



Representation ♦ Education ♦ Research

2024-25 Research Priorities

Climate Resilience and Adaptation

- Develop strategies to adapt to climate change, including addressing extreme weather, temperature variability, and water scarcity, with a focus on creating resilient crops.

Pest and Disease Management

- Enhance integrated pest management (IPM) techniques and alternative control methods to manage emerging pests and diseases. Research should focus on biological, cultural, and technological solutions to minimize chemical use.

Soil Health and Regenerative Agriculture

- Protect and improve soil health through baseline soil health data collection, regenerative practices, and the development of best management practices (BMPs) to support long-term productivity and carbon sequestration.

Water Management and Irrigation Efficiency

- Explore efficient irrigation technologies and water conservation strategies, especially under climate variability. Research should aim at improving water quality, minimizing runoff, and optimizing water use for drought-prone areas.

Sustainable Production Systems

- Strengthen sustainable farming practices that reduce environmental impacts, enhance resource efficiency (water, energy, waste), and lower greenhouse gas emissions while improving farm productivity.

Innovative/Disruptive Technology Development

- Promote the identification and adoption of innovative and disruptive technologies such as robotics, automation, and digital tools for more efficient production, reduced labour costs, and optimized pest and disease control.

Pollinator Health and Biodiversity

- Investigate methods to protect pollinators and support on-farm biodiversity, essential for crop production and ecosystem health. Focus on habitat creation and biodiversity-friendly farming practices.

Post-Harvest Handling and Storage

- Improve post-harvest technologies for better storage, transportation, and handling of fruit and vegetable crops to minimize spoilage, extend shelf life, and reduce food waste.

Nutrient Management

- Optimize nutrient use to balance crop productivity with environmental sustainability, especially for phosphorus and potassium management in horticultural crops.

Labour and Mechanization Solutions

- Research labour-efficient technologies, including automation and robotics, to address labour shortages in fruit and vegetable farming and explore cost-effective mechanization for key farm operations.