## From NY Farms to NY Plates: Institutional Purchasing across NYS 2015 Becker Forum

## **Examples in Consistency: The Eastern Broccoli Project**

Thomas Bjorkman, Department of Horticulture, Cornell University

The Eastern Broccoli Project is an effort to develop widespread production of this high-volume vegetable to Eastern production areas. When we began the project, one of the attractive features of broccoli was that it can be a commodity crop, with the expectation that new producers can enter the market at market prices as long as they meet the commodity criteria. Those expectations have turned out to be incorrect in many ways. Consistently meeting diverse expectations is the reality.

The lesson we have learned is that each institutional buyer has very specific criteria. A grower and distributor must understand those criteria very well before deciding to turn take on the account, or planting a single seed. These lessons will apply to many farm products.

While buyers vary a great deal in the criteria the product must meet, the deliveries to each buyer must be very consistent. One of the challenges in having groups of small or medium-sized producers supply to high-volume buyers is obtaining the necessary consistency.

**The produce.** For most supermarket shoppers, all broccoli looks the same. However, institutional buyers see nuances that they feel are essential to selling the product. While broccoli has established USDA standards, we have found very few buyers who actually pay attention to those standards.

Stem length. Much of the market has changed from bunch to crown cut. Different varieties of broccoli have different branch lengths so it is difficult to come up with an objective criterion for how much stem to leave on the head. It is in the growers interest to leave more stem because it increases yield, but if the stems are too long for the buyers taste, the load may be rejected. Regardless of the exact length the buyers will accept, the stem length needs to be visually identical on every head in the load.

Flower bud size. Broccoli varieties exhibit a broad range of bud sizes at harvest maturity. The Asian standard is for a very small flower bud, while Eastern buyers accept a broader range. Nevertheless, the entire load must be made up of heads with the same flower bud size. Some varieties are interchangeable, but many are not. Growers will typically plant several varieties to improve the likelihood of a steady supply of marketable product. If the varieties are likely to be mixed on a shipment, they must be chosen to be very similar in appearance as well. Varieties that look the same in the catalog, may be distinctive when placed side by side in a display.

**Definition of a bunch**. Traditionally, a bunch has been 2 to 4 heads giving the appearance of an attractive single Dome. Broccoli has been bred to approximate the Pentagon so that varying numbers of heads can produce that attractive appearance. However, one buyer simply specifies that the bunches be 9 inches. Growers have

figured out the production is profitable if many of those bunches contain a single large head, and are satisfying this grower by bunching ones and twos.

**Post harvest handling**. Packing in the box needs to be done so that the product doesn't jostle and get damaged in shipping, and many shippers take pride in excellent presentation. For instance, heads of broccoli are lined up in rows all facing up.

**Packaging.** Each buyer expects boxes of product that fits their handling system.

Box type. Institutional buyers are usually set up to efficiently handle a specific type of packaging. The traditional waxed boxes have been giving way to unwaxed boxes and returnable plastic containers

Despite a diversity of choices, many buyers require one type, and that requirement can have impacts on the grower beyond box sourcing. For example, if a store disposes of all of its cardboard to recycling firm they cannot manage waxed cartons. If waxed cartons are unacceptable, then the product cannot be hydro-cooled or iced in the boxes or pallets. Precooling to 32 or 33° and packaging for iceless shipping will be required, possibly with a plastic film inside each box. Determining whether such requirements can be met profitably is a key planning step for growers.

**Ice.** High-respiration produce, like broccoli, requires an uninterrupted low-temperature cold chain. Traditionally cross-country shipping has been made possible because a large amount of ice keeps the product cold and hydrated. For local producers, the amount of ice is determined by the buyers handling procedures. Buyers who want to keep several days of inventory in their coolers may want a large amount of ice. Buyers with rapid turnover may want to avoid the food safety and slip hazard associated with melting ice. While ice less shipping substantially reduces the packing and transportation costs, maintaining and hydration in the cold chain take substantially more preparation.

**Prediction.** Buyers who turn over their inventory on a daily or near daily basis value a consistent supply. Nature usually does not provide a 100% consistent harvest, so buyers also value predictability. At the time an order is confirmed, the same timing, amount and quality that is delivered must be completely consistent with what was ordered.

The details described here are specific to a particular product, but every farm product will have similar detail requirements. Some will be easy to anticipate but many will not. Talking with the prospective buyer about every detail, obvious or obscure, will allow growers to develop positive and profitable relationships with institutional buyers.

The theme is to deliver product where each load consistently meets the buyers expectations, and within each load the appearance is highly consistent.