

NPDRS

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Ten Projects Funded in 2010

Collaborative between ARS and Universities

- ▣ Wheat and Barley Stem Rust (5)
- ▣ Asian Soybean Rust (2)
- ▣ Laurel Wilt (2)
- ▣ Powell Butte Cyst Nematode (1)

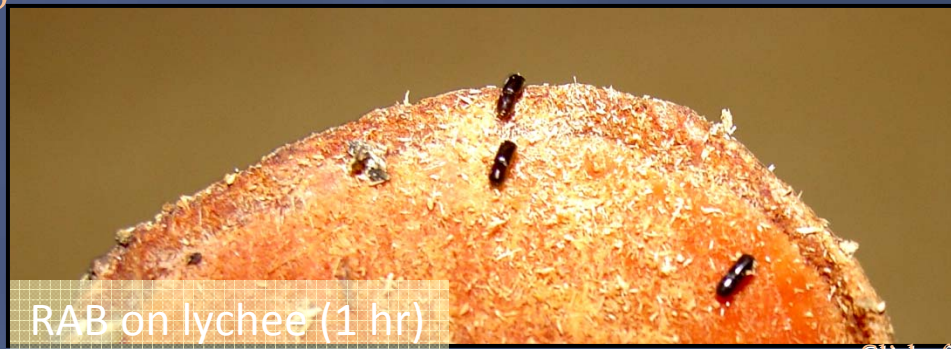
Initial Field Tests (Fall 2009)

- **Questions**
 - RAB preference among 3 avocado races?
 - Is α -copaene the primary attractant?
 - Is manuka lure competitive with wood from host trees?
- Sticky traps stapled to wood bolts
 - 3 races of avocado (W, G, M)
 - Lychee (non-host, high in α -copaene)
 - Unbaited sticky trap (neg. control)
- Lindgren funnel traps
 - Manuka lure (Synergy Semiochemicals)
 - Phoebe lure (2nd test only)
- 8-week tests, 5 replicate blocks



Laboratory Bioassays (Spring 2010)

- Evaluated behavioral responses of RAB to the same treatments used in 2009 field tests
- Collab. with Jorge Peña (UF, Homestead) and John Capinera (UF, Gainesville) – UF lab colony
- Bioassay 1
2-Choice Test: Avocado vs. Lychee
 - Rectangular bin, bolts at opposite ends
 - 20 female RAB (≤ 3 d post-eclosion) placed in center
 - Recorded # RAB on each bolt after 1, 2, 4, 8 and 24 hr
 - Recorded # RAB boring and location on bolt (cut end or bark)
 - Replicated 5x



RAB on lychee (1 hr)

Screening Wheat and Barley for UG99 Resistance in Kenya



Priorities

- ▣ Stakeholders
- ▣ Crop producers
- ▣ Crop germplasm committees
- ▣ USDA, APHIS
- ▣ USDA, ARS, Office of Pest Management Policy

ARS Base-Funded Research

- ▣ Groundnut Ring Spot Virus
- ▣ *P. ramorum*
- ▣ Laurel Wilt
- ▣ Ug99
- ▣ Asian Soybean Rust
- ▣ HLB

FY 11 and FY 12 Budgets

