HOMING IN ON HIGH OLEICS

Focusing on high oleic hybrids has been advantageous for this North Dakota grower.

For North Dakota farmer Adam Bettenhausen, growing sunflowers is second nature.

"My grandfather and my dad started growing sunflowers pretty early on when they started to become a real cash crop. We've stuck with them ever since," says Bettenhausen.

The slate of sunflowers at Bettenhausen Farms has varied over the years, but recently the focus has shifted to high oleic oil hybrids.

"We wanted to focus with just one type of sunflower. At the time high oleics were our best moneymaker. So, we've moved the whole farm in that direction," says Bettenhausen, who makes a practice of field-testing a number of new high oleic hybrids every year.

In 2018, Bettenhausen's trials included N4H302 E, a new high oleic hybrid from Nuseed with the Dupont™ ExpressSun trait providing tolerance to Express herbicide.

Bettenhausen says he chose the hybrid because of stubborn weed issues on his farm.

"We're constantly looking for something else to add to the arsenal, and this new Nuseed hybrid fit that bill, so we thought we'd try it out," Bettenhausen says.

"In this area, we struggle with kochia and a couple other broadleaf weeds. We really couldn't seem to do a good job with Beyond, and if you compare the systems as a whole, the Express versus the Clearfield package, Express is a lot cheaper to use. So, we were interested in moving in that direction."

For the N4H302 E trial, Bettenhausen utilized variable rate seeding and planted between 19,500 and 24,000 seeds per acre.

"Everything was timely and went pretty well as far as planting. The sunflowers handled disease well," says Bettenhausen. "The stand was good [and] there were no lodging problems or any kind of issues getting them harvested."

Production Tips

Bettenhausen says it pays to give sunflowers the same care and attention as other crops.

"Nowadays, everybody is putting every little thing into a corn crop or a soybean crop. They're putting multiple applications of fertilizers, splitting up applications, using biologicals, et cetera," says Bettenhausen.

"If even half of this management effort is put into a sunflower crop, you can definitely make your money back."

Bettenhausen says cutworms can be a problem in his area, so he typically applies an insecticide at planting to help control the pest. He adds weevils can also be an issue at the sunflowers' head-fill stage.

"We've struggled with them for the past couple of years and that requires being really diligent," says Bettenhausen, who scouts his sunflower fields for emerging weevils and will order aerial spray applications once an appropriate threshold is reached.

Bettenhausen notes that large flocks of migrating blackbirds will often nestle into his sunflower fields to feed in the fall. "They can take out a lot of the yield," he says.

SNAPSHOT
Grower: Adam Bettenhausen
Farm: Bettenhausen Farms, Wishek, North Dakota
Crops: Sunflowers, soybeans, corn, canola, spring wheat
Sunflower Acres: 1,200 to 1,800

Bettenhausen will utilize wildlife cannons and pyrotechnics to try to keep the birds away but acknowledges that can be labor intensive. For this reason, he prefers to desiccate and harvest his sunflowers before the blackbirds show up.

"If you can get them off before the birds move in, that can be pretty advantageous," he says.

For Bettenhausen, it's also beneficial to bring his product directly to sunflower processors, which is why Bettenhausen Farms has a large amount of on-farm storage and also its own trucks for hauling the crop to crushing facilities.

Bettenhausen says about a third of his sunflower crop was forward-contracted to processors last year and he'll likely do the same this year.

"The rest is held on to in storage and we try to hit seasonality in the market in the June-July timeframe. We usually find that sunflower prices generally are the best at that time of year," he says.

SUNFLOWERS HIT THE SWEET SPOT

Sunflowers are good for the soil and for this South Dakota grower's bottom line.

South Dakota farmer Colby Brink has been growing sunflowers for more than 30 years. He plans to keep growing them for the foreseeable future because they're good for his farm's bottom line.

"The No. 1 reason we plant sunflowers is profitability," says Brink. "Sunflowers have consistently been a crop that pencils out, some years better than others, but it always pencils in the positive."

Brink notes that because sunflowers have deep penetrating taproots that can access hard-to-reach nutrients and are also drought tolerant, they're an excellent match for the soils and dryer climate of central South Dakota.

