

Industrial Hemp: The Hope, the Hype, and the Harvest

BY MIKE ZABEL, BOARD CHAIR

As you read this, many of you are starting the fall crop harvest. While the details of gathering each crop differ slightly, the general goal is the same—reap the most from each acre while minimizing harvest losses. And whether the harvesting equipment is largely automated, or whether the harvest is performed by hand, the stresses and struggles to secure the crop apply to all.

This year, our own farm is experiencing a new challenge: Industrial hemp. We are currently one of only two growers, and most likely, the first-ever producers of certified industrial hemp seed in Minnesota. As with organic certification, Minnesota Crop Improvement has, once again, risen to the challenge of working with industry professionals to develop certification standards for this new crop in our state.

While growing the crop has not been inherently different from any other crop, we are facing many unknowns regarding the harvest process. We have also received numerous questions and sideways glances from curious neighbors and visitors to our farm.

There are no labeled herbicides for industrial hemp, so weed control has been less than satisfactory, especially since we are used to very clean fields with our other crops. Being particular about weed control, our attempts to manually eradicate weeds in the hemp fields feels as futile as trying to put out a forest fire with one’s breath, or trying to extinguish candles on a birthday cake the size of a football stadium.

Despite the weeds, the hemp has grown well and appears to have produced a good seed set. We are currently waiting for the crop to mature enough for harvest. The harvest challenges will be many. Moisture content is of particular importance. The grain must be harvested at a moisture content that not only minimizes shatter loss, but also reduces the chance that dry plants, with their extraordinary tough fiber, will wrap around the moving parts of the combine.

Following harvest—to maintain quality and prevent spoilage—the grain must initially be cleaned to remove a large portion of the foreign material, such as leaves, bits of stems, green weed seeds, etc. Once the initial cleaning has been completed, grain must be dried to a moisture content of around 9 percent for safe, long-term storage. The drying process will be completed in grain bins with fans using ambient air.

We are excited about this new crop and look forward to improving our management skills, not only for our own benefit, but for other, future growers. While the acres are limited at this point, it appears that the number of industrial hemp acres in Minnesota increased nearly 60-fold over last year’s initial 30-plus acres. All industrial hemp producers in Minnesota are involved in a pilot program through the Minnesota Department of Agriculture.



PHOTO BY KIM ZABEL

Mike Zabel observing his hemp field early in the growing season.

Hemp is grown in more than 30 countries around the world, including Canada. In the U.S., more than a dozen states (and counting) allow the legal growth of hemp. As the major commodity crops languish near unprofitability, the agricultural market is ripe for an alternative crop, but market demand will need to grow before widespread, large-scale production can occur.

An internet search on the topic of industrial hemp yields a plethora of information about products derived from the hemp plant, most of which show hemp’s promise to not only compete with, but to improve materials used in manufacturing and the building trades. In addition, hemp grain is high in oil content and is considered very nutritious and healthful. While industrial hemp contains virtually no THC, non-psychoactive cannabidiol (CBD) derived from the plant and/or grain is being used in the nutraceutical industry. According to its proponents, CBD holds great promise in the treatment of a variety of difficult-to-treat medical conditions.

Certainly, some of the promises promoted by industrial hemp’s advocates are more hype than hope, but many are credible. Industrial hemp will be a valuable addition to the agricultural production landscape.

Stay tuned. Following this season’s harvest, I and other industrial hemp pioneers, along with MCIA’s field supervisors, will be able to share valuable production information regarding this new cropping adventure.



PHOTO BY DAVE HANSEN, MAES

IN THIS ISSUE:

Industrial Hemp Field Day.....	2
Annual Meeting Information.....	2
President’s Corner— <i>Fawad Shah</i>	3
Organic Corner— <i>Michelle Menken</i>	3

White Earth Industrial Hemp Field Day

Researchers at the University of Minnesota have established several industrial hemp plots to evaluate the potential of the crop. MCIA staff members attended an Industrial Hemp Field Day at the White Earth Reservation, August 23, 2017. Visitors to the event toured the site's industrial hemp plots and learned about research trials of different hemp varieties that are grown for both fiber and oil.



