

8 November 2000

MEMORANDUM

TO: Richard Gaskalla, Director
Division of Plant Industry

FROM: Wayne N. Dixon, Ph.D., Chief
Bureau of Entomology, Nematology, and Plant Pathology

SUBJECT: Risk Assessment Report: RA-2-Manatee County

Richard, please find attached five copies of RA-2-Manatee Co. prepared by the Risk Assessment Group that met on 17 June 1998 in response to a request from the Manatee Co. Citrus Canker Eradication Program. I believe the risk assessment went well in terms of the participants' contributions to the risk assessment process and outcome of the risk assessment. It seemed evident that the growers present were pleased with the recommendations made by the group.

Please let me know if you have any questions regarding our report.

xc: Dr. Jim Graham
Dr. Tim Gottwald
Mr. Leon Hebb
Dr. John Miller
Dr. Steve Poe
Dr. Tim Schubert
Dr. Dean Gabriel
Mr. John Thomas
Mr. Ken Bailey
Mr. Richard Clark

Citrus
Canker
in
Manatee
Co.
1998

Report No. RAG-2-1998
from the
Risk Assessment Group Meeting
June 17, 1998
Palmetto, Florida

Manatee Co. Citrus Canker Eradication Program
A Cooperative Program of the
Florida Department of Agriculture & Consumer Services, Division of Plant Industry
and the
USDA Animal & Plant Health Identification Service, Plant Protection &
Quarantine

Introduction

PURPOSE: The Manatee Co. Citrus Canker Risk Assessment Group met on 17 June 1998 in Palmetto, Florida to formulate recommendations for several grove properties. Specifically, the Manatee Co. Citrus Canker Eradication Program in Manatee Co. requested guidance on the policy of removing exposed citrus trees within 125 feet of citrus canker positive trees in several citrus groves.

Members of the Risk Assessment Group were:

Dr. Wayne N. Dixon, Group Leader	Chief, Bureau of Entomology, Nematology, and Plant Pathology, Division of Plant Industry, FDACS
Dr. Timothy R. Gottwald	Plant Pathologist, U.S. Horticultural Research Laboratories, USDA, Agricultural Research Service
Dr. James H. Graham	Soil Microbiologist, Citrus Research and Education Center, IFAS, University of Florida
Mr. Leon Hebb	Co-director, Citrus Canker Program, Manatee Co., // Chief, Bureau of Pest Eradication and Control, Division of Plant Industry, FDACS
Dr. John W. Miller	Plant Pathologist, Plant Pathology Section, Division of Plant Industry, FDACS
Dr. Stephen R. Poe	Plant Pathologist, USDA Animal and Plant Health Inspection Service, Plant Protection and Quarantine
Dr. Timothy S. Schubert	Plant Pathologist, Plant Pathology Section Administrator, Division of Plant Industry, FDACS

In addition to the members, the following invited guests were present and participated in the group's late morning and early afternoon discussions in the field and meeting room (see agenda):

Dr. Dean Gabriel	IFAS/UF	Mr. Walt Elliott	Grimes Groves
Mr. John Thomas	USDA/APHIS/PPQ	Mr. William Grimes	Grimes Groves
Mr. Maurice Duffel	USDA/APHIS/PPQ	Mr. Gary Guthrie	Guthrie Groves
Mr. Randy Valentine	Manatee Fruit Co.		

Attending by speaker phone: Ms. Ann Wainwright, Assistant Commissioner, FDACS
Mr Craig Meyer, Deputy Commissioner, FDACS
Ms. Terry Rhodes, Deputy Commissioner, FDACS

Acknowledgment for Field and Meeting Room Assistance: Mr. Terrill Symons, Mr. Ray Seitler, and Mr. Adam Pressimone of FDACS/DPI provided assistance in locating specific grove trees, decontaminating vehicles, chauffeuring, and meeting room logistics.

