

CEILING STILL RISING ON GREENHOUSE PRODUCE

Quality, reliability and consumer demand for local prevails over price.

BY MINDY HERMANN

reenhouse grown is reshaping the look of the produce department. Greenhouse crop sales total approximately \$1.3 billion in Canada and \$3 billion in the United States. According to AC Nielsen retail scanner data for the last 52 weeks ending Sept. 30, 2017, greenhouse grown tomatoes have captured 57 percent of category dollars.

Statistics compiled by Gary W. Hickman, senior consultant, Cuesta Roble Consulting, Mariposa, CA, show at least half of tomatoes, peppers and cucumbers grown in Canada and approximately one fifth of U.S.-grown tomatoes and peppers are cultivated in greenhouses. As of August 2017, the U.S. Census of Agriculture Report counted 8,750 greenhouse vegetable farms, representing an increase of 115 percent from seven years earlier. Statistics Canada data show 2,430 greenhouse vegetable farms.

"Several factors explain the steady rise in greenhouse growth," explains Joseph Sferazza, sales manager, Mama Mia Produce, East Rutherford, NJ. "First is the need for more intensive production due

to finite and bounded amounts of land, water and labor. Second, many buyers prefer the consistent quality and supply coming from a greenhouse."

"We are seeing increased demand and interest in green-house-grown produce for its reliability, consistency and premium quality," says Viraj Puri, co-founder and chief executive, Gotham Greens, Brooklyn, NY. "Supply chain and food safety risks can be significantly reduced while at the same time increasing sales, sell through and overall customer satisfaction. Furthermore, decentralized production adds the ability to market and sell "local" produce and all the associated benefits."

LOCATION, LOCATION

Geographically, greenhouses tend to be located in two distinct winter climate regions: warm (Mexico, California, Arizona, and Florida) or cold (Canada, New England, Northeast, Midwest). Some growers focus on one region. Mama Mia, for example, maintains

multinational facilities in Mexico, the Caribbean and the Dominican Republic. Others have diversified into both. "We have greenhouse facilities in the warm, dry climates of Arizona and Mexico that are ideal for providing the best vine-ripened tomatoes 365 days a year," explains Harold Paivarinta, senior director of sales and business development, Red Sun Farms, Kingsville, Ontario. "However, we also have acreage in Canada. Advances in technology have allowed us to build greenhouses in locations we wouldn't have considered 15 or 20 years ago."

The combination of new technology and demand for local produce has ushered in a proliferation of greenhouses in cold weather climates, particularly in greenhouse intensive regions such as Ontario (Canada), New England and the Midwest.

"We installed high pressure sodium (HPS) grow lights to enable us to harvest during the winter and lessen the need to source winter produce from other countries such as Mexico," says Kurvin Soobrayen, marketing coordinator, The AMCO Group, Leamington, Ontario.

Little Leaf Farms, Devens, MA, embraces technology to support sustainability,

including renewable energy to power grow lights, along with rainwater collection and reuse systems. Its advanced fertilization and irrigation system uses up to 90 percent less water than field-grown greens. Little Leaf also utilizes automated harvesting for product safety and cost efficiency.

Gotham Greens plans to expand its local reach. Puri notes "we are a regionally focused, nimble grower that has entered the market with highly branded products that connect to local consumers. Our local-only focus allows our retail partners to create unique, local salad and produce programs in New York and the Midwest."

The push for local is marching across the country. "We recently broke ground on a new facility in Peach County, GA, becoming the first greenhouse grower to set up a significant sized operation in Georgia," says Chris Veillon, chief marketing officer, Pure Flavor, Leamington, Ontario. "As of fall 2018, we will be able to reach 80 million people in a 24-hour drive, extending our reach to cover the entire southeastern United States."

SWEET SPOT IN PRICING

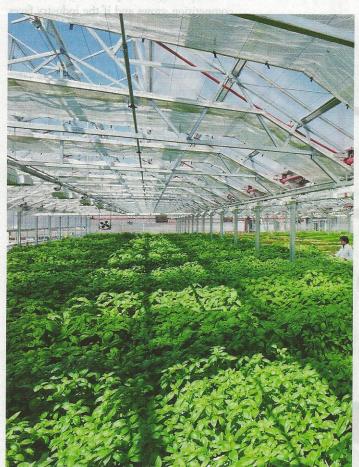
The pricing tug of war for greenhouse

produce pits premium against commodity pricing. "Premium quality produce in high-tech greenhouses is very expensive, especially during the cold winter months," says Kris Gibson, vice president, sales and marketing for Intergrow Greenhouses, Albion, NY.

