

RESEARCH & INNOVATION CENTRE



Ontario Horticulture Research Priority Setting: Sector Consultation Report

Year 2 Public Report

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Table of Contents

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General Overview	1
Year 1 Summary: 5 Year review	2
1 1	
Emergent Themes	
Recommendations for New Priority Setting Process	
Next steps	6
Priority setting support decision tree	6
Ranking priority themes	7
Contact information	7

General Overview

As part of our renewed commitment under Sustainable Canadian Agricultural Partnership (Sustainable CAP), Vineland Research and Innovation Centre (Vineland) conducts the priority-setting process on behalf of the Ontario Ministry of Agriculture, Food and Agribusiness (OMAFA). Vineland continues to be responsible for collecting and synthesizing research priorities from various horticultural groups. These priorities feed into OMAFA's priority setting process, which is used by researchers across the province to address the gaps and needs of Ontario's horticultural sector. A similar process occurs for the livestock research priorities through the Livestock Research and Innovation Centre (LRIC).

This project collects and organizes research priorities across Ontario's horticulture sector to support future planning and funding. Through industry consultation with horticulture commodities groups, it focuses on identifying shared, high-level needs across the value chain.

The goal is to streamline the process, improve sector engagement, and ensure that the results are relevant and useful across different commodity groups and themes. A list of key contacts and resources will also be created to help connect stakeholders and support sector growth.

The figure below provides an overview of the main tasks for each year of this project:

Year 1 (2023–2024): Focused on understanding commodity group perspectives on the previous process and identifying key priority areas for consultation. Year 2 (2024–2025): Consulted 13 of 16 groups to better understand their perspectives and developed recommendations for a new approach.

Year 3 (2025-2026):

Will use these recommendations, along with further industry input, to finalize a new process and set updated research priorities for 2026–2029.

Figure 1. Overview of main tasks for each year of the priority setting project.

Year 1 Summary: 5 Year review

In Year One, a review of Ontario's Horticultural Research Priority Reports from 2017 to 2023 examined priorities from 16 crop groups. The analysis grouped priorities into five main themes: **commercial and market research, pest and disease management, sustainability, technology**, and **variety development**. The full report can be found here <u>Vineland Priority Setting for OMAFRA 2023-2026 - Year 1 Report 2023</u>.

Pest and disease management and variety development were top priorities identified. Technology ranked second in frequency of mentions. In total, the review of pest management priorities highlighted over 150 unique pest and disease concerns. Variety development highlighted the need for varieties that are adapted to changing conditions. Technology priorities often focused on precision tools and data modeling.

Sustainability and market research were also commonly addressed. Market-related goals mainly focused on consumer research, including trends and preferences, while sustainability priorities were largely centered on soil, water, and fertilizer management.

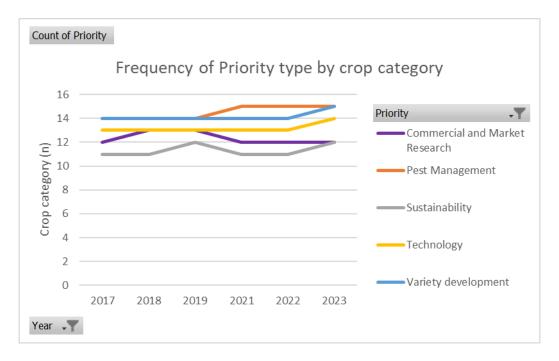


Figure 2. Frequency of Priority themes listed by crop category based on priorities listed in the 2017-2023 horticulture research priority setting reports.

Year 2 Summary: Key learnings from sector consultations

Emergent Themes

Four common themes emerged from consultations across crop groups, highlighting shared challenges in setting and advancing research priorities (Figure 3). These challenges include research priorities that are too broad and unchanging, limitations around funding and research capacity, and representation of crop groups within the research priorities.

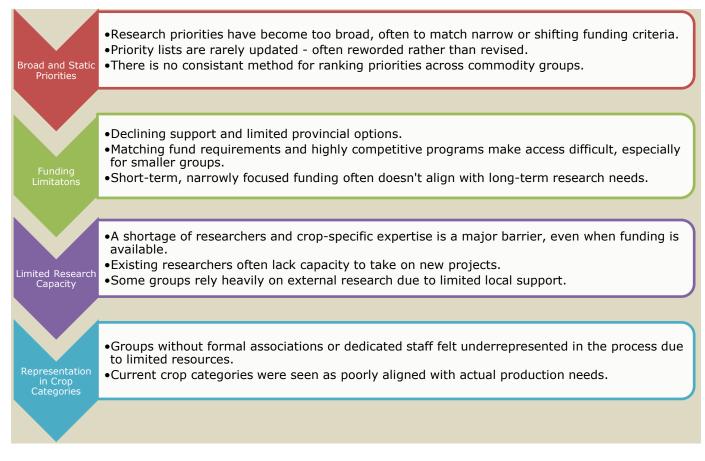


Figure 4. Challenges identified in Ontario's horticulture research priority-setting process.

Recommendations for New Priority Setting Process

Using feedback from the crop commodity consultations, recommendations for improving the priority setting process were developed. Table 1. provides an overview of these recommendations.

