



# Citrus Health Response Program

*GREENING UPDATE  
GREENING SUMMIT, AVON PARK, FL*

*APRIL 8, 2008*

*Jim Heidegger*

*Division of Plant Industry*

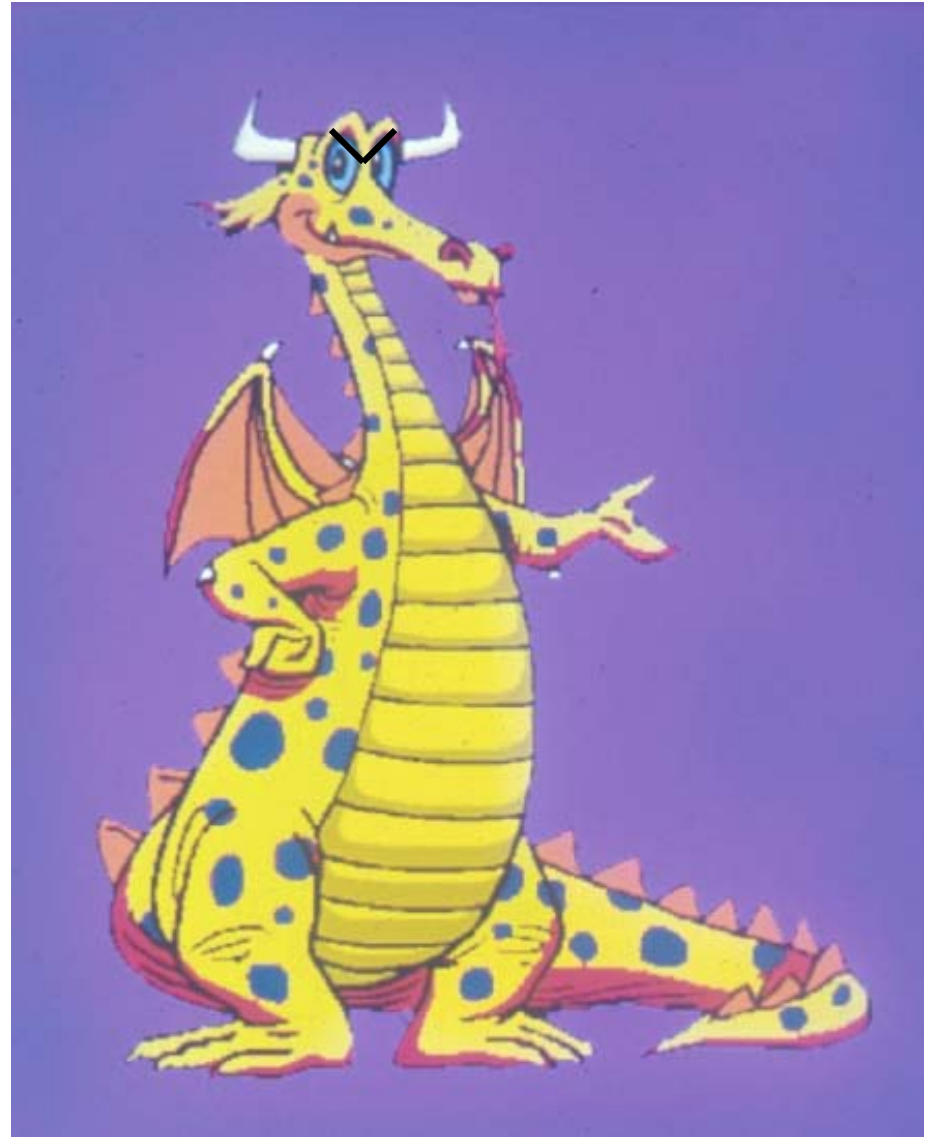
**Florida Department of Agriculture and Consumer Services  
Charles H. Bronson, Commissioner**



