

Ag and Innovation: Biologics

Interest and drawbacks of the new science

BY SHAWN DIGITY
sdigity@iafalls.com

In preparation for the 2023 planting season, ISU Extension agronomist Angie Rieck-Hinz of the state's Region 3 recently discussed some of the newest and hottest trends in the ag world and how they might be factors in the '23 season and beyond. And more than anything, the concept of biologics became the most significant bullet point of interest.

But before informing on the newer biological-agricultural science, Rieck-Hinz recommended some other more fundamental measures that farmers could take before attempting to introduce innovations to their process.

"I would say if people have dollars to invest, I would ask them where they are," she started. "First, I'd start with fertility; I want my soil fertility to be in those optimum categories, so I can maximize yields, and I don't short myself on yield but not overapply fertilizer that I'm wasting it, that I lose it to erosion or leaching or loss of nutrients that cause an economic concern... [And] a lot of people kind of forget about liming and getting their soil pH to where they need to be."

Though, she suggested keeping it simple before looking to branch into the biological realm. "I always tell people to start with the basics, and if they want to try something new for 2023, biologics are a hot topic right now, adding biologics to soils or seed or whatever the case may be... There's a lot of companies investing billions of dollars in biologics that are supposed to unlock our soil potential, potential nutrients in our

soil. But I would say make sure you have all the basics in place first: make sure your fertility is optimized, make sure your pH is optimized, make sure... you're optimizing your seeding rate and your planting time and all those things."

With that, she defined what's meant when referring to farming biologics: "A biologic is a product that, most of the time, has a living organism in it, some kind of microbe that's supposed to gain us some benefit by being in



SHAWN DIGITY / TIMES CITIZEN

Soil fertility is very important and biologics are used to unlock soil potential and nutrients.

the soil."

Additionally, according to the agriculture-centric website Agricen, biologics are "one of the fastest-growing segments in agricultural inputs." They're a "diverse group of products derived from naturally occurring microorganisms, plant extracts, beneficial insects, or other organic matter."

More so, biologics can be broken down into three categories based on their functions: "bio-stimulants (plant growth/productivity enhancement products), bio-pesticides (plant protection or bio-control products), and bio-fertility (plant nutrition products)."

With the wide scope of usage, it's not hard to understand why there's a curiosity behind the concept. But as Rieck-Hinz explained why there's an inquisition — and why it might be worth checking into — she encouraged those efforts only if there

is the wherewithal to do so.

"If people want to try it, they should try it, but they should start small, try a few acres, plant [as] such that they can combine out those strips with and without that biological treatment so that they can give it a fair comparison between the strip that didn't have the extra material versus the strip that did. And then replicate that a couple of times in the field. It's hard to be sure that what you're seeing is actually an effect

of the new product if you only have one strip out in a 160-acre field..."

"So if people are interested in those kinds of things, and they have the dollars to invest in them, I encourage them setting up their own farm trial to explore what that might look like on their farm."

So while Rieck-Hinz encouraged the trial runs if a farmer has the means, it's ultimately still a newer science, and what's successful on one farm might not be replicable on another. Therefore, she cautioned, "I think everybody's going to see a different response, and then I think people are going to see a different response depending on how much rain we get or how dry it is this year."

So while a shift toward biologics could become more popular in the coming years, it's still at a point where the variability is tough to predict with

all the regular contributing factors coupled with the microorganisms from farm to farm.

"This whole area of research and stuff is fairly new yet. It's a really hot topic right now in ag. Because people are like, 'Well, if I put on this biologic that's known to make my phosphorus more available in the soil, maybe I don't have to put on as much commercial fertilizer.' That's the premise under — just an example — of which some biologics might be being sold."

So the interest is there already, as Rieck-Hinz stated, but the process is still experimental in some ways, and it isn't without its trade-offs, and she continued, "The concern is always this: We don't have a lot of sound research on those products yet."

"And then, they tend to act differently under different soil conditions. So if somebody sees a response to that biologic or that microbe that they put on, whether they put it in furrow while they were planting that seed or it's actually a seed treatment, so it gets coated on that soybean or corn seed. Whether they actually see a result that increases their yield or not. Those are pretty highly variable results yet at this point in time."

