

Understanding & Supporting the Green Industry

The “green industry” includes nursery and greenhouse producers, landscapers, retailers, and various allied professionals. Consumers rely on the green industry for a wide variety of ornamental plants and landscaping services.

The U.S. green industry generates nearly \$520 billion in economic output and supports roughly 2.9 million jobs, but its resilience and competitiveness are threatened by challenges such as rising labor costs, chronic labor shortages, water supply and quality issues, changing consumer demands, and new regulations.

Researchers at land-grant institutions across the U.S. are working together on research and outreach that support improved production, management, and marketing in the green industry.

PROJECT IMPACTS

- **More efficient use of water, energy, and other inputs** has reduced costs and environmental impacts.
- **Better marketing strategies** have led to **increased sales** of nursery and greenhouse plants and **increased profits** for retail outlets.
- **Research-based business strategies** have **improved profitability** and **enhanced economic stability** for the green industry.
- **More desirable, high-quality plants** provide consumers with beauty, shade, wellbeing, and ecosystem services.



Multistate Research Fund
IMPACTS



RESEARCH HIGHLIGHTS

Collecting comprehensive data

Every five years, project members distribute the **National Green Industry Survey** to document practices and financial performance, providing valuable insights not available from any other source. Recently, the survey has shown how the industry adapted to COVID-19, labor shortages, supply chain disruptions, and inflation. The survey also provides data on the industry's **economic impact**, which are crucial to advocating for investments and policies.

Informing production and business practices

Detailed cost-benefit analyses led to increased adoption of irrigation scheduling, water recycling systems, heating and cooling technologies, and other **water and energy conservation practices**, which can lower producers' costs, improve plant quality, and reduce the industry's environmental impacts. Producers who adopted recommended irrigation scheduling protocols reduced water use by **20-40%** while maintaining or even improving crop quality.

Findings helped producers decide whether to invest in **automation and mechanization**.

Researchers identified **profitable species** to grow.

Information about **guest worker programs** and **labor management best practices** and **worker trainings** helped businesses plan their workforce, reduce turnover, boost worker productivity, and increase operational efficiency.

Project members designed and coordinated **YourMarketMetrics**, a **financial benchmarking program**, which helps producers and retailers evaluate their operations and make decisions that improve profitability and stability.

The **Index of Prices Paid by Growers** provides more complete, accurate information about **input costs** and **inflation trends** so growers can better anticipate operating costs and make informed decisions.

Analyzing consumer preferences and behavior

Studies showed consumers prefer "**local**" and "**native**" attributes to "sustainable" or "organic" and are willing to pay for **biodegradable packaging**. Other work showed that how a **promotion** is framed matters as much as the discount itself, and **plant guarantees** create greater consumer confidence in plant purchases, but do not equate to higher retail return rates. Eye-tracking studies revealed how consumers view and process plant displays, shedding new light on effective **merchandising**. The industry is using research-backed messaging to reposition horticultural products/services as necessities, not luxuries, improving resilience to **recession**.

Project members provided evidence that flowers, shrubs, and trees raise **property values** and improve **emotional, mental, and physiological health**. Firms are incorporating this information into marketing messages to enhance the perceived value and relevance of the green industry among leaders and consumers.

OUTREACH HIGHLIGHTS

Sharing findings

Webinars led by project members have reached over **2,500 growers**. Implementing the recommended practices would have an estimated economic benefit of over **\$9.3 million** according to participating growers.

Guiding national policy

This project's findings are frequently cited in reports shared with Congress when discussing **H-2A policies**, the **Farm Bill**, and other topics relevant to the green industry.

THE MULTISTATE APPROACH

With federal capacity funding, this Hatch Multistate project brings together researchers from multiple states and disciplines. Led by collaborating land-grant institutions, this project is able to:

- **Address complex issues** more *thoroughly* than a single researcher, institution, or state.
- **Provide continuity** that facilitates *long-term* research and impact.
- **Share expertise and resources.**
- **Coordinate efficient research.**
- **Leverage** external *competitive* grants by demonstrating established teams, proven methodologies, and track records of productivity.
- **Integrate Extension and teaching** to share research with current and *future* producers and scientists.
- **Provide comprehensive data** and *unbiased perspectives*.
- **Develop consensus** that helps guide policy.

Committee Funding & Participation

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Learn more: nimss.org/projects/19212

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