Cornell Releases Six New Fruits and Vegetables

by Linda McCandless

Liverpool, NY - Who knows what will crop up after the New York State vegetable and berry growers get together, but keep your eyes peeled. Six new varieties of fruits and vegetables were officially released by Cornell University plant breeders at the growers' annual meeting on February 10. They include two new raspberries, a summer squash, a head lettuce, and two potatoes - all particularly adapted to New York growing conditions and suitable for commercial production.

"The new varieties we are introducing illustrate the continuing importance of plant breeding programs at public institutions such as Cornell University," said Daryl Lund, dean of the College of Agriculture and Life Science. "To help New York growers remain competitive, we develop high quality varieties that incorporate pest resistance, require fewer pesticides, and help producers keep one step ahead of the insects, the diseases, the climate, and consumer demand."

The two new red raspberries bred by John Sanford and Kevin Maloney are a boon to both growers and consumers. "'Prelude' ripens early and 'Encore' ripens late," said Maloney. "Extending the season in both directions allows growers to get the premium 'first' and 'last' fruit prices and lets New York consumers eat locally produced berries from June through September, rather than those shipped in, which are not as fresh."

'Whitaker' is a Caserta-type summer squash and 'Onondaga' is an 'Ithaca'-type head lettuce. "Both are remarkable for disease resistance that is derived from wild species," said Richard W. Robinson, the vegetable breeder who worked with Joseph W. Shail to develop the new varieties. Wild species are highly regarded as sources of insect and disease resistance because their resistance is developed by centuries of natural selection, but wild genes are very difficult to incorporate into domestic varieties. Robinson and Shail were successful using conventional breeding techniques, but only after..."
making "hundreds of crosses."

The two new potato varieties were developed by Robert Plaisted, Cornell's highly-respected potato breeder. "'Salem' is an early-emerging, mid-season potato with high yielding ability, bred for table stock," said Plaisted. "'Reba' is a mid-to late-season potato bred for both the potato chip market and table use." The emeritus professor's hallmark contribution to the New York potato industry is that all potatoes released by his program are resistant to the golden nematode. This pest, unique in the USA to New York State, can significantly impact yield and marketing of the crop and is most efficiently controlled using environmentally safe plant resistance. Certified seed for both potatoes will be available for the 1998 growing season.

"It is unusual for our fruit and vegetable breeders to have so many new releases in one year," said Jim Hunter, director of the New York State Agricultural Experiment Station in Geneva, NY, where the lettuce, the squash, and the raspberries were developed. "New varieties are the result of long-term collaboration among researchers and industry. Only the very best selections among thousands are ever released for commercial use to nurseries and seeds companies. Finding the right one is like looking for a needle in a haystack. Varieties can require as many as 10 to 15 years to breed, test, and evaluate, and another 10 to 20 years before they are commercially accepted. The squash and the lettuce and the potatoes are important because of their disease resistance. The raspberries will help growers meet the demand for berries all summer long." A raspberry released almost 30 years ago by Geneva, 'Heritage,' is now the industry standard for fall production, he noted.

Both the dean and the director credit the potato, vegetable, and berry growers for helping the public and the college fund the long-term research projects necessary for the development of these new varieties.

"Our members are extremely proud of the researchers at Cornell who continue to come up with new varieties to benefit consumers and growers," said Larry Eckhardt, president of the New York State Vegetable Growers. "Producers in New York rely on research conducted at the Agricultural Experiment Station in Geneva and the Ithaca campus to stay competitive. We look forward to future releases that will continue to help us meet the challenges of growing high quality produce in New York."

Photos of the new varieties are available.