

NEW YORK FRUIT QUARTERLY

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Editorial

Funding Apple Research

Over the past 10 years, our farm and many others have experienced an increase in fire blight pressure. This has been a combination of blossom, shoot and rootstock blight. Some of the increase may be due to the popularity of more highly susceptible scion varieties and rootstocks. Most of the new varieties demanded by the market and planted in New York in high density plantings are susceptible to fire blight. They include Ginger Gold, Gala, Fuji, Honeycrisp, Jonagold, Smoothie Golden, Fortune, NY 674, Cameo, and more. The combination of highly susceptible varieties with highly susceptible rootstocks such as M.9 and M.26 often results in rootstock blight and tree death. Although we have been growing M.9 rootstock for 30 years we have had far more tree death due to fire blight in the last few years. Storms such as the Labor Day storm of 1998 caused serious fire blight outbreaks, especially in nursery trees that were still growing vigorously at that time. Unfortunately, there are very few good control options to apply on the farm. Thus, the urgency to develop better control programs.

This issue of the *NY Fruit Quarterly* details the substantial research efforts undertaken at Cornell University to help growers in the battle against this disease. The work ranges from the very practical efforts to optimize disease prediction models so that applications of streptomycin can be better timed, to the futuristic efforts to insert resistance genes into susceptible apple varieties such as Gala to come up with fire blight resistant versions of popular varieties.

This research effort is funded from several sources including the State of New York and the federal government. However, through the grower funded NYS Apple Research and Development Program, the apple industry has also provided funds to assist in this effort. In some cases, our funds have been essential in getting the work done. In other cases, we have provided seed money which allowed researchers to obtain significantly more funds from the federal government. Fire blight research is an excellent example of this, how grower funds from the New York apple industry can be used to help convince the federal government that it should fund a significant grant on fire blight in New York.

My service on the board of the NYS Apple Research and Development Program has given me a broad look at the way money raised by growers is used and how it influences the research programs at Cornell. In general, the funds we provide are only a small portion of the costs of doing the research because the salaries of all the researchers are paid by the state. Nevertheless, our money provides operating dollars and has a significant impact on what the researchers choose to work on. If it were not for the Apple Research and Development Program, many of the people trying to help us solve the apple industries problems would be working on other crops where there are grower grant funds or federal grant funds.

On the inside front cover, directly across from this editorial, is a listing of the projects funded by the NYS Apple Research and Development Program for July 2000-July 2001. These projects total more than \$155,000 from grower funds and \$22,000 from voluntary processor contributions. The New York apple industry should be proud of the financial support we extend to researchers to help solve the production and marketing problems facing our industry.

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and NYS Apple Research and Development
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Front cover: Watch out for first signs of new fire blight infections in apple orchards—adhering blackened flowers, some with drops of sticky, honey-colored ooze (inset).

Back cover: This experimental transgenic Royal Gala apple contains a fire blight resistance gene and is fruiting in field trials. Inset: The resistance gene was transferred to apple in tissue culture.

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