



FIRST *in the* **FIELD**

**FROM
THE**

field

CHS AND THUNDER SEED

A Deep-Rooted Relationship

Growers in northwestern Minnesota's tough, rocky soils require seed with traits suited for those challenging conditions. CHS Mahnomen provides Thunder Seed varieties that have good IDC scores and resistance to soybean cyst nematodes, making them ideal for the region's soils.

Jason Starkey, station manager at the Callaway substation of the CHS Mahnomen, has been a Thunder Seed dealer for more than 15 years. Although the season began with excess moisture, Starkey said the Thunder Seed soybean and corn varieties performed well this year.

Starkey credits his customers' success to Thunder Seed soybean varieties, such as 33009 R2YN, 31009 R2Y and 3205 R2Y. The IDC scores and relative maturities of .5 to .9 are well suited to the soils and are resistant to soybean cyst nematode, which is common in the area.

"Year after year, Thunder Seed corn and soybean varieties have produced great yields on the grounds in the Mahnomen area," he said. "As new varieties are introduced, we try them and select the ones that work best for our soils."

Starkey has attended the Thunder Seed plot tours and dealer meetings. He said his relationships with Thunder Seed Chief Production Officer Jeff Bates and the Thunder Seed owners has been great.

"Any time I need something, I can get a hold of Jeff or one of the owners and get the answers quickly. Jeff comes out to speak to the farmers when we have seed questions, as well. They're really trusted partners."

Now, with the harvest behind them, growers are starting to plan ahead. Starkey said there's lots of talk about soybeans, and several have already pre-booked for 2015. And even though everything isn't quite nailed down for next year, one thing is for sure: While growers can't control Mother Nature, with Thunder Seed and CHS Mahnomen they will have the best quality seed in the ground.



DON'T LET DISEASE

Diminish Your Soybeans

By Erick Grafstrom, District Sales Manager



With the harvest in the bin, it's time to start planning for next season. While no amount of preparation can protect against adverse weather, thorough planning can minimize the potential for that other perennial yield killer: disease.

The soybean cyst nematode has been harassing southern Minnesota farmers for a few decades, but it is fairly new to North Dakota. Nematodes have recently been confirmed in Cass County, North Dakota, and Clay County, Minnesota, but the problem is slowly moving north. The pathogen often spreads from field to field in the dirt carried on farm equipment, and the number of nematodes can greatly increase in just one growing season. They attack the plant's roots, which can stunt its growth, turn it yellow, and, if unchecked, leave the plant susceptible to the fungus that causes sudden death syndrome.

There are some nematicides on the market that kill the pathogen, but they are expensive and not always effective. Nematode-resistant varieties are the best weapon, and Thunder Seed's 3408 R2YN variety provides excellent resistance. It is also consistently high yielding, has great standability and a 2.3 Iron Deficiency Chlorosis score. So far, nematodes have not been a big problem in northern maturity zones, but it's only a matter of time. For that area, our 33009 R2YN variety provides great nematode resistance and has an excellent 1.7 IDC score.

Phytophthora root rot is another serious problem in this region. The Phytophthora fungus can attack the plant at any stage of development and dramatically reduce yields. Advancing seed genetics have helped, and the 3a gene is the latest trait to provide resistance against Phytophthora.

Thunder Seed's 3505 R2YN variety is new for 2015. In addition to having the 3a gene, the 3505 R2YN produces consistently high yields. It is also nematode resistant and has great field tolerance, which means the variety is resistant to mutations in nature. Our 3303 R2Y variety also has the 3a gene. It offers the best Phytophthora tolerance in its class and has repeatedly proven its outstanding yield potential.

White mold is more common in canola, sunflowers and other dry beans, but it can be an issue in soybeans. This disease requires a lot of moisture while the plant is blooming. Hail-damaged soybeans also are susceptible. White mold can be especially frustrating because it can move into the soil and remain there over the winter.

If you've had issues with white mold in the past, our 3307 R2Y variety will be a good choice because it provides excellent tolerance and a 1.8 IDC score. If you farm north of Grand Forks, North Dakota, the Astro R2Y variety has great white mold tolerance and is one of the top-yielding varieties in the 0.0 maturity zone.

