Cornell's 5th Annual Buckwheat Field Day Brings Growers and Producers Together

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by John Zakour

GENEVA, NY: Cornell University's 5th Annual Northeast Buckwheat Field Day was held on August 24 at the New York State Agricultural Experiment Station in Geneva, NY. More than 30 growers from western New York and Pennsylvania attended the event. Two major buckwheat processors, Birkett Mills and Agriculver also sent representatives. Almost all had been to previous field days and have considerable experience with the crop.

"The goal of the event is to raise growers' understanding of the intricacies of buckwheat production, and to develop the community of growers in the Northeast. This event has really resurrected extension activity with this crop after it languished for many years," said field day organizer Thomas Bjorkman, professor of horticultural sciences.

Buckwheat is becoming an increasingly popular short-season cash crop. Though it is unlikely to be a farm's main crop, buckwheat's many beneficial properties make it ideal to fit specific situations on a farm, often making it a worthwhile part of an overall farm plan.

At the event, Bjorkman highlighted research from Cornell crop and soil sciences professor Ralph Obendorf on a carbohydrate in buckwheat seeds that could have major medical value in treating adult-onset diabetes. The substance, called fagopyritol (from the Latin word for buckwheat) is similar in structure to a compound that is missing in adult-onset diabetes patients. As a dietary supplement, it is predicted to lower and stabilize blood glucose by inducing synthesis of the missing insulin mediator. Fagopyritol constitutes half of the soluble carbohydrate in buckwheat seed. The technology is being patented by Cornell and has been licensed to MinnDak growers of Grand Forks, N.D. Major pharmaceutical and neutraceutical
companies are negotiating to develop specific products.

The event also featured production topics presented by Bjorkman and several growers, along with field demonstrations. A major topic of concern was the effect of the drought on crop establishment and harvest. Bjorkman presented new research on seed rot and the potential use of Apron fungicide. Growers were also alerted to *Sclerotinia* stem rot, which can take out much of the crop just before harvest. This disease was rediscovered last year in collaboration with plant pathologist Helene Dillard.

"In the field, there was particular interest in new genotypes being developed as future varieties," Bjorkman noted. "The growers saw and appreciated the characteristics of a solid canopy, uniform seed set, and lodging resistance that result in better crops than their current variety, Manor."

Cliff Orr, of Birkett Mills, described the company's commitment to using new varieties, and the milling and cooking tests that they need to perform so that they are ready to process the new larger-seeded types. Orr indicated that if the new varieties can be processed with only minor modifications to current manufacturing techniques, they could be contracted as early as next season. If major modifications are necessary, however, then further variety and product development will be required.

Birkett Mills also introduced a new product, "Kasha Classics." According to Bjorkman, the pilaf-like quick cooking dish represents an effort to expand the market for buckwheat products and was well received by the growers.

As an added treat, Dr. Hiroshi Fuji, of Roswell Park Cancer Center in Buffalo, served teuchi soba noodles made traditionally with flour ground just prior to preparation by hand using a stone wheel. The noodles had been cooked that morning in Geneva's Food Science and Technology pilot plant. Participants enjoyed the chance to sample an international specialty made with the crop their growing expertise makes possible. Bjorkman considers this year's Buckwheat Field Day a success and is gratified to see the community of buckwheat growers expanding and becoming more sophisticated about the crop's potential.

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**POSSIBLE SIDEBAR**

**ADVANTAGES OF BUCKWHEAT**

- Fits into rotations at a time when fields might otherwise be idle.
- Can be grown as a cash crop where another crop failed.
- Harvestable within 90 days of sowing.
- Inexpensive to grow because it requires no pesticides and little fertilizer.
- Grown with equipment available on most farms.
- Requires little attention during the growing season.
- Mellows the soil and suppresses some weeds.
- Easily raised organically and commands premium price.