"Because of that, it's hard not to plant them, and so sometimes we have to remind ourselves to follow our rotations and not get greedy," he says.

Until recently, the bulk of Brink's crop has gone to the NuSun® oil or bird food markets. In the past few years, he's also started growing sunflowers for the high oleic oil and dehull markets.

Last year, Brink had an opportunity to field-test a new high oleic hybrid from Nuseed called N4H470 CL Plus, with the Clearfield Plus production system for sunflowers. He was very pleased with how his trial of the new hybrid turned out.

"The plantability was fantastic – good singulation and good spacing. They looked good coming up and everything was phenomenal with them," Brink says.

He adds that aside from some Folicur fungicide he mixed with his insecticide spray at flower, the Nuseed hybrid he trialed didn't require any disease treatments, largely due to South Dakota's hot, dry summer in 2018.

Production Tips

Brink maintains the key to a successful sunflower crop is to ensure your fields are clean at planting.

"THE NO. 1 REASON WE PLANT SUNFLOWERS IS PROFITABILITY."

"Kochia and pigweed have become huge problems in sunflower fields, especially those that did not have a good pre-emerge and burndown program," he says. "If you don't manage those tough-to-control weeds before planting, you will have very little chance of doing that once the crop has emerged.

Brink says another important step in attaining higher sunflower yields is ensuring proper seed treatment and placement.

Last year, we treated everything with Cruiser and Plenaris. This gave us hands down better control of early season downy mildew, and by far better flowability and singulation."

Brink advises sunflower growers to scout their fields weekly to stay ahead of in-season weed, insect and disease problems, and to also always maintain proper settings on their combines when harvesting the crop.

SNAPSHOT
Grower: Colby Brink
Farm: KCM Partnership in Pierre, South Dakota
Crops: Sunflowers, wheat, corn, soybeans, milo
Sunflower Acres: 1,000

Brink believes diversification is important when it comes to marketing sunflowers. It's why he'll usually grow a number of different market types at his farm, marketing a percentage of his crop prior to planting and then the rest during the growing season as the crop develops.

Brink says he's a fan of Nuseed's sunflower portfolio because they are developed in the United States and are tailored to fit farmer and processor needs.

"I am very confident in the hybrids that Nuseed brings to market as they're the ones processors are specifically asking for," he says.

REAPING THE REWARDS OF **GOOD CROP MANAGEMENT**

A Red River Valley grower treats his sunflowers like a high-value crop and is handsomely rewarded.

Glenn Heuchert is a long-time sugar beet grower in North Dakota's Red River Valley who didn't think much of sunflowers before growing the crop about 20 years ago.

"I used to classify them as a weed, but then I started growing sunflowers and making money on them. I've said as long as they're working, I want to keep growing them," Heuchert says.

"I treat my sunflowers just like I do my sugar beet and edible bean crops. If you want to make money on them, you need to treat them like a high-value crop," he adds. "I've made good money in sugar beets but there's been some years I've made even more on sunflowers."

In recent years, Heuchert has been growing both high oleic oil and NuSun sunflower hybrids on his farm. In 2018, he field-tested N4H302 E, a new high oleic hybrid from Nuseed with the DuPont ExpressSun trait providing tolerance to Express herbicide.

The new N4H302 E yielded 2,700 pounds per acre for Heuchert. "Anything that's over 2,000 pounds is a good crop as far as I'm concerned," he says.

"It came out really consistent – it seemed like everything I planted came up," Heuchert adds. "The plants all stood well and had even height. The spacing was perfect so they all had a uniform head size."

Heuchert says due to minimal weed pressure he didn't need to apply Express or any post-planting herbicide. North Dakota's hot, dry summer in 2018 meant there wasn't much in the way of disease either.

Production Tips

Heuchert says he usually trials three different hybrids on his farm every year. He says he looks for high test weight and oil content and, of course, a good yield – but what he values most is consistent results.

"I like a hybrid that is consistent for two, three, or four years, so I can adapt it to varying weather conditions. I've had some hybrids that one year yielded 3,200 pounds per acre, and the next year it was a complete dud."

