Maintaining viable plant pathology programs in multidisciplinary departments

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US Plant Pathology Programs

16 - Freestanding departments of plant pathology

13 - Combined with plant pathology in the name

22 - Combined without plant pathology in the name
What is the APS Role?

Question #10. What is your level of agreement/disagreement with each of these statements?

- APS should work with industry to create internship experiences
- There will be fewer free-standing plant pathology departments in the future
- APS should seek endowments to support graduate education in plant pathology
- The career opportunities for specialists in plant pathology looks bright
- APS should seek federal support for graduate education in plant pathology
- Industry should play a greater role in graduate education
- The future of fundamental plant pathology research looks bright
- The career opportunities for generalists in plant pathology looks bright
- The future of applied plant pathology research looks bright
- The future of extension plant pathology looks bright
- Plant pathology graduate programs can thrive in combined departments
- APS should aid in attracting international students to US programs

Percent of respondents who strongly agreed with each statement.

2007 APS Survey of Graduate Program Heads
A Tail of Three Departments

Michigan State University
  Department of Plant Pathology

Montana State University
  Department of Plant Sciences & Plant Pathology

University of Illinois
  Department of Crop Sciences
Michigan State University Department of Plant Pathology

- Prior to 2001
  Department of Botany and Plant Pathology
  College of Natural Sciences

- 2001
  Split to form Department of Plant Pathology
  Moved to College of Ag and Natural Resources
Benefits:
- Esprit de corps among pathologists
- Maintain plant pathology courses
- Still able to attract graduate students

Negatives:
- Upset some students and faculty
- Plant Pathology now more vulnerable?
- Relationships with former colleagues
- Competition for space
- Future merger?
Montana State University
Department of Plant Sciences & Plant Pathology

- Dept. of Plant Path established mid 1970s
- Merged into Dept. of Plant Sciences 1990s
- Plant Pathology added to department name
Benefits:
- All faculty supportive of name change
- Initial drop in grad students reversed
- Distinct Pl Path MS and PhD programs
- Justification for Pl Path courses & faculty
- Replacement of Plant Path faculty
- Plant genetics students take Pl Path classes
- Collaboration among disciplines

Negatives:
- Competing for graduate students
- Competing for grant funding
University of Illinois
Department of Crop Sciences

- Dept of Plant Pathology formed in 1955
- Merged with Dept of Agronomy in 1995
  - PI Path smaller of two departments
  - Maintained PLPA course rubric
  - No distinct plant pathology graduate program
Benefits:
- Better collaboration with colleagues
  - Joint projects, grant accounts
- Access to more undergraduate students
- More non-pp students in PLPA courses

Negatives:
- Fewer plant pathology faculty
- Fewer PLPA graduate courses
- Loss of visibility to potential students
- No common sense of purpose
Plant Pathology Faculty at Illinois

Dept of Plant Pathology, 1988
17 State-line
5 USDA-ARS
4 Illinois Natural History Survey

Dept of Crop Sciences, 2009
8 State-line
4 USDA-ARS
Teaching Plant Pathology at Illinois

Courses 1988

• 1 undergraduate (intro plant pathology)
• 13 graduate level courses

Courses 2009

• 2 undergraduate level courses
• 7 graduate level courses
• No distinct graduate degree programs
Graduate Students

Faculty (teaching)

Graduate Courses

Research funding
Teaching support
Teaching focus
Concerns with mergers

Reduced student recruitment

- Keep plant pathology in department name
- Keep separate plant pathology course rubric
- Keep separate degree programs
- Loss of visibility to outside students
- Fewer course offerings
- Diluted focus on plant pathology training
Concerns with mergers

**Reduced departmental influence**

- Out voted on issues of policy, curriculum, priorities
- Competition for faculty positions
- Pathology viewed as a service to breeders, geneticists, etc.
- Faculty asked to teach non-plpa courses
Concerns with mergers

Loss of sense of purpose

- Goal of training plant pathology students
- No sense of joint mission
- Focus narrowed to individual research
- Weaker community of plant pathology
- Loss of esprit de corps
Parting thoughts

- Programs can be maintained if plant pathology is valued
- Resource support and advocacy from administration must be present
- Attitudes/personalities can have an impact
- Focus on needs of students may help maintain community of plant pathology