NatureSweet, San Antonio, utilizes premium practices that could justify premium pricing. "We start with the best seeds that are nurtured throughout the greenhouse-grown process and picked by hand at the peak of sweetness," says Lori Castillo, marketing director. "We also operate at the highest level of food safety, with a full traceability code on every package that can identify every product down to the exact row in each greenhouse."

Premium pricing may not be sustainable. "Prices may drop once the cost of high-tech greenhouses can be lowered to compete with the low-tech, shade greenhouses of Mexico and abroad," says Mama MiaSferazza. "Retailers certainly can lower costs and margins, but that does not seem probable given competition from lower-priced field-grown products."

"It is clear that consumers today are willing to pay more for greenhouse grown," observes Helen Aquino, director, communi-



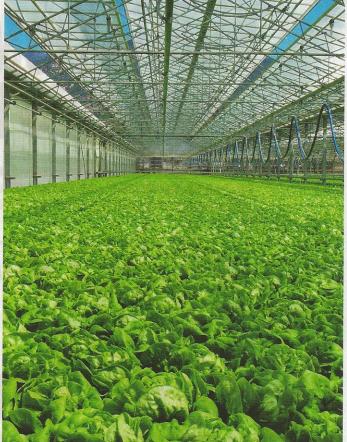


PHOTO ON OPPOSITE PAGE BY WINDSET FARMS; PHOTOS ABOVE LEFT TO RIGHT: GOTHAM GREENS AND ARI BURLING, AND PETE'S LIVING GREENS



cations and brand marketing, Village Farms, Heathrow, FL, and Delta, British Columbia. "In the long run, however, a premium product may not benefit suppliers of greenhouse grown tomatoes. The increasing number of greenhouses being built in the United States, Canada, and Mexico is leading to excess supply. This coupled with lower production and labor costs in Mexico create a buyers' market where suppliers compete on price."

"If the produce clearly is of superior quality, lasts longer, stays fresher, is more flavorful and is grown sustainably and responsibly, consumers may pay a little more compared to conventional produce," says Puri. "However, higher crop yields and lower transportation and logistics costs could erase the cost difference. And longer-lasting produce can reduce spoilage, further enhancing profitability for the retailer and the grower, so pricing on par with conventional produce could benefit all involved."

Red Sun often competes on price, offering everyday low cost to support retailers' everyday low-price programs, a primary driver of growth over the past two decades and a "win-win for both retailers and growers," explains Paivarinta.

The pricing landscape is likely to evolve as competition grows and if the industry faces oversupply. Intergrow's Gibson suggests the decline of field-grown crops of similar vegetables is preventing oversupply. Paivarinta observes that although the greenhouse category experiences some periods of overproduction, the next wave of construction will replace older greenhouses that use obsolete technology. Additionally, some vegetable greenhouses are being taken offline and converted to marijuana, a more profitable crop.

A COMPETITIVE EDGE

Retailers can stand out by securing an exclusive supply or variety of items. Sunset, Produce, Kingsville, Ontario, expresses pride in its retail partnerships that deliver quality, limited edition products, along with creative displays and POS materials. Over the past three years, agriculture tech startup Bright-Farms, headquartered in New York City, has financed, built and operated greenhouse farms in exclusive relationships with leading retailers such as Quincy, MA-based Ahold Delhaize USA and Milwaukee-based Roundy's. It plans to open up to 15 new locations in the next three years as a way to quickly and efficiently manage time, distance and costs.

"We tailor greenhouse size and varieties to the individual client, giving us a dedicated outlet for our products and retailers a dedicated supply," explains Abby Prior, vice president of marketing, Sunset. "Each retailer receives a set of freshly harvested products, along with collateral that highlights local and freshness on packaging, signage, video, digital and social media."

NatureFresh Farms, Leamington, Ontario, invites retail partners to visit its greenhouses and taste new and unique products such as its upcoming Tomberry tomato. "We are working directly with our partners in bringing the new Tomberry to market this spring," says Ray Wowryk, business development director.

INNOVATION ABOUNDS

Greenhouses cultivate and introduce a broader variety of new specialty items than typically seen in field crops. "Innovation occurs constantly in new growing techniques, technology, seed breeding and more efficient and sustainable packaging," says Paivarinta of Red Sun.

