Research Priorities from 2022 National Organic Research Agenda

This is a summary. For the full recommendation list along with details from the discussions and surveys used to create them, download the complete NORA report at https://ofrf.org/wp-content/uploads/2022/05/OFRF_National-Organic-Research-Agenda-NORA_2022-report-1.pdf.

1. Organic Weed Management

- Research-based regional best planting dates for avoiding weed pressure
- Regional IWM strategies with an emphasis on those that do not involve soil disturbance.
- Strategies for invasive perennials including Canada thistle, bindweed, nutsedge, and rhizomatous grasses.

2. Managing production costs and maintaining adequate yields in Organic Systems

- Research on net profitability of organic systems, comparing different marketing strategies, strategies for reduced labor requirements
- Investigate link between organic conservation/soil health practices and yields as well as their link to ecosystem services
- Develop economic analysis tools for organic growers
- Study the cost-efficiency of commercial microbial inoculants and other organic soil health products.

3. Soil Health, Organic Matter, and Soil Life

- Evaluate impact of soil management techniques on soil biotic communities
- Develop practical organic minimum tillage strategies for different crops and regions
- Develop and deliver practical tools for soil health assessment.

4. Organic Insect Pest and Disease Control

- Develop organic insect pest management strategies based on an understanding of the target organisms, drawing from natural enemies, crop diversification and rotations, anaerobic soil disinfection, bio-fungicides, and other NOP-allowed techniques.
- High priority pests included Spotted Wing Drosophila in fruit, flea beetles in brassicas, fire blight in tree fruits, late blight in tomato, downy mildews in vegetables and basil.
- Evaluate the effectiveness of increasing agroecosystem and soil health to combat pests and pathogens.
- Continue building organic strategies for new and expanding pests.

5. Organic Seeds and Crop Cultivars

- Explore strategies to protect organic seed production from GMO contamination.
- Identify constraints to on-farm production of organic seed and seek strategies to overcome these challenges.
- Expand farmer-participatory plant breeding and public cultivar development, evaluation.
- Prioritize for nutrient and water efficiency, seeding vigor, weed competition, disease and pest resistance, effective root-microbial symbioses, and market traits.

6. Organic Livestock Production

- Research and develop improved organic production and health management systems
- Adapt NRCS conservation practices for organic farms.

7. Cover Crops, Rotations, Intercropping, Organic Amendments, and Water Resources

- Region-specific recommendations for crop rotations, cover crops, management practices, new breeds of cover crops optimized for organic production.
- Evaluate and improve design and management of perennial buffer plantings to protect organic fields from GMO and pesticide contamination.
- Document and optimize the capacity of integrated organic systems that use diversified crops and organic amendments to improve soil, crop, livestock health and benefit water quality.

8. Adaption to Climate Change

- Develop, test and promote regional climate-adaptation and resilience strategies for organic production using farmer-scientist collaboration, Indigenous wisdom, farmer innovations, and cutting-edge research; with a focus on Carbon sequestration, greenhouse gas mitigation, and soil water-holding capacity.

Other Recommendations from the 2022 NORA Report

- Outreach that emphasizes Farmer-to-Farmer Learning
- Build Capacity of Extension, NRCS and other Ag Professionals to service the Organic Sector
- Develop a Centralized Location for Organic Information Resources and Coordinate Rollout and Announcement of New Resources
- Increase funding for organic research, certification, and transition.
- Recognize and Establish Organic Agriculture as a Key Player in Climate Change Solutions
- Provide expanded technical support for BIPOC producers and exemplifying racial equity and empowerment in the Organic Sector
- Technical Assistance with Market Development, Business Planning, and Business Management for organic producers
- Research, Technical Assistance, and federal policy changes to Support Organic Integrity and Market Access

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