The following schedule and agenda were planned for the Risk Assessment Group:

<u>Time</u>	<u>Agenda</u>
10:00 - 10:15 AM (10:15 - 10:35 AM, actual)	Program Status Goal(s) for Risk Assessment Group (Location: Rodgers Auditorium, Manatee Co. Agricultural Center)
10:15 am - 12:15 PM (10:35 - 12:50 PM, actual)	Field Review of Specific Grove Locations with Positive Citrus Canker Tree(s)
12:15 - 1:00 PM (12:50 - 2:00 PM, actual)	Lunch (Location: Local Restaurant)
1:00 - 3:00 PM (2:00 - 4:05 PM, actual)	Review and Discussion (Location: Rodgers Auditorium) 1. General Program 2. Field Locations 3. Other issues
3:00 PM (4:05 PM, actual)	Adjournment

Comments on Day's Activities

The agenda was followed by the risk assessment group with some changes occurring due to a longer time spent in the field inspecting and evaluating the citrus canker-infested blocks (actual times listed above). A visit was made to the Grimes Groves' New Rhode Red Valencia Block; Grimes Groves' Heirs Block; and Guthrie Groves' West Orange Block and Grapefruit Block. The Thomas Hume/B&J Citrus' Hume Block was not field-inspected by the risk assessment group. Although it was very hot and humid in the groves, all parties displayed an sincere earnestness to learn as much as possible about the circumstances of each grove. Both in the field and in the meeting room, all attendees exhibited cordiality to each other. The friendly demeanor of the attendees is acknowledged and was much appreciated.

Recommendations by the Risk Assessment Group

1. As an experimental study to further our understanding of the epidemiology of citrus canker in Florida and due to the exceptional circumstances that minimize risk of further citrus canker infestation, it is recommended that no exposed tree related to the positive Valencia orange tree of 14 January 1998 be cut in the Grimes Groves' New Rhode Valencia Red Block and that a suitable resurvey effort take place to ensure early detection of any new citrus canker infection.

Motion: Dr. Wayne Dixon Second: Dr. Tim Gottwald Vote: Approved unanimously

2. As an experimental study to further our understanding of the epidemiology of citrus canker in Florida and due to the special circumstances that minimize risk of further citrus canker infestation, it is recommended that no exposed tree related to the positive grapefruit tree of 14 January 1998 be cut in the Estate of W.H. Grimes Grove's Heirs Block and that a suitable resurvey effort take place to ensure early detection of any new citrus canker infection.

Motion: Dr. Wayne Dixon Second: Dr. Tim Gottwald Vote: Approved unanimously

3. As an experimental study to further our understanding of the epidemiology of citrus canker in Florida and due to the circumstances that minimize risk of further citrus canker infestation, it is recommended that no exposed tree related to the positive Hamlin orange trees of 10 February 1998 and grapefruit trees of 1 June 1998 be cut in the Gary Stephen Guthrie Trust Grove's Grapefruit Block and West Orange Block and that a suitable resurvey effort take place to ensure early detection of any new citrus canker infection.

Motion: Dr. Wayne Dixon Second: Dr. Tim Gottwald Vote: Approved unanimously

4. It is recommended that the Manatee Co. Citrus Canker Eradication Program adhere to the policy of removing exposed trees up to 125 feet from a positive tree in the Thomas Hume Grove's Hume Block due to its mixture of citrus varieties, scattered distribution of canker-positive trees, continued detection of citrus canker, and differential timing of detection of canker-positive trees, as well as proximity to previous citrus canker infestations in the environs.

Motion: Dr. Wayne Dixon Second: Dr. Jim Graham Vote: Approved unanimously

Additional Remarks: In the general afternoon discussion, it was agreed by the risk assessment group and the growers that a minimum of 10 surveys during the next 12 months should take place in the Grimes' and Guthrie Groves as a part of the resurvey effort for evidence of disease. The surveys will be timed to reflect biological phenology of citrus canker disease expression as generally observed in Manatee County. Also, Mr. Grimes and Mr. Guthrie agreed to provide suitable grove maintenance, especially mowing, to facilitate the identified resurvey effort. Adequate accessibility to the grove trees is highly necessary for successful resurvey work.

Background to Recommendations

Grimes Groves, New Rhode Red Valencia Block: (Recommendation 1) Citrus variety is Valencia orange (a fairly resistant variety to citrus canker). A positive tree was detected on 13 January 1998 and was cut and burned in place on 3 February 1998. The canker infection was high up and light on the southeast side of the 4-5 yrs-old tree's canopy. This suggests a weather-related event caused the infection as opposed to human/machinery movement of the pathogen. No additional citrus canker has been found in any additional surveys; the most recent survey was conducted the week of 6-10 June 1998. Windbreaks are present on all four sides of the grove. The nearest citrus canker infestation to the grove was ca. ¼ mile away and occurred about 9 months previously.