Dr. George D. Weiblen, University of Minnesota, and MCIA President/CEO Fawad Shah discuss industrial hemp research results, as other visitors tour the test plots.



MCIA Field Services staff members, Seth Dagoberg, Kris Folland, and Lucas Wertish, along with MCIA President/CEO Fawad Shah, examine industrial hemp plants in the field.

PHOTOS BY DAVE HANSEN, COURTESY MAES

Recognize a Deserving MCIA Member!

MCIA members are encouraged to submit nominations for the Honorary Premier Seedsman, Premier Seedsman, and Achievement in Crop Improvement awards, which will be presented at the MCIA Annual Meeting in January.

If you know a producer, seed conditioner, or supporter of MCIA deserving of recognition, or if you have questions about nomination requirements, please contact Roger Wippler at 1-800-510-6242 or by e-mail at wippl002@umn.edu.

ANNUAL MEETING NOTICE

The MCIA Annual Meeting will be held January 10, 2018 at the Bigwood Event Center in Fergus Falls. Official proceedings will all occur in one day. The business meeting, informational presentations, trade show, and awards luncheon will begin in the morning and conclude late in the afternoon.

CALL FOR RESOLUTIONS

A draft of any resolution to be considered by the MCIA Legislative and Public Affairs Committee and forwarded to the floor of the annual meeting should be received by MCIA 14 days prior to the meeting.

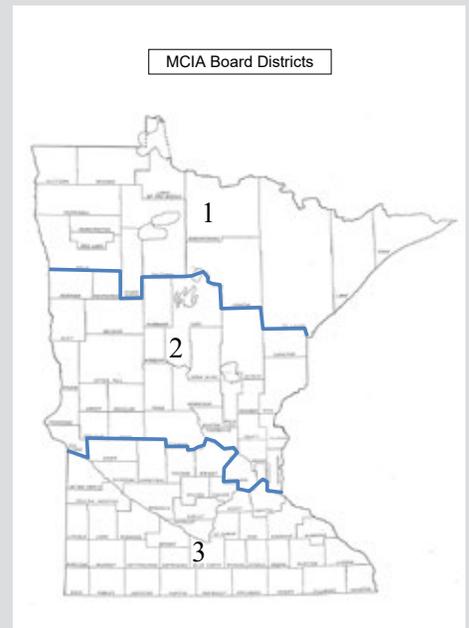
MCIA BOARD POSITIONS OPEN

MCIA is seeking candidates for positions on the MCIA Board of Directors.

The following seats are open: Jay Miller, Shakopee, Related Industry; Mike Zabel, Plainview, District 3; Kurt Flegel, Danvers, District 3.

Jay Miller and Mike Zabel are not eligible to serve another term. Kurt Flegel is eligible for re-election. The MCIA board districts are shown here. Related Industry is a state-wide position. Directors are elected by and from the members at the annual meeting to a three-year term of office.

To propose agenda items or resolutions for the annual meeting, or to nominate someone to serve on the MCIA Board of Directors, or to inquire about serving on the board yourself, please contact Fawad Shah at fawad.shah@mncia.org.





Minnesota Crop Improvement Association's seed laboratory reached its first anniversary on July 1, 2017. The journey to reopen was filled with action: preparing the lab for the testing season, communicating with growers, and hiring staff to support lab operations. Under the leadership of Laboratory Manager Jennifer Pernsteiner, the lab tested samples from fields inspected for certification. The lab also received a number of

customer-submitted samples, and performed tests to determine seed quality.

One of the objectives of reopening the lab was to provide customers with a one-stop shop for their seed certification needs. MCIA puts great emphasis on customer relations and constantly looks for additional ways to communicate. An important result of the lab reopening has been stronger relationships between MCIA and our customers. We received a noticeable increase in the number of telephone and e-mail inquiries regarding the seed lab and available tests. Connecting with existing and new customers through our lab activities has been a positive development for MCIA.