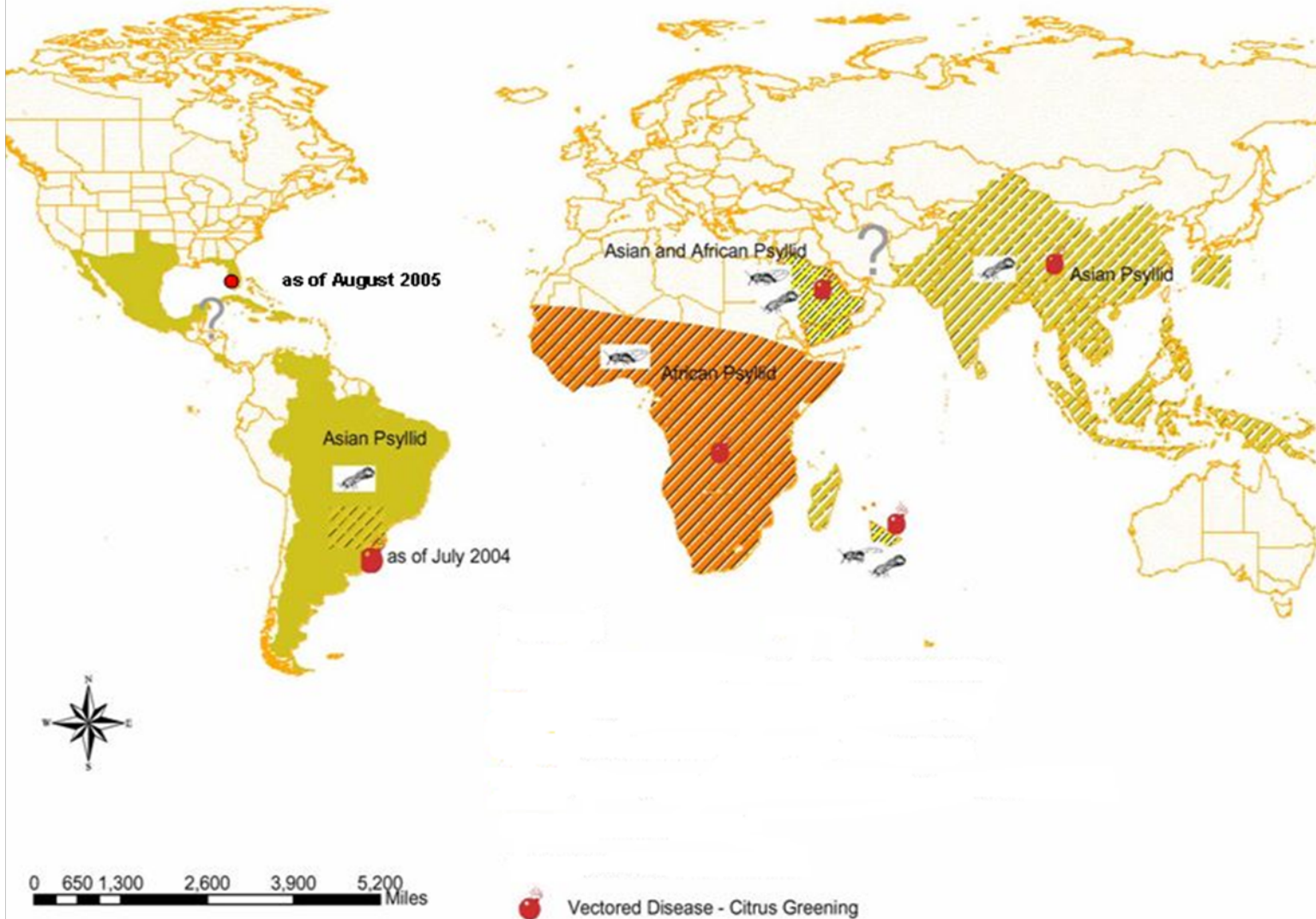
**HLB**  
*also known as*  
**Huanglongbing**