The recommendation will allow the program to monitor the eradication strategy of removing only a positive tree in a young Valencia orange planting. Mitigating factors include: windbreaks of oak and other non-susceptible trees, a single lightly canker-infected tree, distance from other known infestation(s), detection and quick removal of the positive tree, and relative resistance of the variety.

Estate of W.H. Grimes, Heirs Block: (Recommendation 2) Citrus variety is grapefruit (a very susceptible variety to citrus canker). A positive tree was detected on 13 January 1998 and cut and burned in place on 3 February 1998. The canker infection was high up on the southeast side of the young reset's canopy. This suggests a weather-related event caused the infection as opposed to human/machinery movement of the pathogen. No additional citrus canker has been found during the last two surveys. Windbreaks are present. The nearest citrus canker infestation to the grove was ca. ½ mile away.

The recommendation will allow the program to monitor the eradication strategy of removing only a positive tree in an older grapefruit planting. Mitigating factors include: windbreaks, a single canker-infected tree, distance from known infestation(s), and detection and quick removal of the positive tree. Risk factors include: general susceptibility of grapefruit to citrus canker.

Guthrie Grove, West Orange Block and Grapefruit Block: (Recommendation 3) Citrus varieties are grapefruit and Hamlin orange (a fairly citrus canker-susceptible orange variety). In the grapefruit grove, four positive trees (3 and 1-tree loci) were detected on 1 June 1998 on the periphery of an earlier detection (18 December 1997) of 40 positive trees and subsequent push-and-burn action (March 1998). In the Hamlin orange grove, three positive trees (2 and 1-tree loci) were detected and destroyed on 2 February 1998. No substantive windbreaks are present. The nearest canker infestations to the groves were ca. ½ mile away.

The recommendation will allow the program to monitor the eradication strategy of removing only positive trees in adjoining grapefruit and Hamlin orange groves. Mitigating factors include: distance from known canker infestations, and detection and quick removal of the Hamlin orange tree. Risk factors include: positive grapefruit trees were still present on 17 June 1998. General susceptibility of grapefruit and Hamlin orange varieties to citrus canker. Previous eradication action of 40 positive trees and associated exposed trees in the grapefruit grove. No substantive windbreaks. Positive trees uncut in grapefruit block since 1 June 1998.

Thomas Hume/B&J Citrus, Hume Block: (Recommendation 4) Citrus varieties are grapefruit and mixed Valencia, Navel, and Hamlin oranges. Two trees were positive on 9 January 1998 and three positive trees were detected on 21 May 1998. No substantive windbreaks. In a zone of high citrus canker infection, trees have already been pushed-and-burned on the east and west sides.

Risk factors include: mixture of citrus varieties, proximity to previous infestations, no windbreaks, the scattered and expansive distribution of the positive trees, the unsuccessful earlier eradication action of June 1997, and differential timing of detection of positive trees.

Summary

The Manatee Co. Citrus Canker Risk Assessment Group met on 17 June 1997 to field-inspect and evaluate four citrus groves recently or currently containing one or more citrus canker-positive trees. The risk assessment group recognized an exceptional opportunity to further our understanding of citrus canker epidemiology in Florida, thus three of the groves were recommended to receive an experimental eradication control strategy due to sufficiently mitigating risk factors. A fourth grove was recommended to sustain removal of canker-positive trees and surrounding exposed trees to a 125-foot radius as per Manatee Co. Citrus Canker Eradication Program protocol. The Manatee Co. Citrus Canker Eradication Program will provide due diligence to re-inspection of these groves to maximize early detection of any new citrus canker infection.

Report approved and respectfully submitted by the Manatee Co. Citrus Canker Risk Assessment Group on 30 June 1998.

Wayne N. Dixon, Ph.D.

and for:

Dr. Tim Gottwald
Dr. John Miller

Dr. James Graham
Dr. Stephen Poe

Mr. Leon Hebb
Dr. Tim Schubert