



Certificate in Plant Pest Risk Assessment and Management

Tim Durham
University of Florida
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)



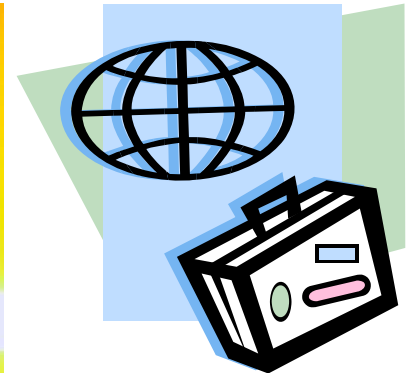
<http://www.plantpath.wisc.edu>



<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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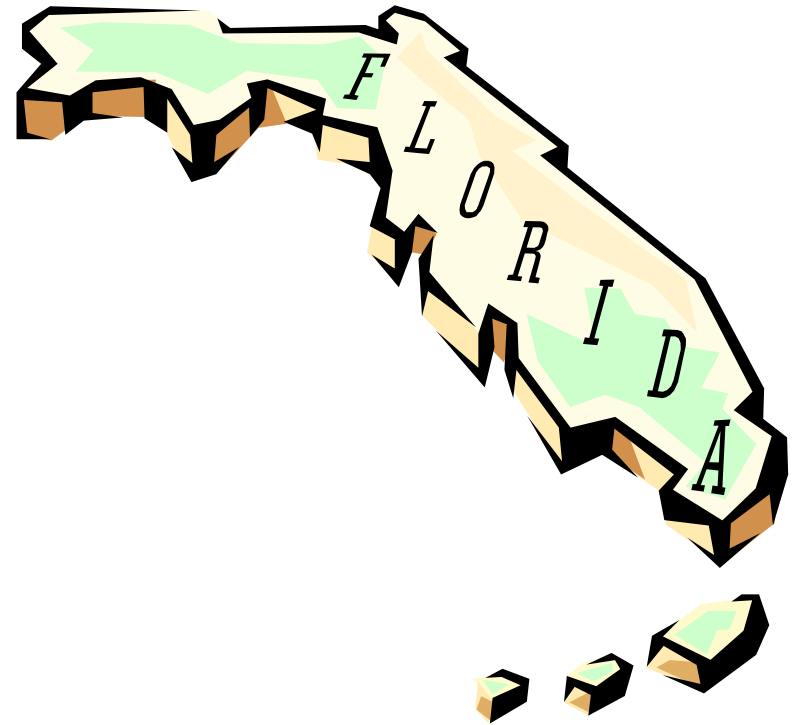


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The UF
Certificate
Program in
Plant Pest Risk
Assessment and
Management

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

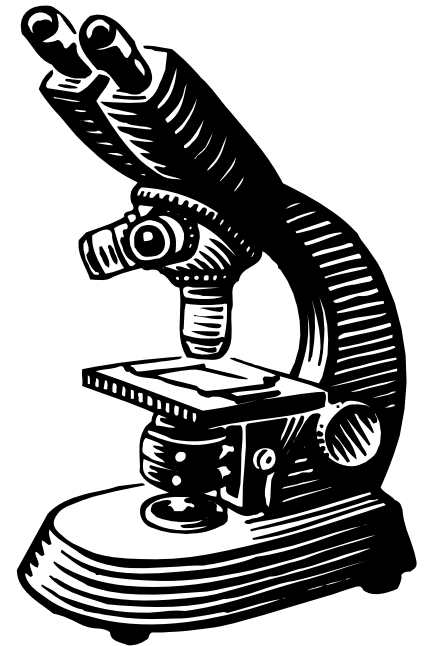
- Newfound priorities of State & Federal govt's
- University of Florida
- IFAS Goal 1
- Goal 3 of the USDA's Strategic Plan for FY 2002-2007:
- Mission of the DHS (National Biodefense Analysis and Countermeasures Center)
- Wave of retirements in Civil Service positions

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



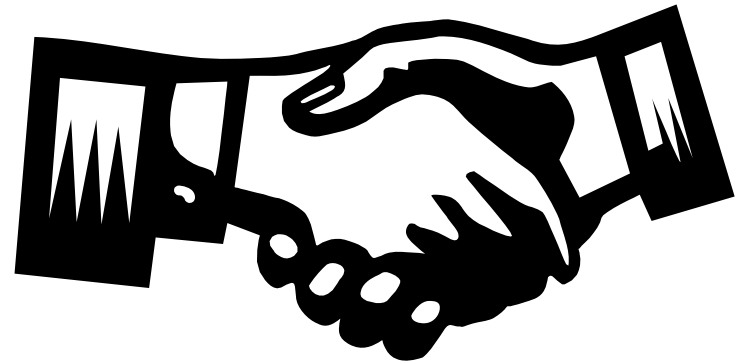
Credit Breakdown Cont.

