



# Certificate in Plant Pest Risk Assessment and Management

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Plant Medicine Program

# Quotable

"I, for the life of me, cannot understand why the terrorists have not, you know, attacked our food supply, because it is so easy to do," - *Former Secretary of Health and Human Services Tommy Thompson*



# An Empty Threat?

- Documented cases of bioterrorism in the US: 1
- Largely based on “what-ifs”



# A More Pressing Need...

- Cases of exotic species: ~1 species/month
- Economic costs: \$120 billion/year?  
(Pimentel et al. 2004)



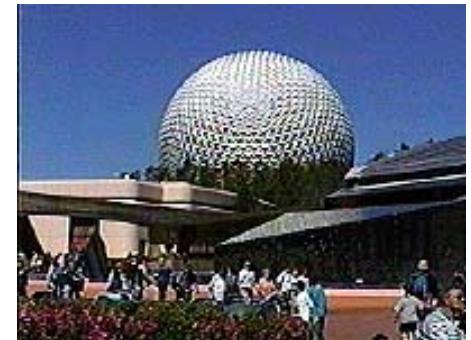
<http://www.plantpath.wisc.edu>



<http://creatures.ifas.ufl.edu>

# Contributing Factors

- Trade
- Tourism & travel
- Ethnic ties
- Weather
- Inspections



# Pest Interdiction

- 2 options:
  - Therapeutic action
    - Treat
    - Destroy
    - Refuse
  - Preventative action



# Enter UF...

- The rationale for the Doctor of Plant Medicine (DPM) Program



# “Putting It All Together”



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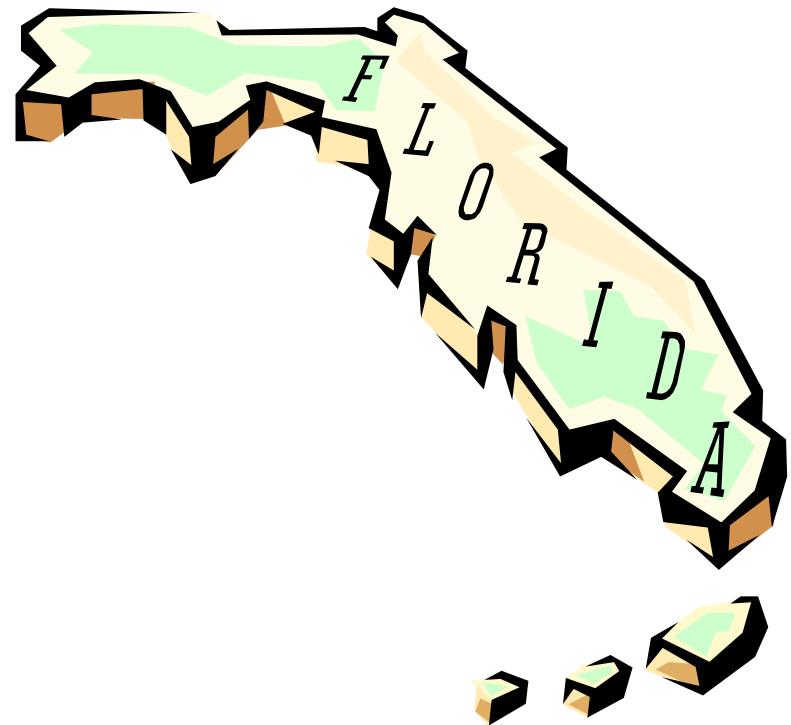


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The UF  
Certificate  
Program in  
Plant Pest Risk  
Assessment and  
Management

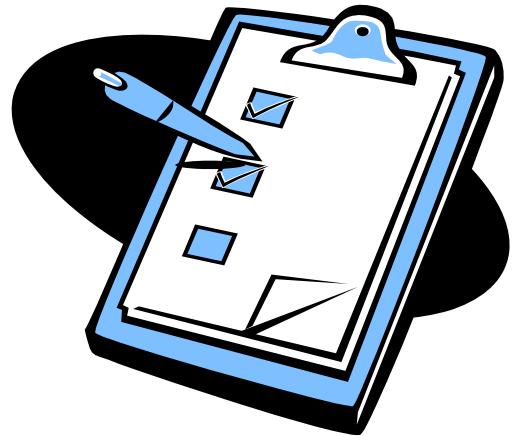
# Why Florida?

