

Tickled with rice

Key Points

- Grower looks at rice under center pivot for rotation.
- Patrick Hulshof had yields of 201 bu./acre with the system.
- He reports water savings with the nontraditional method.

By CECIL H. YANCY JR.

By trade, Patrick Hulshof grows corn and soybeans on sandy soils under center-pivot irrigation.

This past year, however, he found a fit with rice in between the two mainstays.

On an 80-acre field where corn and soybeans normally grow in rotation, Hulshof planted rice under center pivot.

Rice is all around the Bootheel, but it is impractical on these sandy soils that won't hold a flood. These soils resulted from sand blows in the 1811-12 New Madrid earthquake.

A new initiative

Circles for Rice, an initiative from Valmont Irrigation, is opening up nontraditional acres to rice production. Lindsay Irrigation is also conducting experiments with rice under center pivot.

"This is our first experience with rice," says Hulshof, a Sikeston, Mo., farmer, who grew RiceTec hybrids under center pivot this year.

"No more effort than a field of corn," Hulshof says, explaining his experience with rice at midseason amid 106-degree-F temperatures. "Rice fit into our program."

Water savings is top of mind for the effort to grow rice under center pivot, says Jake LaRue, Valmont engineer. On large-scale commercial acres,

THE PIVOT MOVED, DADDY: Parker Hulshof, 2, (front) tells his dad, Patrick, about the movement of the center-pivot irrigation system on a hot summer day in the Bootheel. Parker, his sister Madeline, 9, and brother Brock, 7, visited the rice fields with the family dog, Snickers.



when compared to flooding, Valmont reports using 40% to 50% less water in Arkansas and Missouri.

Entering the fourth year of extensive on-farm research in the U.S. and Brazil, as well as in Pakistan and Ukraine, Valley Irrigation is taking rice culture to nontraditional areas under its center pivots.

Along the way, researchers at Valley, as well as the Delta Research Center in Portageville, Mo., are conducting studies to develop a system approach to weed control, disease control and irrigation scheduling.

Hulshof says his center pivot used less water, but was in operation more than it would have been with corn.

The center pivot is set to turn on at 4 in the afternoon and go off at 8 p.m., with uniform, overlapping sprinkles of water raining down on the rice crop.

Integrated approach

"Just putting a center pivot in the field and trying rice under it isn't going to help the grower," LaRue says. "We're putting together an integrated approach to match the irrigation system with soils, weed control and fertility, and also recommending weekly scouting."

The situations where center-pivot irrigation can work in rice have to meet up with the grower's expectations, LaRue says.

Numerous inquiries have come from soybean producers looking for a rotational crop. The what-if proposition usually goes something like this, says LaRue. "They say, 'We typically run 40 to 50 bushels of soybean, so if we can get 140 bushels of rice, that would be pretty good.'"

For Hulshof, the numbers went higher, giving him 201 bushels per acre, a record for this nontraditional way of irrigating rice.

"We ran the pivot more, but I don't think we put out more water than what a 200-bushel corn crop requires," Hulshof says.

■ For more information, visit www.circlesforrice.com and read our story on Page 6.