- 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

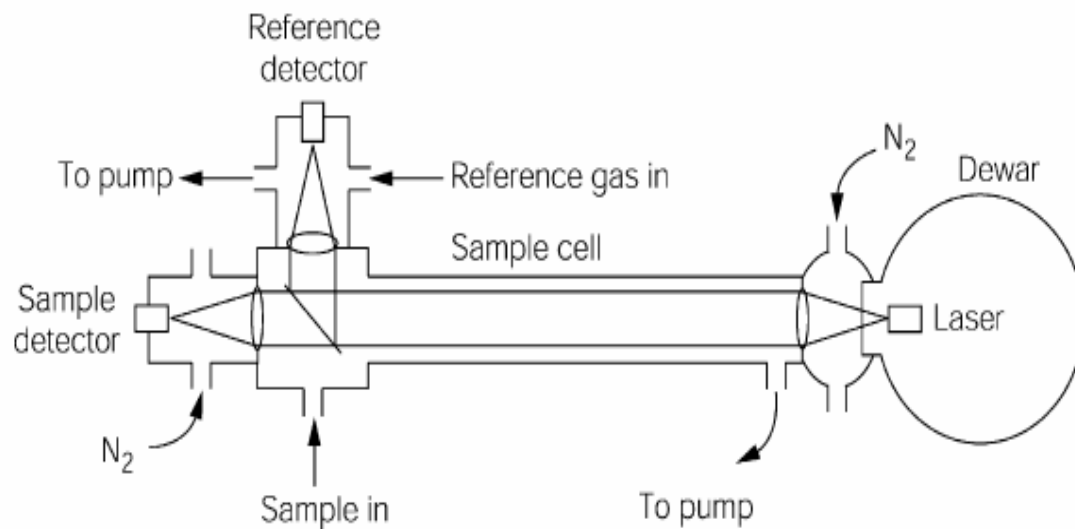


Fig. 1. Diagram of the TGA100 tunable diode laser absorption system.

From Bowling et al. 2003

Employment Profiles for DPM Graduates

- [Dr. Adam Silagyi](#)



- [Dr. Lisa Myers](#)

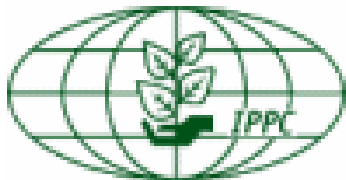


Employment Profiles for DPM Graduates

- [Osmond Barron](#)
- Shawron Weingarten
- Esther Serrano



Organizations



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

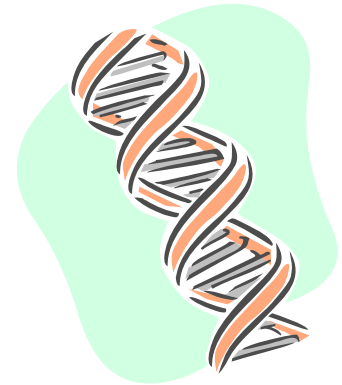
Closing Thoughts: Applicability to Other Areas

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



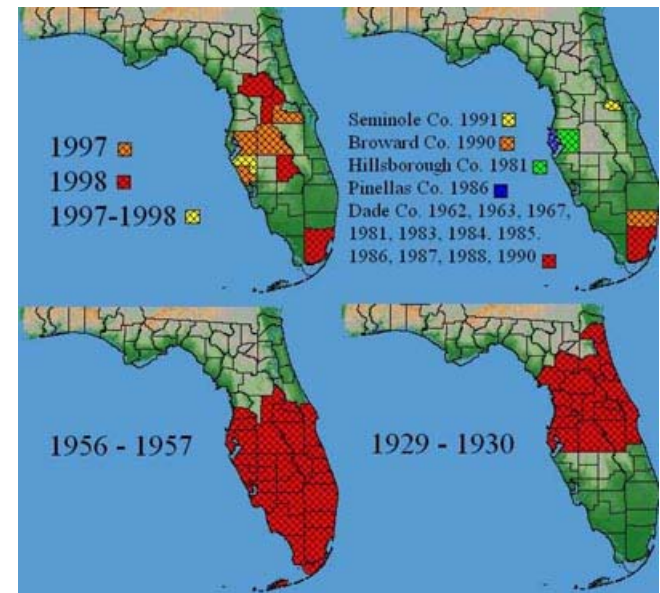
Closing Thoughts: Applicability to Other Areas

- 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

