

**EASTERN BROCCOLI PROJECT UPDATE:
VARIETY DEVELOPMENT, PLANT POPULATION AND MARKETING CHANNELS**

Thomas Björkman, Associate Professor
Philip Griffiths, Associate Professor
Dept. of Horticulture
Cornell University, NYSAES
Geneva, NY 14456

Miguel Gómez, Assistant Professor
Dyson School of Applied Economics and Management
Cornell University
Ithaca, NY 14853

Christy Hoepting
Cornell Vegetable Program
Albion NY 14411

The Eastern Broccoli Project is working to make possible a year-round broccoli industry in the East. The project is developing varieties that are resilient to Eastern growing conditions, especially to the head malformation brought on by the lack of cool nights. We are also working on identifying growing practices that provide the most profitable production with modern varieties and market requirements, and working on expanding the channels for marketing regionally grown broccoli to eastern consumers.

Breeding programs at Cornell, USDA, Oregon State, Seminis, Syngenta and Bejo are all generating new hybrid lines that are expected to be better adapted to the East. We have done regional trials of almost 100 of these over the last 3 years and identified 15 promising hybrids that have been promoted to more highly replicated tests across the region in the last 2 years. The best 3 performers were evaluated in commercial trials in 2013 and will be again in 2014 and 15. We have found substantial increases in head uniformity to be achievable without compromising other important traits. Five varieties have been released, and more are in the near-term pipeline.

We have also found that the productive vegetable land of Western New York produces the best quality and the best yield at higher populations than have been used in the past. It should be possible to regularly harvest 700 boxes per acre, rather than the traditional 450, when the soil, population, fertility and variety are well matched.

A study of the market channels has shown that food service has the greatest potential for growth of eastern broccoli volume, followed by supermarkets. Increasing production in the East has the potential to reduce the overall cost of supplying the product, and reduce the carbon footprint of transportation. Demand modeling shows that flows to the mid-Atlantic will have the most seasonality. The far southeast is the closest to the western supply; New England is already supplied from Maine.

Prospective growers could do test production of the new varieties that reduce the production risk and identify compatible markets to find out whether broccoli would be a good crop for their farm.

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