P & K Recommendations

Fabian Fernandez, Kristin Greer, Chris Rudisill, and Dan Schaefer

Objectives

- Evaluate P & K soil test calibrations for corn and soybean
- Determine P & K removal values for corn and soybean
- Determine effect of tillage on response to P & K

Methods and materials

- Establish long term P & K rate studies at UI research farms
- Evaluate effect of tillage (no-till, strip till, and conventional tillage) by placement of P & K rates on corn and soybean yield across range of P & K soil test levels
- Establish on-farm strip trials with no P or no K as well as strips with 1.5 times removal rate of P & K.

Effect of tillage and P rate on corn yield-7 yr avg.



Effect of tillage and rotation on corn yield-Urbana



Effect of tillage and P rate on soybean yield- 7yr avg.



NREC 2014

- 26 PROPOSALS SUBMITTED
 - 5 RENEWALS
 - -21 NEW
- FUNDING REQUESTED
 - 1ST YEAR- \$3.15 M
 - TOTAL PROJECT- \$4.5M

RESEARCH AREA PROPOSED

- NITROGEN MANAGEMENT- 10
- P & K MANAGEMENT- 6
- COVER CROPS- 3
- FERTIGATION- 2
- FIELD BORDER BUFFERS- 2
- METHOD FERTILIZER APPLICATION- 1
- DIAGNOSTIC TECHNIQUES- 1
- CROP ROTATION/SOIL QUALITY- 1

RESEARCH AREA FUNDED

- NITROGEN MANAGEMENT- 8
- P & K MANAGEMENT- 3
- COVER CROPS- 2
- FIELD BORDER BUFFERS- 1
- CROP ROTATION/SOIL QUALITY- 1