

## FOR IMMEDIATE RELEASE <u>Media Contact:</u> Laurie Underwood D: 309-321-0002 C: 262-424-1256 lunderwood@360yieldcenter.com

# Five Tips for Smarter Nitrogen Management

MORTON, Ill., March 4, 2015 — How much nitrogen does it take to produce 200 bushels of corn per acre? That's a very common question with multiple answers. There is no one-size-fits-all approach to nitrogen management. And not every corn crop needs the same amount of N to produce 200 plus bushels per acre. The reality is that an effective nitrogen management plan needs to focus on how much N a particular field and corn crop needs, as well as how to properly manage N throughout the growing season — with adjustments along the way.

"Inputs must be managed differently today, as margins shrink and regulatory concerns grow," said Ron Lloyd, Agronomy and Technical Lead, 360 Yield Center. "Now is the time to take control and make even smarter N management plans that focus on applying N when and where corn needs it most."

Lloyd offers five steps to rethinking — and maximizing — nitrogen management.

## 1. Know, don't guess how much N is left.

"As farmers, we often take the gut-feel approach to crop management," Lloyd added. "Sometimes that works." But guessing how much N is in a field — and, in turn, guessing how much to put down — doesn't allow for the most accurate and impactful nitrogen management plans. Nitrogen levels are complicated to calculate on gut-feel alone. Rain events, soil moisture, pH, microbial activity and mineralization all play a role. The only way to know exactly much N is needed is knowing how much is in the field.

Fortunately, today farmers can know, in real time, N levels in their fields. 360 SOILSCAN<sup>™</sup> is a portable soil testing system that provides in-field soil nitrate results in about five minutes. It also can generate GPS-tagged, zone-specific readings with comparable accuracy to commercial labs.

## 2. Don't assume a one-and-done approach will do.

Corn demands nitrogen throughout the growing season, and its demands fluctuate and continue to grow as the season progresses. In fact, up to 75% of N is used after V10.<sup>1</sup> With too little nitrogen late in the growing season, especially when kernels form, yield potential could be at risk.

Split-nitrogen application allows farmers to apply N throughout the growing season. It's not about starving the crop early by holding N back for late-season application or putting down all of the N early and never coming back. It's about maximizing N inputs so it's available when the corn needs it.

## 3. Outsmart Mother Nature.

Even with a split-N approach, farmers might not be making the most of their nitrogen. Mother Nature throws some curve balls — like big rain events that can reduce available N. At the same time, that extra moisture can raise yield potential. Crop modeling software, such as 360 COMMANDER<sup>™</sup>, allows farmers to take control and adjust nitrogen management plans based on weather events midseason.

Now, farmers can anticipate the potential for big rain totals in June and push N application back, if needed, so it's not at risk to Mother Nature. Because nitrogen management plans should be monitored and adjusted throughout the season based on full-season, real-time data.

### 4. Provide the right amount of N in the right place.

Nitrogen needs change not only throughout the season but also throughout fields. Different management zones in fields use nitrogen differently — a 3.5 inch rain on a hill makes a different impact on N levels than a 3.5 inch rain in a valley. Taking nitrate samples from different management zones allows farmers to build a variable rate N plan that provides the right amount of N to each zone in a field to maximize every pound of N.

Where N is applied within the row also is important. Traditional sidedress methods apply N in the middle of the crop row — nearly 15 inches from the stalk base. Yet, a corn plant acquires more than 60% of its N from a horizontal radius of approximately 7 inches.<sup>2</sup> With 360 Y-DROP<sup>™</sup>, farmers can apply N within 2 to 3 inches of the stalk base — that means nearly 80% of the plants root mass is within the 360 Y-DROP application zone. And with the funneling nature of a corn plant, farmers can take advantage of stem water to move N placed at the base into the root zone — putting nitrogen in the right place for uptake and minimal loss.

#### 5. Rethink your window of application.

Some farmers may avoid split-N application because of the worry, "Will I miss my window?" Traditional sidedress methods tend to have a short and worrisome window of application. And, if farmers miss it, their crop goes without the N it so desperately needs.

Now, farmers don't have to worry. 360 Y-DROP extends the window of application. Its unique design allows for more flexibility in timing for late-season N application — so farmers can apply N when crops needs it most, whether that's at V6 or all the way up to tassel. That is more than 30 days of application time. So now farmers don't have to worry and have the control to hold some N back for a late-season application.

The days of luxury nitrogen application are over. With smarter N management, farmers can make the most of inputs by applying N when it's needed most, instead of putting it out early when it's vulnerable to loss from rain and environment.

Visit <u>www.360yieldcenter.com</u> to learn more about nitrogen management and how the integrated system from 360 Yield Center can help farmers take control.

#### About 360 Yield Center

Gregg Sauder and his team of farmers, agronomists and engineers at 360 Yield Center have a mission – for every farmer to reach the yield potential of modern seed corn. We are putting the farmer at the center of it all and taking a 360-degree view of key yield-liming variables and how to course-correct for better results. 360 Yield Center gives farmers the power to sense, decide and apply what is needed for better-performing crops and better on-farm profits. That's where 360 SOILSCAN<sup>™</sup>, 360 COMMANDER<sup>™</sup>, 360 Y-DROP<sup>™</sup> and 360 UNDERCOVER<sup>™</sup> come in. To learn more, visit www.360yieldcenter.com, email info@360yieldcenter.com, call us at 888-512-4890 or contact your dealer.

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1 Data on file.

2 Hodgen, P.J., Ferguson, R.B., Shanahan, J.F., & Schepers, J.S. (2009). Uptake of point source depleted N fertilizer by neighboring corn plants. *Agronomy Journal, 101,* 99-105.

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