

Demand For Sustainability Consumer Interest In 'Green' Plants

Organic is the more familiar term, but you are likely better off marketing 'local' or 'sustainable' plants to the general public.

by **CHENGYAN YUE, JENNIFER DENNIS, BRIDGET BEHE, CHARLIE HALL, BENJAMIN CAMPBELL** and **ROBERTO LOPEZ**

THE ornamental plant industry consists of a few large- and many medium- and small-scale growers. In recent years, the intense competition from large domestic and international growers has forced medium- and small-scale farmers to identify and explore new niche markets for their products through value-added marketing.

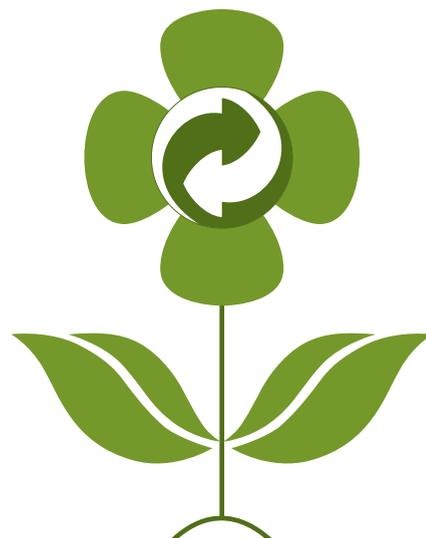
Discovering a profitable niche market is a complicated task because consumer demand is highly diversified. Organically grown and locally grown food products have become increasingly popular in recent years. There is a belief that the demand for organic and sustainable floral products is increasing in the United

States due to an emerging consumer segment focused on health and fitness, the environment, personal development, sustainable living and social justice.

Our research focused on two questions: 1) Are some consumers more interested in ornamentals, vegetable transplants and herbs produced in sustainable ways than conventionally grown plants? and 2) Do some consumers have different levels of interest in local plants, organic plants and plants grown with different sustainable production methods? We included organic and local production as product attributes, as most consumer studies have in the past, while also including attributes related to plants grown in a sustainable manner.

The Study

We conducted an Internet survey to investigate consumer interest in sustainably



About The Series

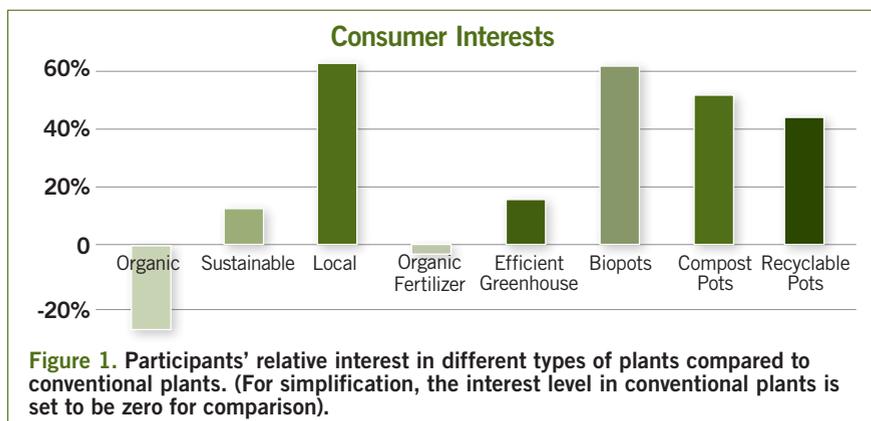
Researchers share their sustainability research and how it benefits growers in the Demand For Sustainability series.

- Part 1:** Consumer willingness to pay for biodegradable containers (January)
- Part 2:** Producer sustainability adoption rates (February)
- Part 3:** Floral consumer recycling behaviors (March)
- Part 4:** Container style preferences (April)
- Part 5:** Levels of interest in local/organic plants (May)

grown plants compared with conventionally grown plants. The survey accessed a sample of 834 consumers from Indiana, Michigan, Minnesota and Texas, whose average demographic characteristics were representative of the population at large in those states.