Innovation is particularly noticeable in tomatoes. Aquino of Village Farms explains that consumers are intrigued by the unique shapes, sizes, colors, and flavors of specialty tomatoes. NatureSweet's Castillo cites consumer focus on salads and other healthy, on-the-go products as the catalyst for such product offerings as Constellation, a rainbow assortment, and SunBursts, a yellow tomato. At NatureFresh, the small, berrylike Tomberry fits into the grower's line of flavorful, snack-friendly items.

The potential for new greenhouse categories drives the executive team at Windset Farms, Delta, British Columbia. Marketing on a theme of music and arts, the company recently added Soprano Strawberries, Brio Basil and Concertino Mini Grape Tomatoes to its product line.

Pete's Living Greens, Carpinteria, CA, produces rooted greens, "a superior product that consumers see higher value in," says Brian Cook, vice president, sales. Marketed with the slogan "rooted in freshness, alive in flavor," the company's greens can last up to 18 days in the refrigerator.

"Product differentiation is a must for creating a niche market segment within a seemingly commoditized and oversupplied category," says Aquino. "Through exclusive partnerships with seed companies, we bring to market unique varieties no other greenhouse grower can offer. This in itself, however, is not the key. The point of differentiation is consumer perception — does the tomato

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- Chris Veillon, Pure Flavor

deliver on unique benefits of quality and flavor that the consumer is willing to pay for?"

MERCHANDISING MATTERS

Packaging helps capture the consumer. Gotham Greens' packaging educates consumers about environmental sustainability and urban greenhouse locations. Windset Farms maximizes the use of colors and product names. "We believe our eye-catching packaging differentiates us from others," says John Newell, owner, Windset Farms. "By branding each item with a unique bold color and an art/music themed name, our packaging stands out on store shelves."

"But packaging is not enough; all is lost unless the consumer is made aware of product attributes," advises Aquino. "Tomato packaging provides space for specific brand messaging and consumer-friendly call outs regarding flavor and usage, but we need retail partners to communicate product attributes through POS signage."

Product displays continue to be important. Pete's Living Greens suggests grouping greenhouse grown products together as a destination. NatureSweet provides a variety of different racks and secondary displays to aid in merchandising efforts to help increase sales. The company also partners with retailers on in-store promotions throughout the year.

"The days of poor displays and no color breaks in the department are long gone," says Mama Mia's Sferazza. "The produce department is the heart of the supermarket; the better it looks, the better the store looks."

EDUCATING CONSUMERS

Greenhouse growers emphasize freshness and longer shelf life, along with local. In fact, local may be eclipsing organic. Although many consumers are drawn to local, they may not understand its meaning. "Because they don't know what's in season, consumers often don't realize that most items don't come from

the farmer down the road," observes Lauren Mordasky, owner/operator, Vermont Hydroponic Produce, Florence, VT. "At the same time, they may not understand how a tomato can be grown in Vermont in the winter."

Increasingly, growers include "greenhouse grown" on their packaging. "We take seriously the opportunity to tell consumers the greenhouse story — little to no seasonality, multiple growing regions, consistent environment, eco friendly and sustainable growing methods," says Pure Flavor's Veillon. "We actively engage consumers in discussions about the relationship between increasing fresh produce consumption and healthy, active living. In fact, we will be unveiling a revitalized brand strategy in spring 2018 with new packaging, website, enhanced social media channels and integrated communication strategy. By aligning packaging strategy with a consumer-facing communication plan, we will help raise product and brand awareness while focusing on usage and healthy active living."

"All greenhouse growers should continue to educate consumers on the benefits of greenhouse produce," advises Intergrow's Gibson. "We incorporate our 'Greenhouse Grown in NY' logo on all packaging and products to promote both greenhouse and local."

"Greenhouse growers can differentiate themselves with their story," says Cook. "Pete's Living Greens took a universal product, gave it a story that talks about Pete, and increased its shelf-life to add value for consumers and create a loyal fan base."

Overwhelmingly, greenhouse produce brings fresher items, particularly to regions that can't grow field crops year-round. Products arrive at retailers within a day or so of being picked and generally last longer than items shipped across the country or from Mexico.

"We call out freshness with package and display labels such as 'Born Local. Raised Right' and 'Massachusetts Grown for Maximum Freshness,'" says Paul Sellew, president, Little Leaf. "Our greenhouse facility in Massachusetts is centrally located to bring the freshest and best-tasting baby lettuce to New England within a day of harvesting. The biggest benefit to consumers is our unparalleled freshness, taste and quality."

"We've always believed superior flavor is the ultimate differentiator," says Paul Mastronardi, president and chief executive, Sunset. "We feature "greenhouse grown" on all of our packaging but we are completely focused on flavor and our emotional connection with our consumers."