- Proximity to the Caribbean
- Sentinel State
- Year-round production
- Presence of endemic vectors



# Design and Goals of Program

- Commenced in 2006
- Novelty of the program
- Provide framework for risk estimation
- Interactive and stimulatory environment
  - Information systems
  - Preparation of pest risk assessments
- Familiarity with regulatory agencies and the policy process



# The Timeliness of the Certificate

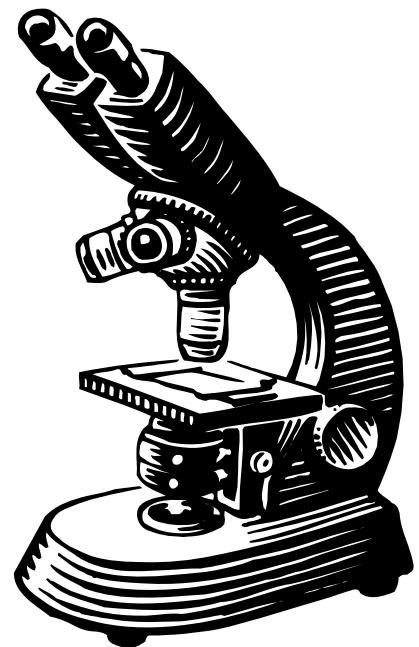
- Newfound priorities of State & Federal govt's
- University of Florida
- IFAS Goal 1
- Goal 3 of the USDA's Strategic Plan for FY 2002-2007:
- Mission of the DHS (National Biodefense Analysis and Countermeasures Center)
- Wave of retirements in Civil Service positions

# Credit Breakdown

- Substantial overlap with DPM curriculum\*
- Core Courses (4)
  - Principles of Plant Pest Risk Assessment and Management
  - Colloquium on Plant Pests of Regulatory Significance

# Credit Breakdown Cont.

- Electives (6) – Select one from each group
- Technical Group
  - Biology of Exotic Species
  - ***\*Epidemiology of Plant Disease***
  - Geomatics: Spatial Foundations of GIS
  - GIS and Remote Sensing in Agriculture and Natural Resources
  - Invasive Plant Species
  - Remote Sensing Applications



# Credit Breakdown Cont.

- Electives (6) – Select one from each group
- Policy Group
  - ***\*Advanced Agricultural Law***
  - Ag and Natural Resources Communications Theory
  - International Ag Policy and Trade
  - Policy Evaluation
  - Policy Process
  - Public Opinion and Ag and Natural Resource Issues
  - Public Policy Analysis
  - The US and World Food Systems



# Recruiting Pool

- DPM students
- MS and PhD students  
in peripheral fields



# In the Interim...

- Homeland Security fellowships
- “Thugs, drugs, & bugs”
- Benefits
- Work requirements



# Los Alamos

- TDLS

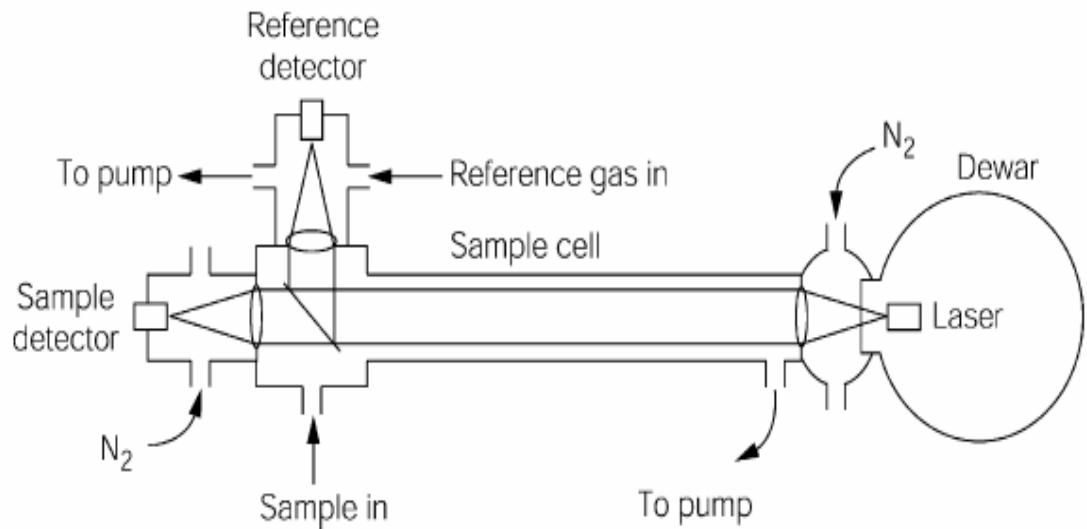


Fig. 1. Diagram of the TGA100 tunable diode laser absorption system.