Table 1. Summary of Recommendations for the Priority Setting Process

Overarching	Specific	Key Details
Recommendation	Recommendation	
Research Priority Setting Themes & 1 Timelines	Separate Agronomy from Sustainability Policy & Regulatory Support	 Agronomy focuses on how crops are grown—such as soil health, irrigation, plant protection, and production efficiency. Sustainability focuses on environmental outcomes—such as reducing emissions, conserving water, and protecting natural resources. Separating the two would clarify research priorities and ensure clear, independent focus on production efficiency and environmental stewardship. Research and practical support for adapting to new policies and regulations. Some policy-related topics can be addressed within existing research themes: Changes to pesticide regulations may fit under Pest Management. Compliance with environmental requirements, such as erosion control, could fall under Sustainability.
	3-Year Cycle with Annual Updates	 Support long-term progress between priority setting periods. Allow flexibility to address emergent issues (something that is not planned for). Annual updates provide timely tracking and adjustments. Encourage clearer progress reporting and more meaningful updates.
Addressing the Diversity	Revise Crop Categories	 Use Pest Management Regulatory Agency's (PMRA) crop groups as a reference. Create subcategories for diverse groups, such as: Specialty crops (e.g., hops, lavender) Landscape ornamentals (e.g., annuals vs. perennials, greenhouse vs. outdoor) Revise vegetable categories: Split fruiting vegetables into fruiting, cucurbit, and legume groups. Separate leafy and Brassica vegetable groups.
	Enhance Priority Specificity & Timelines Cross-Commodity Collaboration	 Require more specific priorities to address their individual needs. Include timelines (short- or long-term). Rank priorities by urgency and importance. These changes will help to develop more specific, clearer, more actionable research agendas that can be better aligned with available expertise and funding. Identify shared priorities (e.g., pests, climate resilience, clean seed programs, automation). Invite groups to submit sector-wide priorities alongside crop-specific ones. Enable Vineland to act as connectors, supporting joint efforts. Expand or develop KTT funding to support collaborative, cross-commodity research.
Building Connections between Researchers and Organizations	Better Support for Research Funding Expand Access to Researchers & Expertise	 More flexible and long-term funding that reflects industry- set priorities. Support for matching fund requirements, especially for crop groups without formal organizations. Expanded funding for research on KTT, technology development, and marketing. Ontario Horticultural Researcher Database is being developed to increase the visibility of researchers in relevant areas.

	 Provide a resource for crop groups to identify researchers relevant to their research priorities and crop focus. Make research capacity more visible across the sector. More expertise and availability of researchers is also required.
Priority Setting Support	 Guidance from sector organizations like Vineland to support the consulting process and leading discussions around research priorities. Including incorporating more grower consultations. Vineland taking the lead on priority setting processes entirely for crop groups with limited capacity to do so themselves.
Enhance KTT (Knowledge Translation & Transfer)	 Engaging more growers in the process by making meetings accessible and showing the value of their input. Effectively sharing research results with growers to strengthen feedback and trust while providing them with the knowledge they need to improve production. Bring together growers and researchers to build their relationships. Expanding KTT funding to improve outreach and ensure research findings reach those who need them.

Next steps

The overall objective for year three is to establish a new priority setting process and use it to finalize the 2026-2029 research priority list to be released in April 2026. Vineland will be reaching out to all commodity groups to provide next steps and support their research priority setting needs.

Priority setting support decision tree

Since there will be changes to the research priority setting process and crop groups have already expressed interest in support with consultation and priority ranking, we plan to use a priority setting decision tree with crop groups. This decision tree will help us determine where we can assist crop groups in developing and ranking their research priorities. A draft decision tree is shown in Figure 5.

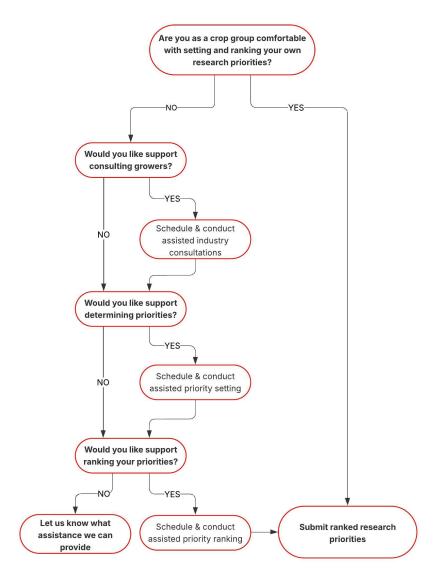


Figure 5. Draft Decision Tree for Priority Setting Support/Consultation

Ranking priority themes

Using the decision tree (Figure 5), each of the commodity groups will let us know how we can support them in setting their priorities. Regardless of the level of support provided, the outcome will be to have a ranked list of priority themes for each crop group and within each theme, a prioritized list of research priorities where applicable. It will be up to each crop group how they rank the six themes and whether they will provide priorities across all six themes. Some crop groups may have priorities across all six themes while others may only have priorities in their top one or two themes.

The 6 research priority themes are:

- Agronomy
- Consumer and Market Research
- Pest and Disease Management
- Sustainability
- Technology
- Variety Evaluation and Development

By allowing this tailored approach to creating the research priority list, it will enable more customization by each crop category to highlight and emphasis their areas of research need and be able to communicate their research needs to researchers, government and funding opportunities.

Contact information

To learn more about the Ontario horticulture research priority setting process or to inquire about how to be involved, please contact:

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