

Organic Agriculture Research – The USDA-ARS Portfolio

Jeffrey Steiner, National Program Leader USDA-Agricultural Research Service USDA NAREEE Board Organic Agriculture Subcommittee Washington, D.C. 30 October 2007

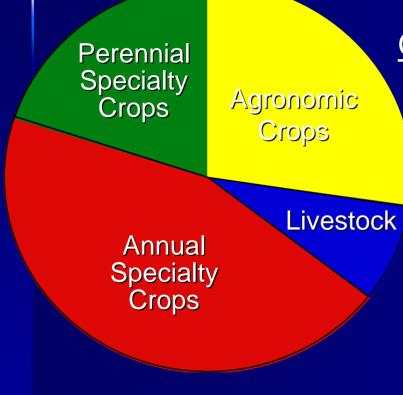




Research directly supporting - \$15,446,600
Direct research, on-farm - \$8,244,400
Other research indirectly supporting - \$45,374,000



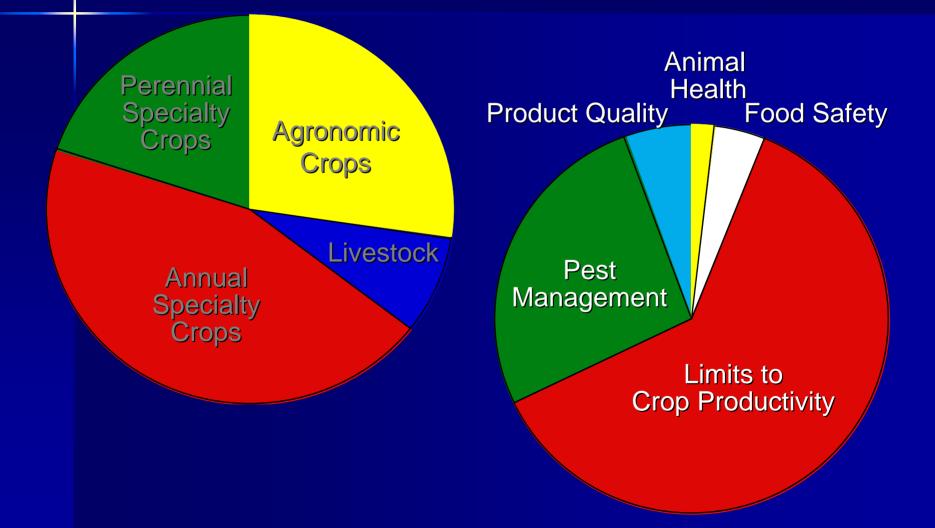




Growth in ARS Organic Research:

- 91% increase in budget since 2002.
- Mostly grassroots growth as a part of National Program cycle.
- Locations responsive to needs of local customers.
- Science is applicable to both organic and conventional producers.







Organic research is being conducted at:



Lane, OK Certified Organic Farm

Ames, IA Morris, MN Beltsville, MD Orono, ME Parlier, CA Beaumont, TX Booneville, AK Prosser, WA Brookings, SD Salinas, CA Columbia, MO Shafter, CA Stoneville, MS Dawson, GA Tifton, GA Geneva, NY Ithaca, NY University Park, PA Kearneysville, WV Urbana, IL Lane, OK Wenatchee, WA Wyndmoor, PA



Develop transition strategies for conventional-to-organic production systems with known risk of economic loss.

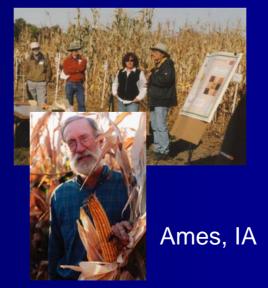




Identify genetic plant growth efficiency mechanisms and combine with soil fertility management strategies to increase crop productivity with improved cultivars suited to organic production conditions.



Wyndmoor, PA





Beltsville, MD





Salinas, CA Beltsville, MD Orono, ME Dawson, GA Tifton, GA



Develop whole-system biological-based management strategies for weed, insect pest, and disease control using preventive approaches as first defense, and therapeutic controls as rescue practices.



Develop whole-system biological-based management strategies for prevention of parasites in small ruminant grazing animals.



Rotational Grazing

Booneville, AR Beaver, WV



Resistant Breeds

High Condensed Tannin Forages



Diagnostics

Copper Oxide Deworming Treatment





Determine the effects of organic production practices and whole-farm systems on ecosystem services, and provide guidelines that contribute to support of USDA Farm Bill Conservation Title.





Ames, IA Beltsville, MD Morris, MN Orono, ME



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USDA Natural Resources Conservation Service

NRCS Conservation Practice Standards:

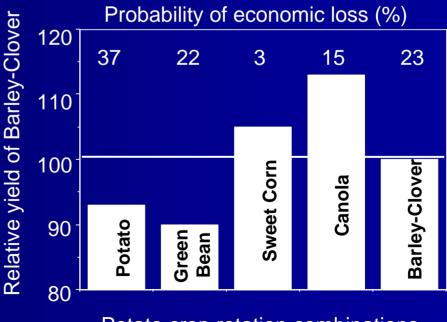
- Adapted for state or local needs.
- Programs are open to all producers.
- Agricultural Management Act in 16 states, partnership with RMA to serve transitioning to organic agriculture.



Develop market-driven strategies to satisfy urban demand for regional specialty organic products, and diversify food supply chains for increased National food security.



Orono, ME



Potato crop rotation combinations



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Boston Markets

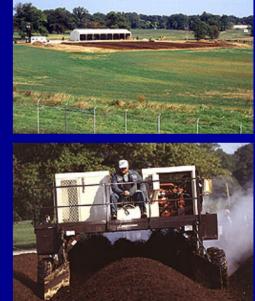
USDA-Industry Partnerships:

- Collaborate with USDA-AMS to define markets capacity and product quality needs.
- Develop marketing chains to reach new market outlets.
- Industry partnerships with USDA-Rural Development to develop infrastructure to reach markets.



Develop market-driven production strategies to satisfy urban population demand for regional specialty organic products, and diversify food supply chains for increased National food security.





Government-Private Partnerships:

- Agricultural Research Service
- Maryland Technology Development Corporation
- Renewable Carbon Management, LLC

Beltsville, MD



National Agricultural Library -Alternative Farming Systems Information Center:



- Source for USDA organic information.
- Tools to access reliable high quality information on organic-related topics.
- Creates topical bibliographies and resource guides.
- Digitizes historic USDA publications (Organic Roots database).
- Directly answers customer questions.



The vision for ARS Organic Farming research is to help the organic community overcome the challenges they face related to productivity, profitability, environmental stewardship, and energy efficiency