

June 2015

No. 38

Northeast Buckwheat Growers Newsletter

Thomas Björkman, Editor Horticulture Dept., Cornell-NYSAES, Geneva NY

2015 Buckwheat sourcing

Demand for buckwheat continues to be higher than supply. Birkett Mills has maintained buckwheat contract prices at \$28.50 per hundred pounds for conventional grain, with Certified Organic grain having a premium at \$33.50.

The price is on a clean and dry basis, with the adjustments for non-grain and excess moisture taken at the receiving house.

The weaker prices for corn this year than last, coupled with a rainy June, could attract more acres to buckwheat.

The abundant rain in the Northeast this June has delayed soybean planting. Some fields slated for soybeans may be sown to buckwheat as the classic catch crop.

Soybean growers who think of buckwheat as a Group 00 maturity soybean will estimate the planting date and potential yield fairly well.

In Manitoba, a new processor has begun sourcing with big plans. Manitoba production has been down to about 5,000 acres in recent years. Fyk Soba is planning to build a processing plant that can handle the production of up to 50,000 acres. They have been contracting at C\$24 to 27 per hundred pounds. This is an extraordinary development in North American buckwheat.

Fyk Soba is in the Parkland area, the northernmost agricultural area of Manitoba, about 250 miles northwest of Morden, where production has been concentrated recently.

2015 Buckwheat Field Day

The 2015 Northeast Buckwheat Field Day will be the Hatfield farm, on the north side of Moravia, near Owasco Lake.

Don Hatfield is hosting the field day. He has been producing grain near Owasco Lake for many years, and is Certified Organic. This is the second year of organic buckwheat production, so Don has a lot of keen observations about how it has (or has not) met his expectations and management needs.

The field day will be on Wednesday, August 26 from 1 to 4 pm.

The exact location of the field day will be announced after the buckwheat is out of the ground. It is still too wet to know for sure where the site will be. Just in case, there will be a sign by Owasco Meats, just north of Moravia on Oak Hill Road.

We will speak about how buckwheat fits into organic field crop rotations, where it has value for soil building and weed suppression. We will see how effectively it addresses the weed concerns on this farm, which are mainly foxtail and Canada thistle.

--Continued on Page 3

Production notes

Downpours seem to be coming more frequently this summer than in years past. That water can pose a problem for buckwheat seedlings, because standing water around the seed or young seedling reduces the vigor a lot.

To make sure that water near the seed drains as fast as possible, avoid

compacting soil just below. That kind of compaction happens easily if the soil is a little wetter than ideal. Fitting the ground with a disc can cause a shallow compaction layer, as can certain openers on planters. It is worth taking a look to see whether your implements are compacting the soil somewhere in the top few inches.

Siberian buckwheat benefits from recent Orel breeding

A substantial proportion of Russian buckwheat is raised in the Altai Krai of Western Siberia. This is a region just east of Novosibirsk, and just north of where Kazakhstan and Mongolia touch. Altogether that small, remote region has about 1,000,000 acres. About a third of that is in [the Salair foothills](#), where buckwheat occupies a full 20% of the arable land. That may be the biggest concentration of buckwheat in the world.

In this dryland agriculture the buckwheat yield varies vastly. Nevertheless the average is a familiar 15 bushels to the acre.

Russian buckwheat production has been supported by [a long-standing breeding effort](#) in Orel, Russia. That research station has three generations of Fesenko buckwheat breeders. Nikolai V. Fesenko began the effort, and was followed by his son, Nicolai Nicolaiovich, whose son Dr. Alexej Fesenko is now the head of the station.

Two market-leading varieties, *Davyatka* and *Dikul*, are recent releases from the Orel station. *Dikul* was released in 1999 with N.N.Fesenko as the lead breeder. *Davyatka* was released in 2004, on which Alexei also got credit. All three generations are included on the most recent release, *Dialog*.

The Orel team has been working on a more concentrated seed set and uniform ripening, which is an especially big concern at high latitudes.

A small amount of *Davyatka* was imported to North Dakota recently under [a SARE project](#) with farmer Anne Ongstad and researcher Frank Kutka. In North Dakota trials, it flowered four days before Koto and Manor.

