

NEW YORK FRUIT QUARTERLY

Editorial

A Vibrant Future for Tree Fruits

The College of Agriculture and Life Science (CALs) at Cornell University has a partnership with the New York State fruit industry that dates back to the 1880s. Together, the challenges we have faced include managing crop-threatening diseases and insects, breeding world-class varieties and rootstocks, implementing production and post-harvest practices, enhancing value-added fruit products, and measuring and promoting the nutritional value and post-harvest quality of fruit, particularly apples.

One of the strengths of our efforts has been the breeding of new varieties. A recent grant from the New York Farm Viability Institute is supporting Cornell's apple breeding program and more effectively bringing growers into the development process. Our efforts will be enhanced further by assembling a core group of faculty specializing in key areas of tree fruit genomics. Dr. Susan Brown, recently appointed Herman M. Cohn Professor of Horticulture, will serve as director of the Cornell Tree Fruits Genomics Initiative. Gene marker-assisted selection, fruit quality, nutrition, and plant architecture are key areas of investigation, as is tree architecture and development. Understanding tree form modification will aid in the development of dwarfing varieties and diverse tree forms (upright, weeping, etc.) that may prove useful in urban landscapes. Because of increasingly difficult farm labor issues, trees better suited to mechanical harvesting are also an important goal.

Cornell scientists will also continue to partner with scientists at the USDA-ARS Plant Genetics Resources Unit to evaluate apple germplasm in the USDA repository in Geneva. Our cooperative goal is to develop new rootstocks that is resistant to cold and important diseases like fire blight.

CALS will continue to provide cutting edge research to improve management of production practices like: high density planting systems; insect and disease management; mating disruption technologies; effective IPM control strategies; technical improvements to pesticide-application systems; and production, post-harvest, and storage guidelines.

We are also committed to assisting the fruit industry with challenges associated with changing markets. Newly developed Integrated Fruit Production protocols and Integrated Pest Management elements will help growers maintain access to important export markets. The TracApple software program includes pesticide and fertilizer application reports that meet Eurepgap requirements.

Food scientists are working to better understand the bioactive components and potential health benefits of fruit, working on fresh-cut options and improving the quality and safety of value-added, fresh-pressed products, like cider and wine.

Together with Cornell Cooperative Extension (CCE), the College is committed to strengthening fruit extension programs. Dr. Kerik Cox joined the faculty this year in plant pathology at Geneva with responsibilities in tree fruit and berry disease control. At the Hudson Valley Laboratory, Steve Hoying and Peter Jentsch were hired to fill research and extension needs in areas of fruit production and entomology, respectively. A recent grant from the New York Farm Viability Institute will help fund the formation of the statewide fruit extension team and result in a new farm business management educator located at the Hudson Valley Lab. And, two field tree fruit extension staff are being sought for the Lake Ontario Fruit Program team.

CALS and CCE will also continue to deliver workshops and educational programs that help growers compete in national and global markets, and to provide access to educational materials like "Scaffolds" and the "Cornell Recommends" series. One focus area is the development of orchard diversification options for growers to include pears, and stone fruits like cherries, peaches, and plums.

As we address future challenges, my colleagues and I welcome stakeholder input and support. We want to maintain a strong partnership in developing a fruit industry that is as healthy and economically viable for producers as it is for consumers and New York's land-grant university.

Susan A. Henry, Ph.D.
The Ronald P. Lynch Dean of Agriculture and Life Sciences

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