Brown stem rot is another disease to keep on your radar. It hasn't been seen much in our area yet, but it is common in states where farmers have been growing soybeans for longer than we have. If it does become an issue, our new 3506 R2YN variety is resistant to brown stem rot and soybean cyst nematodes.

There are several measures you can take to protect your soybeans. Good crop rotation is key to reducing the chance of disease in your fields. However, markets fluctuate, and the ideal rotation isn't always feasible. Seed treatments are a great way to improve early season vigor and defend against disease and insects. Taking soil samples can help you anticipate certain issues, such as nematodes or IDC. It's important to scout your fields during the season so you can spray a fungicide to combat any problems that arise. All these precautions can help, but if any diseases plague your fields, planting varieties developed specifically to resist them is the best way to maximize your yield potential.

Erick Grafstrom is a district sales manager and agronomist at Thunder Seed. His diverse and extensive experience includes crop advising, selling seed and cultivating dealer relationships. He also worked as a research technician in the Crop and Weed Science Department at North Dakota State University.

Read and You Shall SucSeed

ANALYZING PLOT DATA IS KEY TO EFFECTIVE PLANNING

By Jeff Bates, Chief Production Officer



Trial data from the 2014 growing season is rolling in, so we now have the latest information to help you plan for spring planting.

We test all varieties in our own fields, of course, but we don't just rely on those results. Between county, co-op and dealer plots, and plots operated by North Dakota State University and other research institutions, Thunder Seed varieties are tested in more than 200 locations throughout the upper Midwest.

The data from these third-party replicated trials helps us determine not only which varieties perform best, but also where they perform best. With this information, our district sales managers and dealers can help farmers select varieties with the best maturities and traits for their specific soils and conditions.

This data is equally important to you. Effectively analyzing test plot results can have a big impact on your yield and profit potential. There are a few things to keep in mind when sifting through the stack of information.

First, and most importantly, don't base your seed decisions on data from one plot alone. It can be tempting to get excited about a variety that yielded very high in a plot near your farm, but consistency is the most important factor. Weather and soil conditions that affect performance can vary greatly between plots and from year to year. If you are interested in a particular variety, analyze how it performed in several plots and, if possible, how it performed in previous years.

Crop rotation is another factor to consider. All trial results should include planting date, harvest date, previous crop and whether any pesticides or herbicides were used.

With so many varieties available, you'll want to analyze each one you're considering and make sure it has traits equipped to resist the potential yield reducers in your fields. You'll also want to check if the soil conditions from the test plot were similar. For example, if your fields have issues with Iron Deficiency Chlorosis or soybean cyst nematodes, you'll want to review data from other plots with the same challenges.

Data that can help you select the best variety for each of your fields is out there and just a call or click away. Your local Thunder Seed dealer can help answer any questions you have regarding trial data or variety performance, and for 2014 plot data on all Thunder Seed varieties, visit www.thunderseed.com.

Jeff Bates is Thunder Seed's chief production officer and key accounts manager. He has more than 25 years of seed industry experience.



BE FIRST TO GROW

THUNDER SEED

Sunflowers

IN YOUR FIELDS



FIRST *in the* FIELD



You Asked, **AND WE LISTENED.**

We're excited to be your new partner for top-quality sunflower seed. Our three new varieties are all Clearfield® hybrids, which makes them tolerant to Beyond® herbicide for excellent weed control. Whether you're growing for the high-oleic or NuSun® markets, our varieties produce excellent yields and high oil content.

Thunder Seed sunflowers also have several traits that make them well suited to the soils of the upper Midwest. The early-maturing **35H92** produces high-oleic oil quality. It performs well in all sunflower maturity regions and has excellent disease resistance. The medium-maturing **42H94** also produces high-oleic oil quality and offers excellent yield potential and stalk quality.

For the NuSun® market, our medium-maturing **11N94** has strong stalks and roots as well as excellent tolerance to sclerotinia head rot. In addition, all three varieties are resistant to several races of downy mildew, which can stunt sunflowers' growth and significantly reduce yields.

