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GETTING STARTED WITH PRECISION AGRICULTURE – STEPS FOR SUCCESS

Precision agriculture technologies are being utilized more and more frequently throughout the Southeast. Precision tools such as guidance systems, yield monitors, and variable-rate fertilizer applicators are resulting in higher productivity and profitability for many operations. However, some growers that stand to benefit from incorporating some aspect of precision agriculture into their farm management have been reluctant to get started. This article is for growers asking the question: "How do I get started in precision agriculture?"

Step one is to determine your individual need. Just as precision agriculture allows growers to address site-specific production issues, the reason for getting into precision agriculture will also vary from grower to grower. Do you want to be more efficient with inputs? Do you want better on-farm record keeping? Do you have ideas for management changes that require additional knowledge about your farm? Loading up with a bunch of new toys without first establishing a well-defined need can be costly and counter-productive.

Once you have established a need, you must identify the tools that can help meet that need. Determining what you need is only part of the process. Figuring out which of the numerous models or styles of the tool you are shopping for is right for you can be challenging. Just like televisions or washing machines, precision agriculture tools that appear to do the same thing can vary greatly in quality and price. Hopefully, you wouldn't buy a new tractor without knowing what it offered compared to the other brands; the same is true for guidance systems and software packages. Consultants and university extension personnel can often help determine which specific tool is right for you.

Third, an understanding of what is required to implement the new tool and how it will be used will help ensure success. Several questions can and should be asked regarding implementation: Can this tool be used on multiple crops? Is it going to be used on the entire farm or only certain acres? Who is going to run it? Will operator training or technical support be needed? Plans for implementation can also affect which specific tools are selected to meet a defined need. Establishing an implementation plan early in the process can go a long way toward what would be considered successful adoption of a precision agriculture technology.

Finally, be patient. Adding new technologies to the farming operation will inevitably take some adjustment. Even the most "operator-friendly" tool will have its moments. Your adoption timeline might need to extend over a few growing seasons, not just to work out the kinks and get comfortable with the new tools, but to fully establish the system needed to obtain the desired results. If your need is to increase crop yield, then a yield map is a good place to start, but really of little value unless the information leads to a change in management that can increase yield, like a change in variety or planting density in certain areas of the field. Successful adoption of precision agriculture will in many cases be more of an evolving process rather than a quick-fix that will show immediate results. Multiple tools might be needed to address some needs. There is so much reliable information and so many experienced growers to learn from that there really is no reason to be hesitant to explore the opportunities that exist in adopting precision agriculture technologies.

To learn more about precision agriculture technologies, consider attending the 9th International Conference on Precision Agriculture (ICPA) in Denver, CO, July 18-21. The ICPA will provide a forum for presentations on the current state of precision agriculture research and applications. Also, dedicated sessions for practitioners entitled "Precision A to Z Tracks" will offer practical advice from international authorities on key topics of precision agriculture for producers and professionals. For more information, visit >www.icpaonline.org<.

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