Vazhov V.M., Odintsev A.W., Kozil V.N. 2014. Distribution of sowing and buckwheat crop capacity in Altai with regard to environmental conditions Life Sci J11:552-555



Two of the world's buckwheat breeding legends, Dr. Nikolai N. Fesenko of Orel, Russia and Dr. Clayton Campbell of Morden, Manitoba. Photo in Manitoba 1998 T. Björkman

2014 Field Day *(cont.)*

There will be information valuable to old hands as well as new or prospective growers. Buckwheat tends to have a somewhat different place in conventional and organic rotations, but the production of the crop is essentially the same. We will evaluate crop progress to anticipate what the yield might be, whether

plant vigor is in the desired range and how to do those evaluations on your own farm. There will be excellent opportunities for farmer-to-farmer learning.

It is a nice return to the eastern Finger Lakes, since the [2008 field day](#) in Cazenovia at the Gianforte Farm.

Research note

Several times a year, I get calls from beekeepers looking for buckwheat varieties that have not existed for many decades. They have heard from somebody that those varieties produce more honey than modern varieties. There is absolutely [no evidence for that being true](#), but the story persists. It would be a service to bee keepers if anyone can help identify where this rumor keeps getting resurrected.

In 2014 we rechecked bee activity with both the current variety the activity, *Koto*, and the 1970s-era variety *Mancan*. In part, this was a comparison of the most widely grown variety with a somewhat older type. It was also a test of whether the bee population behave differently from when we did [extensive pollination experiments](#) in the early 1990s. The short version is that honey bees happily visit both *Koto* and *Mancan*.

What we found was essentially the same behavior. In the morning, honeybees arrive as soon as the flowers open and pollen was available. Once the pollen is gone, after a few hours, so are the honey bees. In the afternoon, the flowers keep producing nectar and are visited by various other insects.

My interpretation of this behavior is that honey bees really like buckwheat pollen, but are somewhat indifferent to the nectar. If that were

the whole story, the bees would spend the afternoon collecting nectar they like better. However, rather than visiting alfalfa fields they apparently hang around the hives annoying the beekeeper. It would be helpful to have a bee psychologist weigh in with some ideas of why they behave the way they do.

The vast variation in honey production from one year to the next remains unexplained. One possibility worth considering is how much it rains during the flowering period.

We already know that bees cannot work wet buckwheat flowers. Rain and drizzle delay flower opening to late in the day, and also get the inside of the flower and dilute the nectar. The same can happen from dew. If the soil is wet and the air is still and humid, dew is expressed through the flowers morning to make drops of water on the flowers.



A bee working Koto buckwheat. Dew drops are at the tip of many sepals, / Evaporation allowed the flowers to dry enough to open, and the bee was there immediately to gather pollen.

**Thomas Björkman,
Editor**

Dept. of Horticulture
Cornell University
630 W. North St.
Geneva, NY 14456

PHONE:
315-787-2218

E-MAIL:
tnb1@cornell.edu

www.hort.cornell.edu/
bjorkman/lab/buck/

Buckwheat flower festival in Vietnam

In the Northeast, September brings the Preston County buckwheat Festival, where buckwheat flour is the big attraction. In Vietnam, October brings the [Ha Giang buckwheat Festival](#) where buckwheat flowers are the big attraction. Tourism officials have planted fields of white, pink and purple flowering buckwheat as a draw for tourists.

Ha Giang Province borders Yunnan

province in China and is part of the original range of buckwheat. Since buckwheat is a wildflower there, there is considerably more variation in flower color than in varieties for grain.

In this area, buckwheat is planted for grain harvest both in the spring in the fall. But in the spring, tourists come for the cherry blossoms, not the buckwheat.

About the Northeast Buckwheat Growers Association

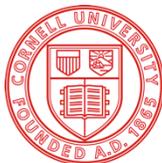
The NBGA is made up of about 150 buckwheat growers in the Northeast.

Membership may be obtained by contacting the editor and providing contact information (address, phone, email). There is currently no charge to join.

This semi-annual newsletter goes out to those who have signed up as members of NBGA. The printed version is sent to

members in the Northeast, and electronic version elsewhere. The complete member list is distributed to members each fall.

The Northeast Buckwheat Growers Association has been on the World Wide Web since 1998. An on-line Buckwheat Production Guide for the Northeast and back issues of this newsletter are available there.



Thomas Björkman *Northeast Buckwheat Growers Association*

Cornell University
New York State Agricultural Experiment Station

Department of Horticulture
630 W. North St.
Geneva, NY 14456