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Processing Sweet Corn & Snap Bean Field Day Well-Attended

by Cathy Weeden

Geneva, NY - Despite the rain and the unseasonably cold weather, Cornell University's Annual Sweet Corn and Snap Bean Field Day held at the New York State Agricultural Experiment Station (NYSAES) in Geneva, NY, on August 18, was a rousing success. Steve Reiners, of the Horticultural Sciences department, reported, "Over 60 people attended, and I was repeatedly told that the NYSAES field day is one of the best in the country." People came from as far away as North Carolina, as well as nearby areas of the Northeast, such as Pennsylvania, New Jersey, New York, Ontario, and Quebec.

Many of the attendees who sloshed through Tuesday's mud represented vegetable processing and seed companies. Reiners explained that the seed companies want to know how their varieties perform in trials, and processors want to look at new varieties that might be preferable for their growers to plant. Jim Ballerstein, who has run the field trials for over 10 years, is looking for characteristics in the 45 bean varieties planted this year that increase yield, size, disease resistance, and plant vigor, while the number of days to harvest is decreased. A desirable plant is able to resist stresses of temperature extremes, lack of rain, and too much water, he said.

If beans are susceptible to heat, they may develop a "split set," which occurs when heat causes blooms to drop. Then, instead of similarly-sized pods, some are too mature, having set before the blossom drop, and others are too small. The shape of the plant is also important. Because most harvesting is now mechanical, plant shape and size should be uniform. Also, pods should not grow too close to the ground, which makes them difficult to harvest, or too high on the plant, which makes the plant top heavy.

In corn for processing, similar characteristics are important: yield, size, vigor, number of days to harvest, and stress and disease resistance. Where the ear is located on the plant is also important, as well as uniformity of plant and ear. Although flavor is not vital in processing corn, plants occasionally produce corn with an off-flavor, which is not desirable.
This year, Ballerstein and others from Reiners' program - Cindy Cowan, Matt Wavrick, Kathy Campo, and Aubrey Robinson - were challenged by the weather and an invasion of raccoons. The masked bandits almost destroyed the early sweet corn plot (less than 50 percent of the anticipated data was collected). In the second planting, one replication was completely destroyed and several were badly damaged. As for weather: one planting scheduled for late June/early July could not be seeded at all because of heavy rains. With the help of the excellent vegetable farm crew, Lee Hibbard, Steve Gordner, and Brandon Wood, researchers were able to overcome these setbacks and generate sufficient data from the sweet corn and snap bean trials to educate seedsmen and processors.

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