

Aeration Tillage Gives No Benefit In No-Till Wheat

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A little bit of aeration or rotary tine tillage for wheat has proved to be of no benefit in a three-year study conducted by UK Extension Agronomist John Grove, Ph.D. Grove reported on the study at the Wheat Science Field

was a very good wheat production soil, one was not as good.

“We were hoping it would help us out on the not quite so good soil because that’s the kind of environment where no-till wheat sometimes underperforms tilled wheat,” he said. “But this level of tillage which did disturb the surface but did not improve yields is clearly not the way to go on

**UK Extension Agronomist,
Dr. John Grove, reports
on a three - year study
on aeration or rotary tine
tillage for wheat
at a recent field day.
Photo by John LaRose, Jr.**



Day in Princeton, Ky, recently.

“The basic outcome was that we saw no benefit to doing this kind of tillage in otherwise no-till wheat systems relative to the no-till system itself,” Grove said. “In other words, the extra steel, the extra diesel fuel did not pay for themselves. There was no yield increase of any substance and therefore the practice would not be recommended.”

The work was done on two different soils. One

that kind of average to lower quality wheat soils. The nitrogen levels were all constant and were all high. We applied fungicides for everything, insecticides whenever needed so there were no other limiting factors except seasonal climate. That’s where, in the past, when we’ve had a poor season on a poor quality soil we’ve seen some benefits to chisel plowing for wheat. But, in these cases aeration and rotary tine tillage did not do anything for yield in any of the three years, on either soil.” Δ