

RECON SPRAYSENSE™



FOR OVER 5 YEARS, INTELLIGENT AG HAS BEEN RESEARCHING VARIOUS ISSUES REGARDING THE MANAGEMENT OF SPRAY QUALITY.

OUR STUDIES CONCLUDED:



You can't believe what you see...



This nozzle had 75% blockage.

- ⊕ The sprayer is the most utilized equipment on the farm today.
- ⊕ Infinite chemical and spray tip combinations, changing regulations, and new spraying techniques makes spraying an incredibly complex operation to manage.
- ⊕ The vast majority of sprayers we inspected had nozzles with significant variances from the desired flow rate.
- ⊕ Variations in nozzle flow rate and pressure can cause major problems with spray quality and, ultimately, chemical efficacy.
- ⊕ It is nearly impossible to physically see nozzle issues.

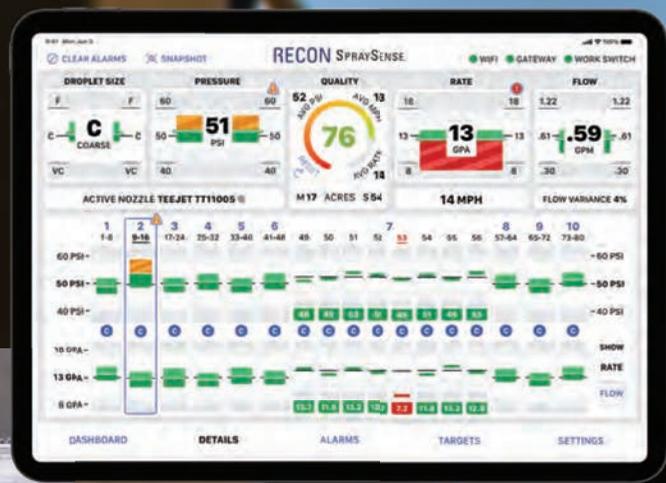
THIS CAN LEAD TO MANY PROBLEMS INCLUDING:



Sub-lethal dose delivered to weeds due to partially blocked nozzle.

- ⊕ Weed resistance
- ⊕ Reapplication that could have been prevented
- ⊕ Lost yield
- ⊕ Wasted chemical

RECON SPRAYSENSE™



RECON SPRAYSENSE OFFERS:

- ⊕ Real time monitoring of flow rate and pressure at every nozzle
- ⊕ Real time indication of droplet size (based on pressure and nozzle selection)
- ⊕ Foolproof blockage detection: instant notification of current or emerging pressure or flow problems
- ⊕ LED included for problem indication and spray-pattern illumination in low-light conditions
- ⊕ Compatible with common check valves and electronic on/off valves (PWM support coming soon)
- ⊕ Easy to understand dashboard and nozzle-by-nozzle details views via iPad application
- ⊕ Pre-loaded specifications for over 8,000 nozzle tips in the iPad
- ⊕ Historical “Spray Quality Score” to understand percentage of acres applied within target rate and pressure ranges
- ⊕ Easily adjustable alarm settings
- ⊕ Flow rate displayed in GPM and GPA
- ⊕ Easy to install and configure
- ⊕ Designed for use with self-propelled and pull-type sprayers

S P R A Y



O N T A R G E T

STAY IN TOUCH

SEE MORE INFORMATION AT:



SprayOnTarget.com



This unique study aims to determine the impact of various spray nozzle problems that can occur during operation. We wanted to observe any impacts of product efficacy due to inaccurate flow conditions caused by a single nozzle on a boom with other properly functioning nozzles. Each trial area was sprayed in two passes with a different nozzle flow scenario represented. Each trial was replicated several times in random placements to reduce as many other variables as possible.





