

Drainage Control

Systems To Promote Yields In Flood Soaked Fields Under Study

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Better varieties with flood tolerance packages, or production systems that will facilitate better yields by improving surface drainage are systems presently under scrutiny by Dr. Trey Koger, Mississippi State University Assistant Research Professor at the Delta Research and Extension Center at Stoneville, Miss.

"We typically grow a lot of our soybeans on fertile but very flat, poorly drained heavy clay soils," he explained. "So one thing that we have looked at is growing soybeans on these heavy clay soils that are poorly drained on flat ground, versus ground that has been hipped up, or

bedded. What we have found in where we elevate those beds we get increases in yield from 10-12 bushels which is a sizeable increase,

amounting to anywhere from 7 to 15 percent."

The trials are done at a lot of different loca-

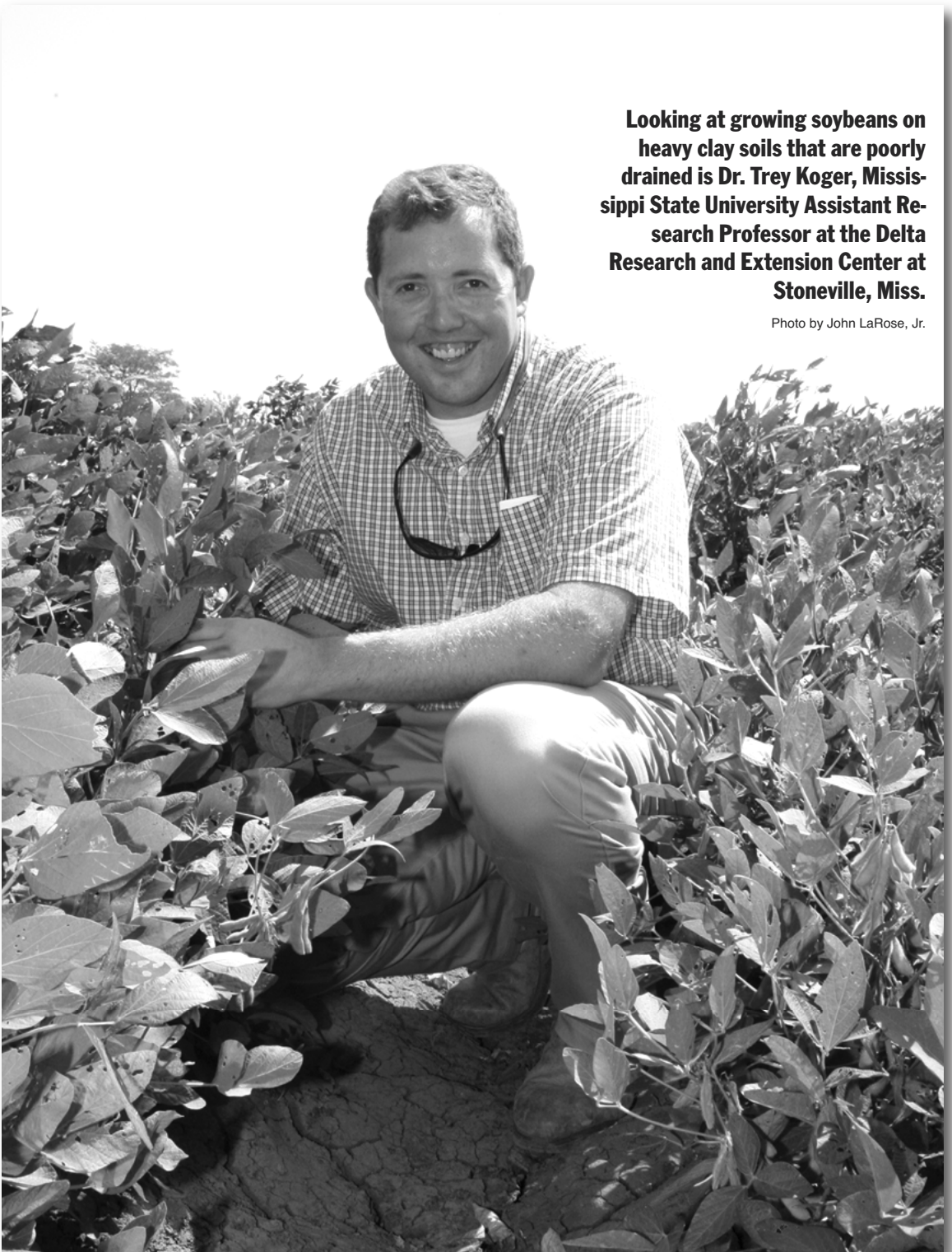
tions, different years, varieties, environments, wet summers and dry summers.

"We are seeing consistent yield increases by planting soybeans on elevated beds versus planting them flat which we historically have done," Koger said. "We continue to find ways to improve soybean yields and one way is to improve drainage. Here behind me is a breeding plot where the plot has over 200 breeding lines, that are susceptible and resistant to flooding. We are trying to develop varieties that have much better flood tolerance than our current commercial varieties."

The trials are showing a consistent yield increase that makes the system pay for itself and helps growers make money.

"We are also looking at this system in a soybean-rice rotation," he explained. "Can we grow rice following soybeans on those old beds? What type of limited tillage do we have to do to get that ground prepared to plant rice on it?"

These are some of the questions Koger's trials are aimed at answering. Δ



Looking at growing soybeans on heavy clay soils that are poorly drained is Dr. Trey Koger, Mississippi State University Assistant Research Professor at the Delta Research and Extension Center at Stoneville, Miss.

Photo by John LaRose, Jr.