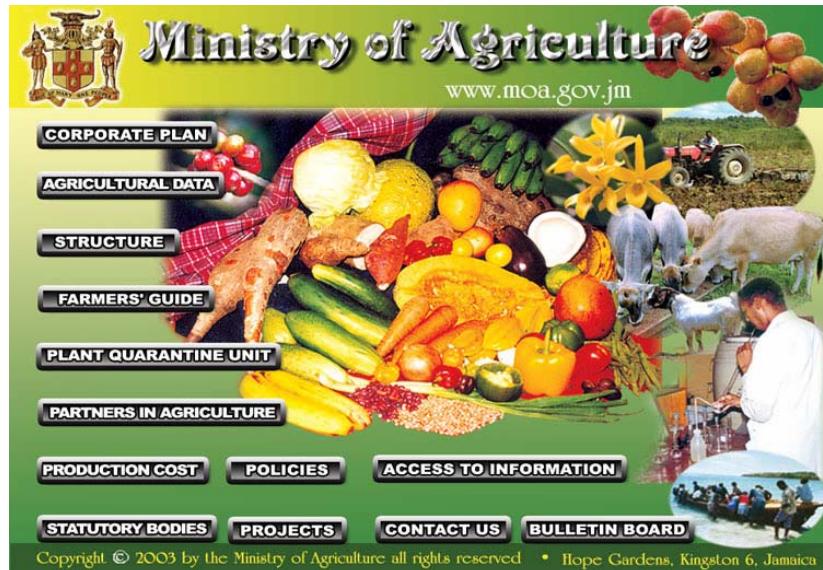
From Bowling et al. 2003

# Employment Profiles for DPM Graduates

- Dr. Adam Silagy



- Dr. Lisa Myers

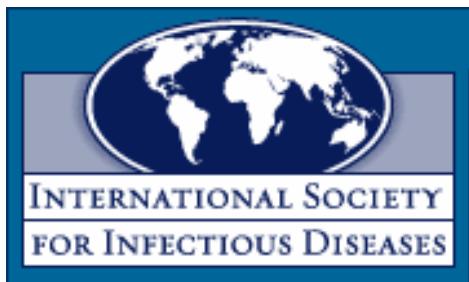


# Employment Profiles for DPM Graduates

- Osmond Barron
- Shawron Weingarten
- Esther Serrano



# Organizations



ORGANISATION NORD AMÉRICaine POUR LA PROTECTION DES PLANTES  
NORTH AMERICAN PLANT PROTECTION ORGANIZATION  
ORGANIZACION NORTEAMERICANA DE PROTECCION A LAS PLANTAS  
CANADA      UNITED STATES      MEXICO

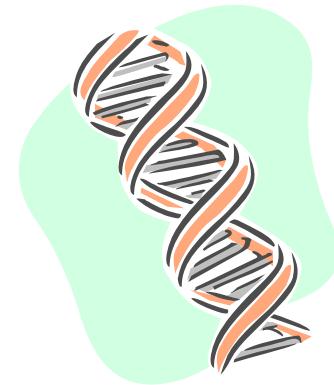
# Closing Thoughts: Applicability to Other Areas

- Skill sets
- The rise of IPM and the use of natural enemies?



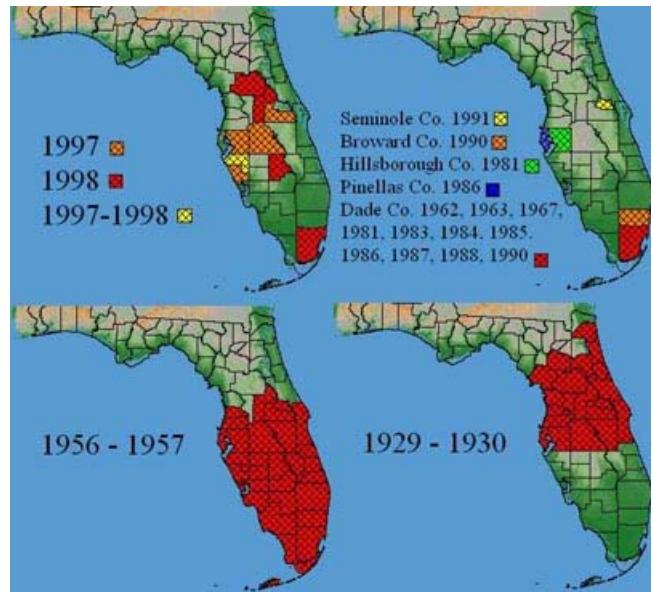
# Closing Thoughts: Applicability to Other Areas

- The ubiquity of GE
- Transgenic crops and arthropods may exhibit an invasive profile
- Personal experiences



# Applicability to IPM

- Trade (NAFTA, CAFTA)
- Medfly introductions to FL
- Historical management vs. present day needs
- Phloxine B



# Final Thoughts

- Disconnect between policymakers and stakeholders
- *The Plant Medicine Program mantra*

Website:

<http://www.dpm.ifas.ufl.edu>

Under “What’s New” at bottom of page, click Certificate in Plant Pest Risk and Assessment