SprayOnTarget.com



SEE THE CHALLENGES TO EFFECTIVE WEED MANAGEMENT

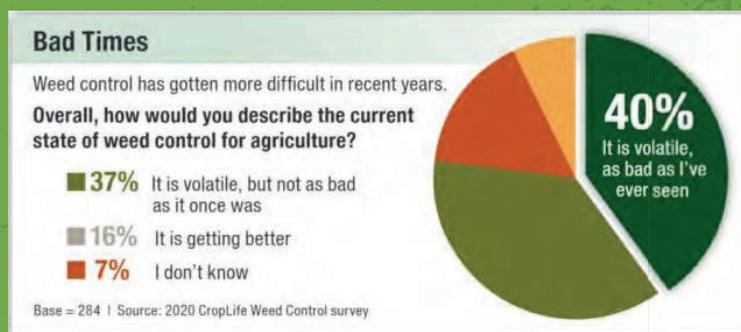
BY ERIC SFILIGOJ

Controlling herbicide-resistant weeds was already a major challenge for ag retailers and their grower-customers. At last count, the number of herbicide-resistant weeds globally had skyrocketed past the 500 mark. Of these, there are varieties that have evolved resistance to 23 of the 26 known herbicide sites of action and 167 different herbicides overall.

To gauge just how difficult controlling weeds has become, CropLife® magazine sent out a brief survey to its readers in October 2020. The results were eye-opening, to say the least.

When asked about the current state of weed control in agriculture, the majority of respondents (40%) indicated this was “very volatile, as bad as I’ve ever seen it.” Another 37% wrote that weed management was volatile, “but not as bad as it once was.” Only 16% of respondents believed weed control today was “better” than it had been during prior growing seasons. The remaining 7% weren’t entirely sure what the current state of herbicide-resistant weed control was in their areas of the country.

CropLife®



WEED CONTROL CHANGES AHEAD



Controlling yield-robbing weeds has remained a key priority, especially with forces both in the field and from outside impacting the segment.

Naturally, weed control management will begin to alter somewhat because of all these challenges. For one thing, with all the legal issues impacting post-emerge products, observers see bigger market opportunities for pre-emerge products. In fact, according to the survey, 68% of respondents predict pre-emerge product use will become more widespread than it is today, with another 22% saying usage in this sector will increase “a little more” during upcoming growing seasons.

Beyond this, survey respondents predict that weed control management will continue to develop strategies to fight herbicide-resistant weeds. One recent trend respondents think will dominate weed control management in the 2021 growing season is one that has already shown some recent popularity — “cocktail mixes” of different active ingredients that operate with different modes of action. According to the survey, 60% of respondents think these “blended products” will become the norm moving forward.

READ FULL ARTICLE AT [CROPLIFE.COM](https://www.croplife.com)

HERBICIDE-RESISTANT WEEDS: A TOUGH PROBLEM THAT 'RANKS RIGHT AT THE TOP' FOR AG RETAILERS, GROWERS

BY ERIC SFILIGOJ



The evolution of herbicide-resistant weeds is one of the most significant developments in agriculture today.

Of course, most experts will say that many of these weed control problems tie back to the agricultural industry's overreliance on certain popular herbicides such as glyphosate — which has given weeds time to adapt over the years. Therefore, in recent years, crop protection suppliers have introduced new cropping systems based upon different/older chemistries to fight back, with both dicamba- and 2,4-D-resistant crops debuting into the market.

Moving forward, besides employing new herbicides, experts say that there are other important steps ag retailers and their grower-customers can take to combat resistant weeds. As a first step, Dr. Bill Johnson, Professor of Weed Science at Purdue University, recommends scouting fields and reviewing notes from the close of the 2020 season.

"I always try to encourage people to look at the subtle changes that are happening in the fields where you farm for a long time" says Johnson. "Is foxtail control getting more difficult? Is waterhemp making inroads in your area? Maybe it's not in your field, but maybe you've got some neighbors who have it. Pay attention to the subtle things."

Since the beginning of the biotech crop age in the late 1980s, herbicide-resistant weeds have steadily grown in both species types and overall numbers.

How are these latest herbicide-resistant weeds developing in the first place? According to some experts, it's possible these species could have evolved during the Prevent Plant Event of 2019, where cool and wet weather across much of the U.S. kept many farm fields from being planted/treated as they normally would have been. Based upon statistics from the USDA, approximately 19 million acres of cropland wasn't planted/treated during 2019.

Overall, the numbers are somewhat mind-blowing. Just a few years ago when CropLife® put together its annual look at herbicide-resistant weeds, most market watchers estimated the number of resistant varieties barely topped the 200 mark. By the end 2020, however, weed scientists estimate that there are now more than 500 herbicide-resistant weeds spread out across the globe. In all, these varieties have evolved resistance to 23 of the 26 know herbicide sites of action and 167 different herbicides overall.



Waterhemp, 18-20 inches, in soybean stubble.