**Or**

**“Yellow Dragon  
Disease”**



# World Distribution of Citrus Psyllids and Citrus Greening Disease





# ASIAN CITRUS PSYLLID

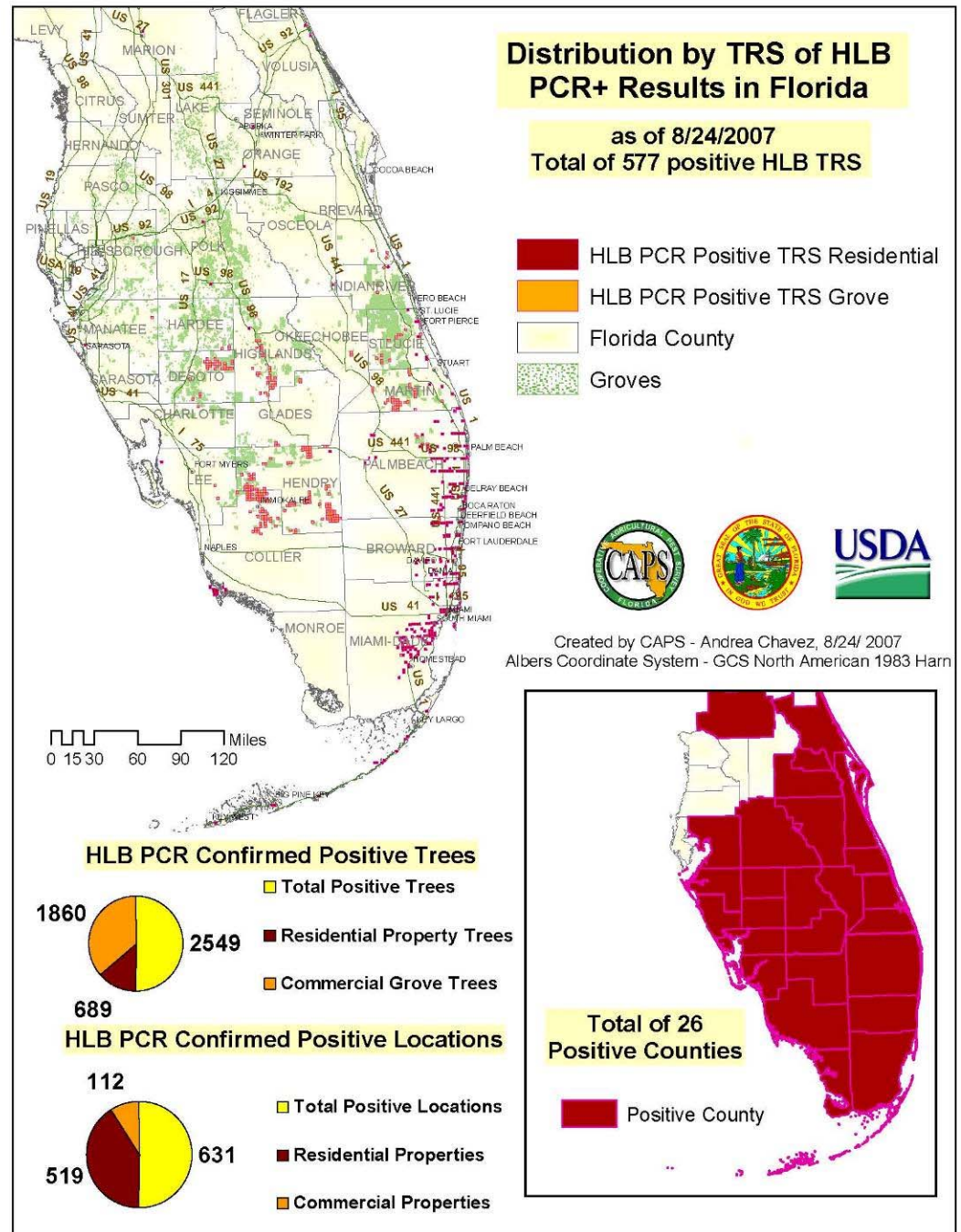
**Asian citrus greening was found for the first time in the USA in Florida in 2005.**



