

GREENEYE SELECTIVE SPRAYING

Diversification, innovation and delivering exceptional value to NuWay-K&H Cooperative patrons is at the core of every decision we make. Our investment in Greeneye Technology will unlock the benefits of precision spraying for our members by helping them efficiently utilize input dollars, increase crop yields, and support sustainability. Through the cooperative business model, we are able to utilize our network of resources and offer this technology as a custom spray service for all to benefit from.

HOW DOES IT WORK?

Our Hagie STS1600 has been retrofitted with a Greeneye selective spraying system (SSP) which transformed it from a standard, broadcast sprayer into a smart sprayer that will use camera vision, artificial intelligence, and deep learning to revolutionize application practices. Cameras mounted along the boom capture high-resolution images of the field, which are then fed back to the system's graphics processing units (GPUs). The GPUs calculate the exact amount of product required and signal to the appropriate nozzles to open, spraying only the targeted area. Spraying with Greeneye can be carried out at the same travel speed as broadcast spraying – 15 mph – ensuring no reduction in productivity for growers.

When selective spraying applications are not necessary, dual lines and nozzles at 10-inch spacing give us the ability to specifically apply value-added products such as biologicals, fungicides, and micronutrients directly over the row using the precision line, while applying broadcast products through the main line. This will help growers spread out input dollars and boost crop production potential.



BENEFITS

Dual Line: Allows us to broadcast apply one set of crop protection products through a main spray line while simultaneously applying a second set of crop protection products through a site-specific spray line providing unrivaled efficiency.

Precision-Line Spray Tank: Having a separate spray tank on the sprayer allows us to use our full 1,600-gallon main tank capacity, effectively reducing load frequency.

Data Collection and Scouting Reports: While traveling through the field, the Greeneye system will use artificial intelligence to identify and map weed densities, take crop stand counts, and eventually document nutrient deficiencies, insects, and disease presence.

SSP HIGHLIGHTS

- 24 high resolution cameras
- 72 High intensity lights
- 12 Processing Units
- 144 Nozzles
- 10 Inch Spacing

OPPORTUNITIES

The Greeneye system creates opportunities to save and redistribute input dollars. This means that you can invest in more complex tank mixes that were not affordable when applied on a broadcast basis, enabling you to manage in-field situations much more effectively, and allowing you to utilize input dollars more efficiently. Saving dollars by utilizing selective spraying creates more opportunities to re-invest resources into additional yield enhancement strategies to maximize your yields and profit.

SUSTAINABILITY

Using the Greeneye system will help us achieve sustainability goals by supporting the 4R strategy: putting the Right Rate of the Right Product in the Right Place at the Right Time.

WHY IS NUWAY K&H COOPERATIVE EXPLORING GREENEYE TECHNOLOGY?

OUR FOUR, KEY OBJECTIVES ARE:

1. To create input use efficiencies through enhanced application strategies
2. Re-allocate and re-invest input dollars into additional yield enhancement strategies
3. Explore potential plant health benefits
4. Explore avenues for environmental and sustainability benefits