

## LOW SOIL PRODUCTIVITY RATING SOILS DATA & RECOMMENDATIONS

Low soil productivity rating (SPR) soils in central Illinois continue to indicate 1-pass tillage as the most profitable system. The table below shows an increase of \$39 per acre for soybeans grown in low SPR soils when farmers forgo additional tillage passes.

This is a case where farmers should consider whether an extra pass over the field will pay for itself before committing to an extra pass.

### LOW SPR TILLAGE DATA

***Economic returns resulting from various tillage strategies for soybean production in central Illinois from 2015-2019. Low SPR soils (<136 soil productivity index).***

| 2015-2019 SOYBEAN                 | NO-TILL | 1-PASS LIGHT | 2-PASS LIGHT | 2-PASS MODERATE | 2+ TILLAGE PASSES |
|-----------------------------------|---------|--------------|--------------|-----------------|-------------------|
| <b>LOW SPR SOILS</b>              |         |              |              |                 |                   |
| <b># fields</b>                   | 493     | 121          | 123          | 120             | 175               |
| <b>Yield per acre</b>             | 61      | 64           | 61           | 62              | 61                |
| <b>GROSS REVENUE</b>              | \$562   | \$590        | \$564        | \$573           | \$560             |
|                                   |         |              |              |                 |                   |
| <b>TOTAL DIRECT COSTS*</b>        | \$141   | \$141        | \$115        | \$136           | \$129             |
|                                   |         |              |              |                 |                   |
| <b>Field Work</b>                 | \$0     | \$11         | \$22         | \$25            | \$40              |
| <b>Other power costs**</b>        | \$71    | \$68         | \$61         | \$65            | \$63              |
| <b>TOTAL POWER COSTS</b>          | \$71    | \$79         | \$83         | \$90            | \$103             |
|                                   |         |              |              |                 |                   |
| <b>OVERHEAD COSTS</b>             | \$30    | \$30         | \$30         | \$30            | \$30              |
|                                   |         |              |              |                 |                   |
| <b>TOTAL NON-LAND COSTS</b>       | \$246   | \$253        | \$231        | \$257           | \$264             |
| <b>OPERATOR &amp; LAND RETURN</b> | \$316   | \$336        | \$334        | \$316           | \$297             |

*NoTill=No tillage; 1Pass Light=1 pass w/ low disturbance tillage; 2-Pass Light=2 passes w/ low disturbance tillage; 2-Pass Medium=2 passes (1 low disturbance+1 high disturbance); 2+ Pass=more than 2 tillage passes, any intensity level*