# Citrus Greening in Florida

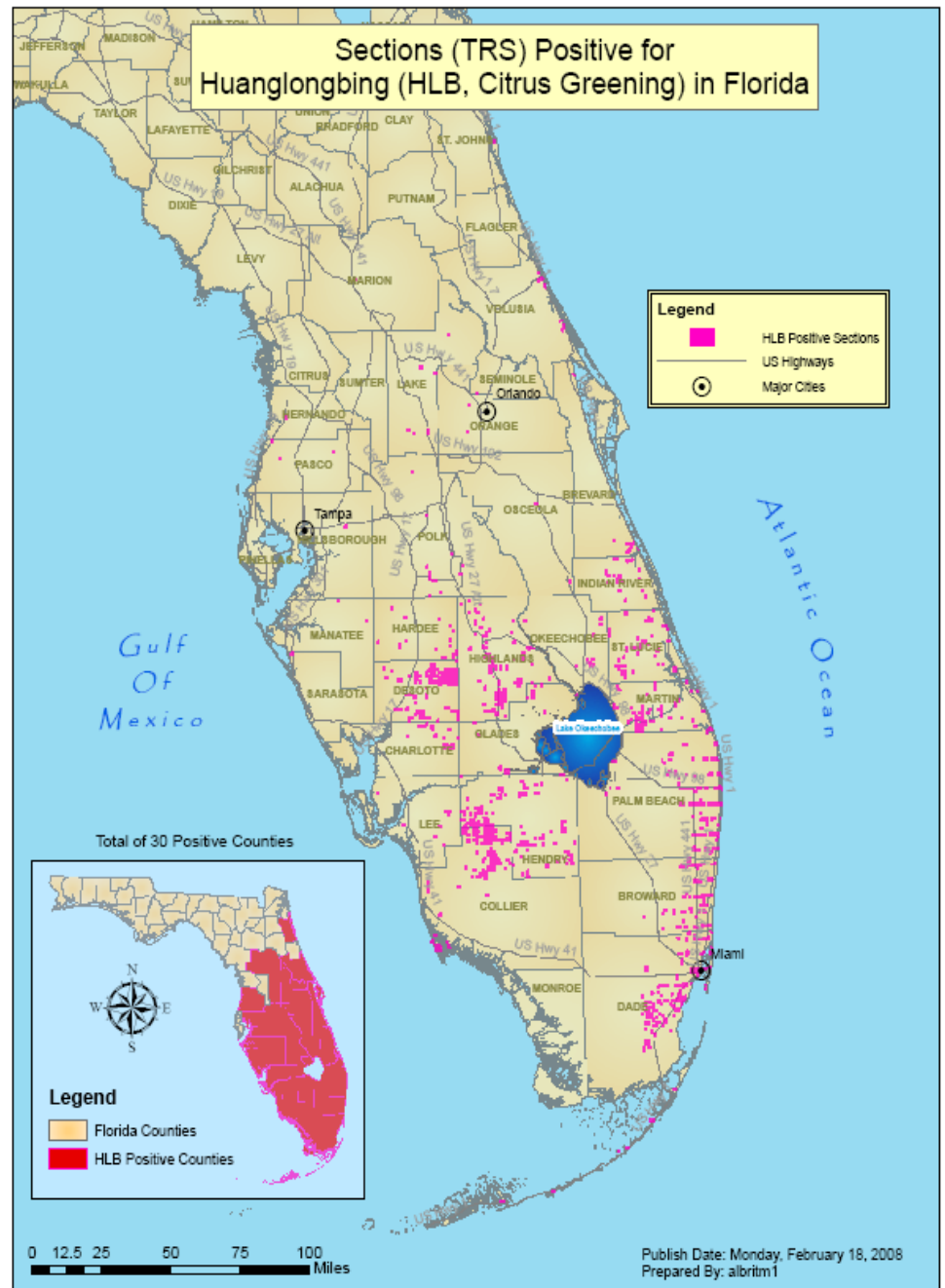
## August 2007

Map by Andrea Chavez



# Citrus Greening in Florida

## February 2008



# Symptomology

- Common symptoms
  - Most notable characteristic is a **blotchy leaf mottle** symptom.
  - Early symptoms appear on new shoots which will become yellow, hence “**yellow shoot or yellow dragon disease.**”
  - Symptoms will generally express themselves only on a few branches which produces a “**sectoring**” appearance.



- Note mottle that crosses veins on slightly older leaves. This is the best symptom to look for.
- Newest leaves have apparent zinc-like deficiency.
- Notch in leaf is due to feeding by Asian citrus psyllid, the vector of HLB pathogens.