Exemplary customer relations is a priority in all service areas of MCIA. Continued growth in Organic Services is a testament that customer care is paramount to the success of any business. Foundation Seed Services is known for its relationships with customers as well as its close partnership with University of Minnesota researchers and the university's Office for Technology Commercialization. Field Services is considered MCIA's "boots-on-the-ground." Its staff regularly interact with customers in a variety of ways, including field and facility inspections. MCIA continues to build strong customer relationships through its publications: the quarterly newsletter the *Minnesota Seed Grower*, the monthly bulletin *Samplings*, and the annual *Directory*.

This is an unprecedented time in MCIA's history. The organization has built a strong reputation for delivering a diversified portfolio of quality services. At the same time, MCIA is facing the departure, due to retirement, of several seasoned staff members. To keep a healthy staff-to-work balance, and to ensure uninterrupted service delivery, MCIA made six hires during the last fiscal year—three since January 2017. These talented individuals, led and trained by experienced supervisors, are quickly learning how to perform the various tasks and duties of their jobs. They are also coming to understand the significance of creating a positive experience for our customers. I am confident that our new staff members will carry on MCIA's strong tradition of exceptional customer care well into the future.



Organic Corner

Michelle Menken, Organic Services Manager

Brenda Rogers will be retiring October 2. Please feel free to wish her a good retirement. Brenda has been with MCIA a long time and she has been part of Organic Services since we started it in 2002.

We are getting the last of the files out to inspectors and we are hoping just about everyone will be inspected by the end of the month. If you are planning to apply for cost-share, remember you can apply for a refund of up to 75 percent of all organic certification costs paid between October 1, 2016 and September 30, 2017. So, you may want to prepay your inspection fee to include it in cost-share. Let us know if you need to know the amount due. We will send out more cost-share information later this month.

We will finish up September sending the last files out to inspectors, conducting inspections ourselves, and completing Final Reviews and issuing certificates. By October we should all be working on Final Reviews and issuing certificates. If

you need a certificate or Letter of Good Standing, please let us know.

There are three things that are always prohibited in organic production and organic products. We call these the Big Three, listed in NOP §205.105(e), (f), and (g): GMOs, ionizing irradiation, and sewage sludge. Sewage sludge includes treated waste from a sewage treatment system, including composted waste (commonly marketed as *biosolids*), home septic system waste, and out-house waste. This summer we noticed that some farms are spreading septic system waste and out-house waste and treating it like raw livestock manure. This is not allowed.

According to the National Organic Program regulations, human waste is not treated as livestock manure. So, if you spread septic waste or out-house waste, you must find a place on your farm that will not have crops you want to certify—perhaps a permanent pasture for non-organic livestock or a wooded area. Next year we will add this question to our Organic System Plan and Inspection Report. If we find you have applied sewage sludge, the field will require a three-year transition.



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I certify that the statements made above are correct and complete. —Alan Makinen

CALENDAR

NOVEMBER

- 2–4 South Dakota Local Foods Conference, Spearfish
- 4–7 Western Seed Association Conference, Kansas City, MO
- 9 AgriGrowth Meeting & Conference, Minneapolis
- 19–20 Iowa Organic Conference, Iowa City
- 14 MCIA Board Meeting, Saint Paul
- 23–24 MCIA Office Closed

DECEMBER

- 4–7 ASTA CSS 2017 & Seed Expo, Chicago IL
- 13–14 Prairie Grains Conference, Grand Forks, ND
- 25–26 MCIA Office Closed

JANUARY

- 1 MCIA Office Closed
- 10 MCIA Annual Meeting, Fergus Falls
- 11–12 Minnesota Organic Conference, Saint Cloud
- 15 MCIA Office Closed
- 24–25 MN Ag Expo, Mankato
- 25–27 NPSAS Winter Conference, Aberdeen, SD

For more event information visit www.mncia.org.