Citrus Canker Eradication Program Update

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Division of Plant Industry

Citrus Canker

History

- Canker found in 1915
- Eradicated in 1933
- 50 years later found again in Manatee County
- Eradicated in 1992
- Found again in Miami in 1995

Photo courtesy of Ultimate Chase Video

Young leaf lesions

An assortment of canker lesions on fruit

Canker symptoms associated with leafminer wounds
Advanced citrus canker symptoms on dooryard and grove trees

Biology
- Canker is a bacterial disease spread by
  - Wind-blown rain
  - People and equipment
  - Movement of infected plant material
- There is no known cure for canker
- Only method of control is to remove infected and exposed trees

1,900 Ft. Rule
- Epidemiologic study conclusions:
  To control the spread of canker, all exposed citrus trees within 1,900 ft. of an infected tree must be removed

CCEP Obstacles
- Biological
- Economic
- Legal

Prior to 2004 hurricanes, all successfully addressed w/in available resources

CCEP Driven by Science
- CCEP developed and implemented based on sound science and regulatory principles
  - Exposed-tree removal distances
  - Disease-spread patterns
  - Hurricane impacts
  - Survey Strategies

Hurricane Impacts
- August 2004, CCEP had removed all known canker outside of SE Florida
- Absence of hurricane activity in past 10 years left program w/ lack of scientific certainty of what outcomes would be
- In late 2004 and early 2005, far-reaching impacts of hurricanes became apparent
Hurricane Impacts (cont’d)

- # of commercial citrus acres infected/exposed to canker prior to August 2004 = 15,868 acres
- Since August 2004 approx. 46,508 commercial citrus acres infected/exposed to canker

New Canker Finds

- Charlotte County
- Collier County
- Highlands/De Soto Counties
- Orange County
- Lee County
- Orange County
- Charlotte County
- Osceola County
- St. Lucie County
- Indian River County
- Polk County
- Manatee County
- Clay County

Program Challenges

- Sufficient manpower and infrastructure remain key to program success
- 2005 hurricane season

New Strategies

- Shift resources to address new detections
- Program stakeholder meetings/assessments

New Strategies (Cont’d)

- USDA Residential Sentinel Survey reassigned to grove survey
  - Two grove blocks selected in each township
  - Every tree surveyed
  - Second phase, expand to four different grove blocks in each township
  - Targeted surveys concentrated in areas most vulnerable to disease spread by hurricanes

New Strategies (cont’d)

- Grower self-survey program
  - Designed to augment existing CCEP surveys
  - Over 2,000 industry members trained by UF/IFAS and CCEP
  - Growers posting their survey results on FDACS/DPI Web site
  - Many new finds detected by growers
New Strategies (cont’d)

- Control strategies for increasing amount of acreage removed
  - Heavier equipment can remove a minimum of 200 acres/day
  - Contract in place early September

Compliance Agreement Changes

- CCEP Business Plan
  - Industry-improvement initiative
  - Plan to address how CCEP regulatory objectives will be met (who will be in charge of decontamination issues? How will they assure compliance? What methodologies will be applied?)
  - Grove self-surveys
    - Mandatory training in canker identification
    - Schedule and reporting requirements
  - More rigid penalty system/increased regulatory security measures

Current Status

- CCEP emphasis on determining extent of 2004 hurricane-related spread of disease and removal of infected/exposed trees
- Control of residential areas at least 70% complete
- Commercial control activities progressing w/ industry support

Control Reports
8/12/04 thru 8/12-19/05

<table>
<thead>
<tr>
<th>County</th>
<th>Percent Disease</th>
<th>Trees Investigated</th>
<th>Trees of Total Percent Disease</th>
<th>Total of All Trees</th>
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Public Outreach

- Industry Workshops
  - Over 800 members attended
  - CEU’s earned
- Farm Workers Decontamination Training Program
  - 1,800 harvesters trained and over 150,000 farm workers trained
- Commercial Citrus Grower Self-Survey Training
  - 2,000 grove personnel trained
Public Outreach

- Up to 40 new public information liaisons hired in South Florida to assist in getting waivers signed
- Public education -- advance notification of impending IFOs/warrants

In Summary

- Good overall public support
- Overwhelming industry support
- Public understands industry contribution to state's economic well being
- Canker was eradicated from Florida once (1915-1933)
- It can again, with similar resources, industry support, and cooperative perseverance over extended period of time

Citrus Canker Website:
www.doacs.state.fl.us/canker/

Citrus Canker Helplines:
Miami-Dade, Broward, Palm Beach, Monroe Counties
800-850-3781
All other counties
800-282-5153

Thank you.