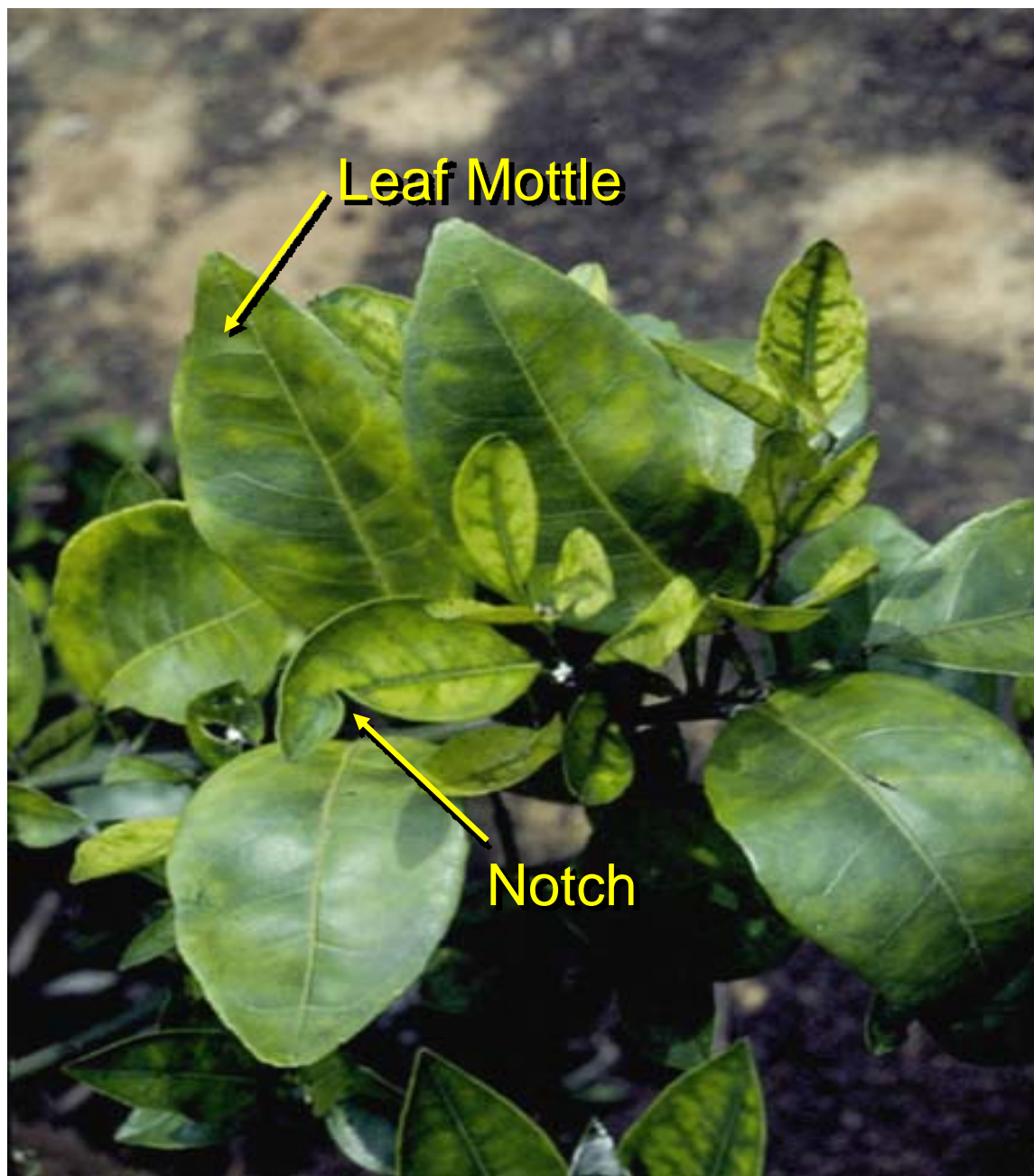


Photo: Susan Halbert, DPI

Note yellow shoots



Photo: Brazil

# Citrus Health Response Program

## Grower Services

- **Survey Expertise**

- Fresh Fruit Surveys (EU)
- Nursery Environs
- Grower requested citrus pest & diseases scouting

- **Training**

- Train the trainer
- Recognition of diseases & pests
- Decontamination training & certification



# Citrus Health Response Program

Citrus Health Response Program Website:

[www.doacs.state.fl.us/pi/chrp/](http://www.doacs.state.fl.us/pi/chrp/)

Helpline:

**800-282-5153**

