Update for CPDPC Joint Science & Operations Subcommittees

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Effectiveness of HLB+ tree removal

- Previous modeling work implies that removing HLB+ trees had some benefit compared to doing nothing.
Effectiveness of HLB+ tree removal

- Agent-based model added functionality to implement a **delimitation** strategy: responding to HLB+ trees detected by survey
- Preliminary work underway; modeled scenarios (e.g. control strategies) will be refined
- Figure here represents average +/- se of 5 replicated simulations for each strategy

None: No control strategy implemented  
Chemical & Removal: risk-based survey 2x/year & HLB+ trees are removed, citrus is treated with once with insecticide in Jan/Feb  
Chem, Removal, Delim: same as Chemical & Removal, but with 100% survey & spray of properties in a 400m radius around an HLB+ tree
Regulatory Working Group Update

CPDPC – OPERATIONS / SCIENCE SUBCOMMITTEE MEETING

JULY 8, 2020
Working Group Tasks

Evaluate data and justification for splitting ACP Bulk Citrus Zone 5

Evaluate a QC permit to ship fruit into the HLB quarantine
Revised Proposal

Keep current Zone 5 intact

Create systematic response to isolated HLB detections

Issue a permit to move fruit into an HLB quarantine (modified QC 1486)
Permit Systematic Approach

Only the surrounding zone may ship fruit into an HLBQ without mitigation.

- Tarping
- Pre-shipment notification

Only Zone 5 may ship into the Riverside/SB HLBQ

Similar permit would be issued for future isolated HLBQ with packinghouses
Bulk Citrus Regional Quarantine

- Zone 1
- Zone 2
- Zone 3
- Zone 4
- Zone 5
- Zone 6
- Zone 7

HLB Quarantine

Packing House

Map Printed 7/1/2020
Bulk Citrus Regional Quarantine

- Zone 1
- Zone 2
- Zone 3
- Zone 4
- Zone 5
- Zone 6
- Zone 7

- Hypothetical HLBQ
- HLB Quarantine
- Packing House

Map Printed 7/1/2020
Systematic Approach

**ADVANTAGES**

- Reduces unintended consequence of revoking QC 1486
- Does not require splitting Zone 5
- Reduces required inspections and program cost
- Approach applies to future HLBQ areas

**DISADVANTAGES**

- Potentially adding more ACP to HLBQ area
Discussion

Presented by: Keith Okasaki
Email contact: Keith.Okasaki@cdfa.ca.gov
Should the buffer treatments be reduced from 400m?
Issues inhibiting success of border sprays

• Residential Acceptance/Availability
• Timeliness of applications
• Acceptance * Distance
• Tree identity
Residential Acceptance/Availability

• Data provided by Anmol Joshi at CDFA
• Provided with data for the following areas: Ventura, Ojai, Camarillo, San Diego, UCR, San Bernardino, Santa Paula, Santa Barbara, Imperial, Hemet, Coachella
  • Total properties considered, Total properties treated, No-Contact, Refusal
  • Chose locations with 4 or more data points
  • Provided for Winter and Fall treatments
  • 2016, 2017, 2018, 2019
• Separated into Coastal Areas and Inland
Average properties considered per region:
Ventura = 8,432
Camarillo = 1,097
Santa Barbara = 3,381
Santa Paula = 1,350
Average properties considered per region:
UCR = 1,142
San Bernardino = 3,668
Hemet = 1,775
Imperial = 14
Trends

• Refusals usually under 20%
• Treatments are only going onto < 60% of properties
• No contact with host more influential than outright refusal
Timeliness of applications & distance

• Insecticide treatments are going to cause adult ACP to move
• Movement will likely be to nearest citrus tree, which could be grove
• Highly problematic in regions where systemic insecticide is not an option
• Setamou mark recapture study (not yet published, conversation on 9 June 2020) suggests that ACP are mostly coming from residential that is 100ft away from the grove
Tree identity

• CDFA is unable to provide this data in digital form
• Critical to risk assessment as lemons can host more ACP/year
• In CA, conservatively, we should assume it is mostly/all lemons
Recommendation

• **Reduce the distance of border treatments to 100-200 meters**
• **Two-week treatment window**
• **Critical to address the first 100ft first**
• **Critical to address the amount of no contact with owners since this is contributing to the lack of treatments more than refusals**