There's plenty of curiosity about the idea either way, as Rieck-Hinz explained. And where biologics will be 5 or 10 years from now is yet to be known, but according to the agronomist, "There's a lot of interest in doing this. So if people want to do it, I would encourage them to set up some good strip trials in this."

And for those looking to make the leap — or at least give it the old college try — then Rieck-Hinz is available to help out where she can: "They want some consultation on how to do that kind of thing on their own farm, I'm happy to help them with that," she concluded. ■



IFSB to continue Community Challenge

The Barlow Family Foundation legacy will live on through Iowa Falls State Bank Community Impact. Community Impact is the charitable giving side of Iowa Falls State Bank. This includes donations, grants and scholarships that are given by Iowa Falls State Bank. Just as it has been done previously, by the Barlow Family Foundation.

Crystal Doering, senior vice president and community impact team director, said, "The Community Challenge is an important tradition to Iowa Falls State Bank, and we knew we needed to continue it. Each year it is inspiring to see the passion and support the community challenge brought to organizations, not just financially matching funds, but also attending events, helping the organizations reach goals and continuing to encourage growth on projects that made organizations Dream Big."

Iowa Falls State Bank Community Impact Team will be made up of employees of the bank, members of the community and students of the Iowa Falls Alden High School. This Committee is responsible for carefully reviewing and considering all eligible applications for community projects based on guidelines and qualifi-

cations. The Youth Impact Team is a component of Iowa Falls State Bank Community Impact Team. This youth team allows juniors and seniors from Iowa Falls-Alden Community School to gain leadership skills and experience philanthropy first hand.

Important Dates to Remember:

* Fall general funding requests and challenge applications are Due by 5 p.m. on Aug. 31, 2023.

* The 2023 Community Challenge will take place Oct. 11-25.

* Special application requests may be reviewed and granted throughout the year.

Visit www.ifsfb.com to learn more about application guidelines, requirements and how students can apply and become part of the Impact Team, or contact Crystal Doering, SVP/Impact Director cdoering@ifsfbank.com.

Iowa Falls State Bank is a community bank that takes pride in developing deep life-long relationships based on thoughtful, reliable and confidential service. Their stable yet progressive culture provides the foundation for their employees to serve the full range of financial needs of their customers. ■

Community Briefs

Easter Egg hunt today

Iowa Falls Chamber Main Street will be hosting their annual Easter Egg Hunt 10 a.m. today, Saturday, April 8, at Rock Run Elementary School. The event is for kids preschool through second grade, and each child is asked to bring a bag.

E-Squad breakfast

The Hardin County E-Squad will be holding their annual breakfast 7 to 11 a.m. today, Saturday, April 8, at the Iowa Falls Moose Lodge. Menu includes pancakes, biscuits and sausage gravy, eggs made to order, bacon, sausage links or patties, hashbrowns and milk, juice or coffee. Free-will donation.

ISU Statesmen to perform

The Iowa State University Statesmen ensemble will perform at 7 p.m. on Thursday, April 13, at Iowa Falls-Alden High School auditorium. The Iowa Statesmen, one of the region's leading men's choirs, was founded by Dr. Rodde in the fall of 2000. The ensemble specializes in the performance of traditional and contemporary

male chorus literature. The group gives various performances during the year and enjoys playing an active role in the Iowa State community. The concert is free to the public and is sponsored by the Hardin County Endowment Fund and the Evelyn and Eleanor Schiller Endowment Fund.

ECC Without Borders

Ellsworth Without Borders returns at 1 p.m. Monday, April 10. The event will be at the Barlow Library in Iowa Falls and will feature two student-athletes from Japan - Bruce Kanno and Kotaro Nakagawa.

E-NP Spring Concert

The Eldora-New Providence Elementary Spring Concert will be Tuesday, April 11 at South Hardin High School. The concert will begin at 6:30 p.m. for grades K-2; and at 7 p.m. for grades 3-5. The concert is free and open to the public.