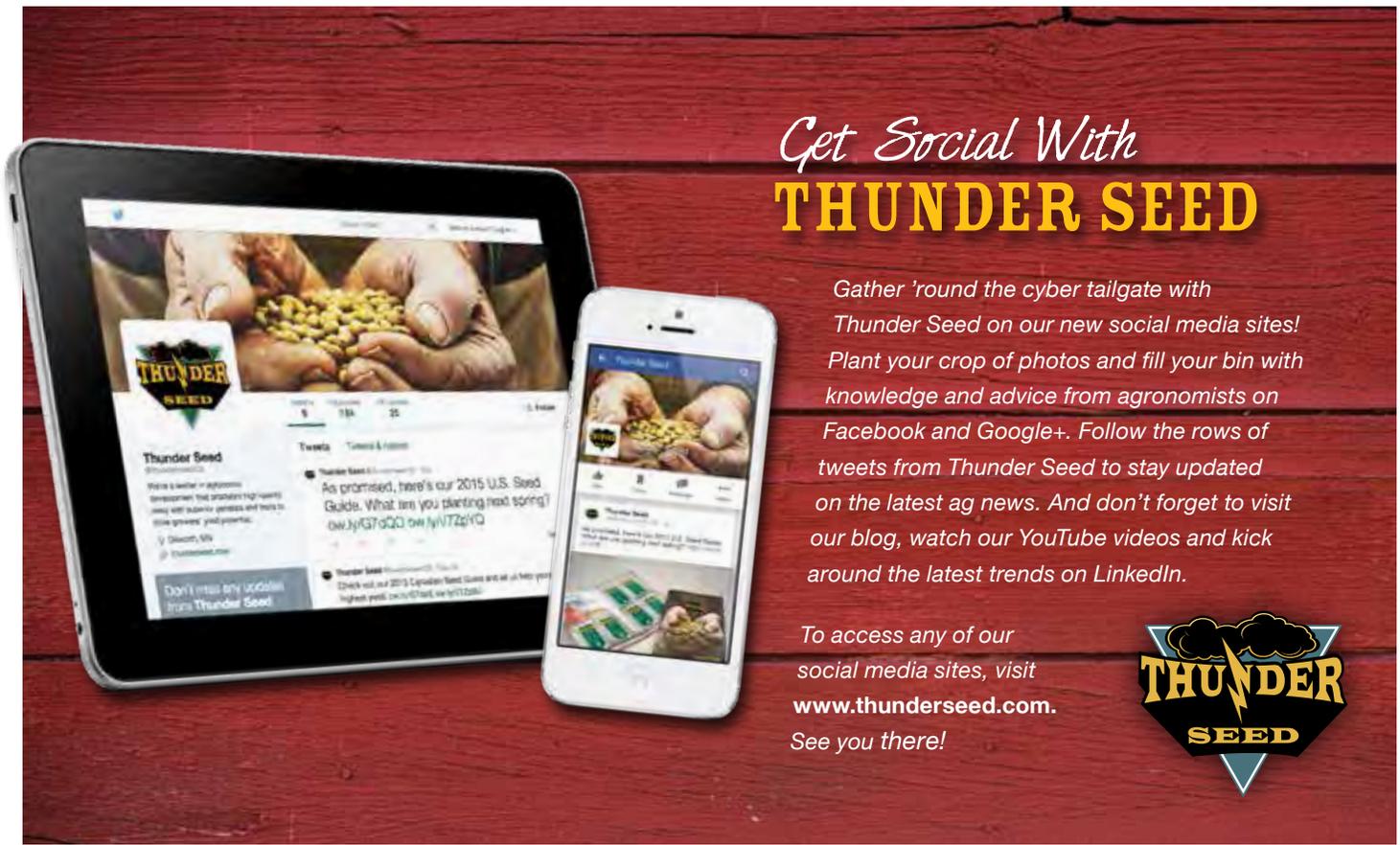
These varieties are available now. Talk to your local Thunder Seed dealer today for more information on how you can maximize your potential with Thunder Seed sunflowers.



FIRST *in the* FIELD

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To access any of our social media sites, visit www.thunderseed.com. See you there!

