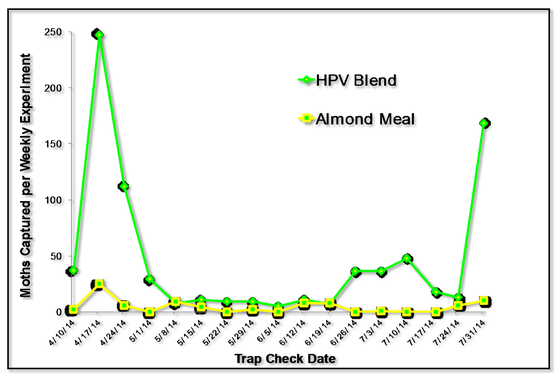
In Nonpareil almonds under conventional treatment, if growers maintain cumulative NOW under 30 moths trapped by week 30, they will have a 30% chance of developing <1% NOW damage by the end of the season

2015 Results (year 2)





2014 Results (year 1)



Results Highlights

- Blend consistently outperformed almond meal in mating disruption treated and conventional almond orchards
- Blend can be used for monitoring NOW and trap catch numbers can be used to predict damage

Multidisciplinary Project

Research was conducted under the following projects:
TFCA 58-5325-4-042 Almond Board of California
RCA 5325-42000-037-13 California Dept. Food and Agriculture
USDA-ARS CRIS Project 5325−42000−037−00D