Heuchert says one of the things he's learned during his years of growing sunflowers is the importance of proper seeding.

"Every grower needs to find out what is the optimum spacing that works for him, how many seeds he needs to drop, what are the survival rates, and everything else you need to know to get an even, consistent stand," he says.

"I used to try dropping 23,000 seeds per acre in 22-inch rows, because I felt I'd have better emergence," Heuchert adds. "I felt that my stalk strength may have been suffering because the population was too high, so this year I dropped the seeding rate down to 21,000 seeds per acre and I still had a good stand."

Heuchert says he typically desiccates his sunflowers to avoid crop losses prior to harvesting. "It's more consistent than leaving it up to Mother Nature, plus you don't have to deal with damage caused by birds and wildlife in your fields."

SNAPSHOT
Grower: Glenn Heuchert
Farm: G & C Heuchert Farms, Grafton, North Dakota
Crops: Sunflowers, sugar beets, edible beans
Sunflower Acres: 300 to 700

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TAPPING INTO WATER EFFICIENCY

With water a large consideration, this Colorado grower focuses on sunflowers.

Patrick Hume is one of many farmers in Colorado's eastern plains region adversely affected by declining groundwater levels. Hume and his dad, Charles, co-owners of Big Flat Farms, used to be primarily irrigated corn producers but they've switched their focus to a crop that needs much less water.

"We have water issues, and sunflowers just work for us. You can get about as much gross profit with them as you can with corn, using about a third of the water," says Hume, noting that half of his sunflower crop is farmed under dryland conditions and the rest receive minimal irrigation.

Hume says because sunflowers are a broadleaf crop, it allows his farm to diversify its rotation and also leverage different chemistries, "so we can directly combat resistant weeds."

"Sunflowers also seem to really scavenge nutrients left in a field after a corn or milo crop that other plants don't," he adds.

"Sunflowers do an excellent job of eliminating any stubble that you might have left from a previous crop, which in my mind is great because that usually gets turned into soil organic matter that holds water – and water is our number one limiting resource here. So, for us, it's a pretty good fit."

Hume says his father started growing sunflowers more than 30 years ago. During that time, the farm has produced sunflowers mostly for the high oleic oil market.

Last year, Hume's farm trialed N4H521 CL, a new high oleic hybrid from Nuseed, with the Clearfield production sysytem for sunflower with tolerance to Beyond herbicide. N4H521 CL also has resistance to downy mildew.

Hume says he was impressed with N4H521 CL's emergence and standability. Hume notes there were some lodging issues due to high winds at one point in the season, but he says the new hybrid seemed to fare better than test plots of other hybrids he grew.

Hume was also pleased with how well the N4H521 CL hybrid held up at harvest. "It harvested fine and they didn't break open before I could get them in the header," he says.

Production Tips

Hume says it's crucial to ensure your fields are protected from wind erosion in drier regions like his. To keep the soil from blowing away, Hume will plant his dryland sunflowers into corn, wheat and milo stubble.

"You need to make sure that your ground's covered before you even attempt sunflowers in dryland conditions," he says. "I learned that lesson the hard way by trying to plant them in a year that had quite a bit of drought."

Hume says it's also important when growing dryland sunflowers to ensure that pre-emergence herbicides are put down early and are adequately incorporated into the soil – which often means keeping a close eye on the weather for timely rainfall events.

Without a proper pre-emergence program, Hume adds, "you're just going to be fighting weeds the entire season and you're probably not going to have a very good experience."

Hume recommends that growers follow at least a one-in-three-year rotation for their sunflowers to avoid disease issues, and cautions growers to always keep track of their chemical applications.

"I know there are quite a few corn herbicides and plenty of milo herbicides that will mess up sunflowers," he says. "If you have accurate records and can go back and see everything you've put on a certain field for at least two years, if not further back, this will help you have some success."

SNAPSHOT
Grower: Patrick Hume
Farm: Big Flat Farms, Springfield, Colorado
Crops: Sunflowers, corn, milo, winter wheat
Sunflower Acres: 2,000