

Nitrogen Soil Testing Available For Rice Growers For Limited Time Only

LONOKE, ARK.

A nitrogen soil test that can save rice producers money and help improve yields on crops grown in silt loam soil in Arkansas, Louisiana and Mississippi is now available from the University of Arkansas System Division of Agriculture.

However, the testing under "N-ST*R," or nitrogen soil test for rice, is limited to the first 5,000 samples, first come, first served. The cost for in-state producers is \$5 per sample or \$50 per field – that includes 10 samples. Costs are higher for out-of-state producers.

With nitrogen application accounting for 18 percent of production costs, it's the single biggest expense for the state's rice farmers.

"This is a great opportunity for farmers to save money during the upcoming growing season by applying the right amount of nitrogen to the field," said Keith Perkins, Lonoke County extension agent for the University of Arkansas System Division of Agriculture. "By applying the correct amount of nitrogen the producer can maximize yields with minimum cost of nitrogen fertilizer."

Trent Roberts, assistant professor-soil fertility/testing, with the division, said Monday that "The purpose of N-ST*R is to maximize producer profitability by utilizing field-specific nitrogen rates that allow producers to maximize yields while lowering nitrogen input costs."

SIX YEARS, THREE STATES IN THE MAKING

During the past six years researchers from the Univer-

sity of Arkansas have worked closely with scientists from LSU, Mississippi State and Texas A&M to help build the calibration curves and validate N-ST*R's ability to predict field-specific nitrogen rates for rice produced on silt loam soils.

"We have successfully validated the current N-ST*R calibration curves in Arkansas, Louisiana and Mississippi and we feel comfortable give field-specific nitrogen rates for those states. Work is ongoing to determine the correct N-ST*R rates for rice produced on silt loams in Texas and we should have something in the next year," Roberts said.

TAKING N-ST*R SAMPLES

Perkins said the tests help producers fine-tune the amount of nitrogen and can reduce the cost of application and also forestall disease and lodging – a condition where weak stems make the rice fall down – conditions associated with too much nitrogen.

How to collect samples for N-ST*R:

- Collect 10 samples from each field the farmer wants tested
- Take samples from top 18 inches of soil
- Samples can be collected anytime between harvest and planting
- Bring the samples, and appropriate fee, to your county extension office
- Fill out field information
- The soil lab will send the results to the rice grower
- The results include economical, optimum and maximum yield goals.

Perkins said only nitrogen will be tested in these samples. "Producers will still need routine soil samples to test for phosphorous, potassium, zinc and lime recommendations," he said.

VIDEOS AND PDFs

Two publications are available online or from your county extension office. They are FSA2167, "N-ST*R: Nitrogen-Soil Test for Rice," www.uaex.edu/Other_Areas/publications/PDF/FSA-2167.pdf, and FSA 2168, "N-ST*R Soil sample bucket and soil sample collection," www.uaex.edu/Other_Areas/publications/PDF/FSA-2168.pdf.

There are also three videos to help growers:

- "N-ST*R Nitrogen soil test for rice: Assembling the tools," www.youtube.com/watch?v=WZD37JlrXEg&feature=youtu.be
- "N-ST*R Nitrogen soil test for rice: Collecting the samples," www.youtube.com/watch?v=w_dzpmJs6NY&feature=youtu.be
- "N-ST*R Nitrogen soil test for rice: Submitting the samples," www.youtube.com/watch?v=XqY13TrxTsl&feature=youtu.be

A version of N-ST*R for those who grow rice in clay soils is expected to be rolled out in fall of 2013.

To learn more about N-ST*R, contact your county extension office, or visit www.uaex.edu or growers in Louisiana and Mississippi can contact the lab at: 479-5757569 or NSTARLAB@uark.edu. Δ



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