2009 Indiana Horticultural Congress
and Trade Show

The 2008 Farm Bill
What's In It For Specialty Crops

21st Century Challenges, The
Farm Bill, and Purdue
Agriculture

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Overview

• Grand challenges
• 2008 Farm Bill
• Mission
• Rise to the challenges
• Putting science to work
Grand Challenges
- Richard Smalley, Nobel Laureate

- Energy
- Water
- Food
- Environment
- Poverty
- Terrorism & war
- Disease
- Education
- Democracy
- Population

21st Century Agricultural Challenges
- Health
  - Food safety, nutrition, obesity, cardiovascular disease, dementia, cancer, hunger, poverty, families and children
- Ecological Footprint
  - Water and land use, natural resource and environmental stewardship, global climate change, depleted soils, etc.
- Agricultural Competitiveness
  - Improving crop and animal agriculture; enhancing farm productivity and income; policies; supply chain; storage and transportation
- Bioeconomy
  - Replacements for petroleum-based products and enhance community economic well being

The Perfect Storm
- Economic meltdown
- September 11, 2001
- Terrorism
- Afghanistan, Iraq
- Hurricanes, Tornadoes, Tsunamis
- Climate change, droughts, environmental concerns
- Health concerns
- Food vs. fuel
**Farm Bill**

**Title VII: Research**

- Reorganize USDA research: NIFA and REE
- Initiatives for specialty and organic crops, bioenergy, nutrition, pollinators, other high-priority research areas
- Competitive funding for most programs, including Smith-Lever extension funds
- Increase funding for 1890 institutions

- AFRI grants for fundamental and applied research, extension, and education
- $700 million per year for grants in FY 2008-12. Priority areas:
  - Plant health and production and plant products
  - Animal health and production and animal products
  - Food safety, nutrition, and health
  - Renewable energy, natural resources, and environment
  - Agriculture systems and technology
  - Agriculture economics and rural communities
- 60% for fundamental research, 40% for applied research
  - 30% for research by multidisciplinary teams
  - Improvement of capacity
  - Fellowships for pre- and post-doctoral researchers
  - Beginning researchers
  - Small, mid-sized, and minority-serving institutions
- Requires matching funds
• Pollinator Research
• Borlaug fellowship program and international programs
• Specialty Crop Research Initiative: $30 million in FY 2008, and $50 million annually in FY 2009-12; annual appropriations of $100 million
  – Plant breeding, genetics, and genomics
  – Product taste, quality, and appearance
  – Environmental response and tolerance
  – Nutrient management, including uptake
  – Pest and disease management
  – Phytonutrient content
  – Pollination, pest, and disease issues
  – Productivity and profitability
  – New innovations, e.g., ripening technologies
  – Food safety, including that related to fresh produce
  – Economic analysis and applied information useful to specialty growers
  – EPA to conduct meta-analysis related to methyl bromide
• Organic Agriculture Research and Extension Initiative: $78 million for FY 2009-12; annual appropriations of $25 million for FY 2009-12
  – Conservation and environmental outcomes of organic practices
  – New and improved seed varieties for use in organic production systems
  – Farm and Ranch Stress Assistance Network

• Farm Business Management research and extension grant program
• Agricultural and Rural Transportation Research and Education
  – Transport of biofuels
  – Export of agricultural products
• Beginning Farmer and Rancher Development Program Priority
• Bioenergy research
  – Develop, distribute, and implement biobased technologies
  – Promote diversification and environmental sustainability through biobased energy and product technologies
  – Promote diversification of rural areas through biobased energy
  – Enhance efficiency of bioenergy and biomass research and development through collaborations among USDA, Department of Energy (DOE), and land grant universities
  – Enhance production of biomass energy crops and energy efficiency of agricultural operations
• Research on efficacy of agricultural policies in promoting health in disadvantaged populations.
• Food deserts to assess areas with limited access to affordable and nutritious food, particularly lower income areas
• New Grants and Research Programs
  – Program to distribute vegetable seeds to underserved communities