Tree Keepers tree adoption

The Iowa Falls Trees Forever Tree Keepers will be offering hundreds of small trees free for adoption from 8 to

11 a.m. Saturday, April 22, or until all the trees are all gone. The trees will be available at the City Garage (across from the fire station) and the group will have plenty of planting and care information along with mulch available. Tree protection help will also be available. For more information visit <http://www.cityofiowafalls.com/tree-adoption.html>.

Authors to speak April 15

Three Iowa authors will read from their work from 1 to 3 p.m. Saturday, April 15, at the Iowa Falls Community Theater Building at 510 Stevens St.

The authors are Marci Bolden of Newton, Dennis Maulsby of Ames and former Iowa Falls resident Myron Williams of Cedar Rapids. Music and finger foods will be offered at the free event. The authors will have copies of their books for sale after their readings.

100+ Women to meet

100+ Women of Hardin County will hold their first meeting of 2023 at the Hubbard City Library, 218 E. Main St., in Hubbard on Monday, April 24. Social hour begins at 5 p.m. Meetings are one hour, from 5:30 to 6:30 p.m. In the past 10 years, this group has donated over \$102,000 to organi-

zations in Hardin County, and they are looking for new members. To learn more, contact a steering committee member to attend the April 24 meeting with no obligation.

Steering committee members include Kathy Enslin 319-415-6268; Toni Nederhoff 641-485-0880; Brenda Doering 515-290-4472; Christine Axiotis 641-425-6031; Connie Wubbena 641-373-4490; and Gwen Groen 319-939-3816.

Greg Warren Comedy Show

Comedian Greg Warren will perform for one night for an all-ages show at 7 p.m. today, Saturday, April 8 at Hamilton Auditorium on the Ellsworth Community College campus. Tickets are \$20 per person. The event is sponsored by Mo's Gym, Mid-Iowa Group, Thrivent and Relion Insurance. Contact the ECC Foundation office at 641-648-8575 for more information.

Popcorn Party set April 14

Hardin County Community Partnerships for Protecting Children will be hosting a Popcorn Party at the Iowa Falls Popcorn Stand 4 to 5:30 p.m. Friday, April 14. As well as free popcorn and family activities, people can meet local heroes. ■

Men's Bridge Marathon finishes '22-'23 season

The Men's Bridge Marathon, benefiting the Hansen Family Hospital Foundation, finished the 2022-23 season with a fun night at the Iowa Falls Elks Lodge on Monday, April 3. There were eight pairs participating this year. In a remarkable outcome, there were three teams that finished within 1,000 total points for the season.

The team of Duane Kruckenberg and Duane Schulz earned overall honors this year. Close behind were the pair of Dick Winder and Bob Burns. In hot pursuit but ending in third place were Charlie Gilbert and John Ibeling.

Other players in this year's Marathon were Dr. Joe Brunkhorst and Martin Dittmer;

Joe Scallon and Chris Sparks; Dr. Les Meier and Larry Phipps; and Fran Buckel and Dave Gimer.

The Marathon is constructed such that every pair plays every other pair at a time and location of their choosing, anytime between Labor Day and the first Sunday in the following April. A group function is then held the first Monday of April.

If interested in joining the group, or to learn how to play Contract Bridge, please call or message Dave Gimer at 641-373-0821, or contact any of the previously listed participants. You will be welcomed by this fun group with a worthwhile goal, supporting the local hospital. ■

ELDORA CLEANUP

Eldora City-Wide Door-to-Door Clean-up Day!

Sat., April 29, 2023 - 6 AM-10 AM

Items NOT accepted:

- TV's, liquid paints, household garbage, tires, tree trimmings, lawn materials, batteries, carpet, metal and appliances

Appliances will NOT be picked up this year. Contact a local recycler if you need an appliance picked up.

IMPORTANT - All items for pick-up should be curbside at your residence the evening before Friday, April 28, 2023.

No more than one cubic yard of material which would equal 5 large garbage bags or 1 oversized chair.

After items are placed curbside we cannot guarantee pick-up of those items.

Collection will be completed by: Stone Sanitation

If you have any questions please call city hall at 641-939-2393