### **NPDRS**



# 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  $\alpha$ -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-copaer
  - Unbaited sticky trap (neg. control)
- Lindgren funnel traps
  - Manuka lure (Synergy Semiochemic
  - Phoebe lure (2<sup>nd</sup> test only)
- 8-week tests, 5 replicate blocks



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### 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



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## 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 Resarch

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

### FY 11 and FY 12 Budgets