Demographics

The average age of the participants was 47 years; the average education level was some college; 52 percent of participants were female; 53 percent of participants were married; 25 percent had children under 12 years old; 84 percent had a detached family house; average income was between \$40,000 to \$50,000; there were three people per household; and less than 25 percent of their household food budget was spent on organic food. The average annual dollar amount participants spent on gardening-related products was \$51 to \$100; 57 percent had bought annual plants in the past year; 47 percent had purchased perennials plants; 45 percent had pur-



chased herbs or vegetable plants; 21 percent had purchased shrubs; 13 percent had purchased trees; and 27 percent had purchased indoor plants. Participants were evenly distributed across the four states, and 81 percent were from urban areas.

Findings

The results show that except for plants grown with organic fertilizers, participants' interests in other types of plants were all different from their interest in conventional plants. Participants' interest in organic plants was lower than their interest in conventional plants, while their interests in other types of sustainable plants were all higher than their interest in conventional plants (see Figure 1).

Participants' gender affected their interest in different types of plants. Female participants were more interested in locally grown plants, plants grown with organic fertilizers, plants grown in energy-efficient greenhouses and plants grown in biodegradable, compostable and recyclable pots.

Participants with children under 12 years of age at home were more interested in organic plants. This was similar to the results from previous studies that indicate consumers who had children were more willing to buy organic food products because they were concerned about the health of their children. Those participants who had a detached house were more interested in plants grown in compostable pots. We found the larger the participants' household size, the lower the interest in organic plants and plants grown with organic fertilizers. This, too, was consistent with earlier findings that people with larger household size were less interested in organic food products.

We found participants who spent more of their food budget on organic food purchases were also more interested in organic, locally grown and sustainable plants, plants grown with organic fertilizers and in energy-efficient greenhouses and plants grown in the three types of sustainable pots.

Our results show that participants who purchased different types of plants in the

past year have different levels of interest in the various types of "sustainable" plants. For instance, participants who have purchased annuals, herbs and vegetables in the past year have a greater interest in all of the "sustainable" plants in our study. Participants were less interested in organic plants in general, but they were more interested in buying organic plants that produce herbs and vegetables. Participants who purchased perennials in the past year were more interested in purchasing sustainable plants and locally grown plants than those who did not. Participants who purchased shrubs in the past year were more interested in sustainable plants than those who did not. Interestingly, those participants who purchased indoor plants were more interested in organic plants.

Participants who live in urban or suburban areas were less interested in all the types of plant production in our study compared to those people who live in rural areas. We also found that there were some state-level differences among participants



Over 200% productivity gains were achieved in the recent years by the industry...

in terms of their interest in different types of plants. We found that participants from Michigan were more interested in plants grown in energy-efficient greenhouses and plants grown in biodegradable and compostable pots than participants from Indiana. We also found participants from Minnesota were more interested in plants grown in energy-efficient greenhouses than participants from Indiana.

Takeaways

Consumers in this study were not as enthusiastic about plants or their fertilizers being organic as compared to their interest in organic food. This may be due to health concerns (pesticide residues, nutritional value and food safety) associated with food products not being as big an issue for non-edible plants. However, at least some consumers were more interested in plants' being locally produced, similar to the public's ever-increasing interest in local food products. One of the main reasons consumers purchase local

products is to support the local economy and local farmers. In this sense, both local food products and local plants can achieve the same objective. Therefore, we see consumers' high interest in buying locally grown plants corollary to their interest in buying local food products.

For many participants in our survey, "sustainability" means "eco- or environmentally friendly" or "energy saving or energy-efficient or energy conserving." With the increasing emphasis on "eco-friendly" and "renewable energy" in the U.S. and around the world, more consumers are becoming aware of the importance of consuming products that are sustainable, which is also true for plants.

Among the sustainable production practices, consumers are most concerned about the plants' pots. Instead of being interested in making plants themselves more sustainable, consumers are more interested in making the pots more sustainable. Among the different types of pots, biodegradable and compostable pots are

more desirable than recyclable pots.

The results have important marketing implications for the green industry in developing profitable niche markets. Among the sustainable practices, the nursery and floriculture industry should focus on promoting locally grown plants and plants grown in biodegradable and compostable pots. Marketing plants as "sustainable" or "grown in energy-efficient greenhouses" have the second best potential. Unlike food products, organic plants do not trigger high and prevailing interest among consumers as hypothesized by some earlier studies. **GG**

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