**Title X: Horticulture & Organic Agriculture**

• Block grants for States to enhance specialty crop competitiveness
  – $10 million FY 2008; $40 million FY 2009; $55 million/year FY 2010-12
  – $100,000 to each state or 1/3 of 1% of total funding for each FY
  – If State does not spend, money reallocated to other States.
• New plant pest and disease management programs and fresh produce food safety education program
  – $12 million FY 2009, $84 million FY 2010, $50 million FY 2011, FY 2012
  – Early Plant Pest Detection and Surveillance Improvement Program
  – Threat Identification and Mitigation Program – foreign pests
  – Specialty Crop Certification and Risk Management Systems
    • National Clean Plant Network
    • Pest and Disease Revolving Loan Fund
    • Cooperative agreements related to eradication, prevention, control, or suppression of plant pests
• Funds for farmers’ markets and to expand fruit and vegetable market news reporting
  – Agritourism promotion program
  – Federal nutrition programs at farmers’ markets
• Funding to help producers and handlers
  – Organic certification costs
  – Enhance data collection on organic agriculture
  – Support Federal organic regulatory activities
• Census of Agriculture, including specialty crops
• Marketing Orders: Research and/or Promotion
• Mushroom Promotion, Research, and Consumer Information Program
• National Honey Board
• Food Safety Education Initiative
• Market Loss Assistance for Asparagus Producers
• Improve Transporting Specialty Crops

Specialty-Crop Provisions in Other Titles

• Title I, Planting Flexibility and Restrictions for Program Participants
• Title II, Enrollment and Assistance Under Conservation Programs and Conservation Innovation Grants
• Title III, Technical Assistance for Specialty Crops (TASC) Program
• Title IV, Nutrition Education, Promotion, and Outreach
• Title IV, Fresh Fruit and Vegetable Program
• Title IV, Healthy Food Education and School Gardening Pilot Programs
• Title IV, Purchase of Fresh Fruits and Vegetables for Distribution
• Title IV, Farmers’ Market Nutrition Programs – for seniors
• Title IV, Locally Produced Foods – for school lunch programs
• Title VII, Pollinator Research
• Title VII, Specialty Crops
• Title XI, Country-of-Origin Labeling
• Title XII, Orchard and Nursery Tree Assistance Program
• Title XII, Pilot Programs and New Product Development
• Title XII, Other Risk Management Provisions
• Title XII, Emergency Assistance for Livestock, Honey Bees, Farm-Raised Fish
• Title XV, Unused Merchandise Drawback – for wine

Organic Agriculture

• National Organic Certification Cost-Share Program
• Production and Market Data and Economic Research and Analysis
  – Collect and distribute comprehensive reporting of prices relating to organically produced agricultural products
  – Conduct surveys and analysis and publish reports relating to organic production, handling, distribution, retail, and trend studies (including consumer purchasing patterns)
  – Develop surveys and report statistical analysis on organically produced agricultural products
• National Organic Program Support
• Organic Provisions in Other Titles
  – Title II, Conservation Reserve Program (CRP) – for Organic Transition Incentives for Beginning Farmers under CRP and EQIP
  – Title II, Conservation Stewardship Program (CSP)
  – Title II, Agricultural Management Assistance Program (AMA)
  – Title V, Conservation Loan and Loan Guarantee Program.
  – Title VII, Organic Agriculture research
  – Title XII, Insurance of Organic Crops
The mission of Agricultural Research Programs is to serve the citizens of Indiana, the United States, and the world through:

**Discovery** that expands the realm of knowledge and develops solutions to problems relevant to the agriculture, food, health, and natural resources sectors.

**Landgrant Ethos**

- Egalitarian
- Advance common good
- Economic engine
If we do not change direction, we are likely to end up where we are headed

- Chinese Proverb

How to Opportunity

- Create boundary-spanning structures for innovative partnership ecosystem
- Create intellectual communities – interdisciplinary and integrated teams
- Enhance diversity to enhance productivity
- Facilitate globally competitive efforts
- Provide enabling infrastructure
- Work with stakeholders

Putting Science to Work

- Agriculture in a changing landscape
  - Promote sustainable plant and animal systems
  - Enhance competitiveness and profitability
  - Create science-based policies
  - Minimize ecological footprint
  - Respond to climate change
- Safe and abundant food
  - Enhance food safety
  - Support food production
- Energy and materials from renewable commodities
  - Encourage innovation on farms and industry
  - Support natural resource use/conservation
  - Develop bioproducts and biomaterials
- Sustaining our environment
  - Protect water, land and air for the future
  - Promote sustainable agricultural systems
- Enhance science capacity and adoption of technology
  - Offer K-12 STEAM programs
  - Enhance undergraduate/graduate education and experiences
  - Promote formal and informal education
  - Use technology to expand learning and engagement
  - Enhance adoption of research-based technologies
- Address global problems
  - Enhance capacity of others
  - Offer fellowships and student training
  - Increase study abroad, scientific exchange programs
  - Help build international capacity and infrastructure
- Promote family and community well being
  - Security, safety and health
  - Entrepreneurship and small business development
  - Human nutrition

- think and act anew
  Abraham Lincoln