

WHEAT FERTILITY EXPERIMENT No.502

North Central Experiment Station

Established 1970

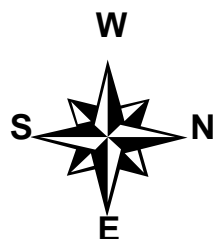
Location: **Lahoma**

Plot size: 16' x 60'

Alley: 20'

Total Trial Area:

224' x 300'



OBJECTIVE: To study fertilizer nitrogen, phosphorus, and potassium in winter wheat. In recent years, this study has also been used to develop yield potential models and yield predictions through sensor based technologies.

| TRT | Pre-plant N rate (kg N / ha) | Pre-plant P rate (kg P/ ha) | Pre-plant K rate (kg K /ha) |
|-----|---------------------------------|--------------------------------|--------------------------------|
| 1.* | 0 | 0 | 0 |
| 2.* | 0 | 20 | 56 |
| 3.* | 22 | 20 | 56 |
| 4.* | 45 | 20 | 56 |
| 5.* | 67 | 20 | 56 |
| 6.* | 90 | 20 | 56 |
| 7.* | 112 | 20 | 56 |
| 8. | 67 | 0 | 56 |
| 9. | 67 | 10 | 56 |
| 10. | 67 | 30 | 56 |
| 11. | 67 | 40 | 56 |
| 12. | 67 | 30 | 0 |
| 13. | 112 | 40 | 56 |
| 14. | 67 | 20 | 67 (Sul-Po-Mag) |

N applied as 46-0-0 (Urea)
P applied as 0-46-0 (Triple Super Phosphate)
K applied as 0-0-60 (Potash)
* - YP plot

1, 2 – Harvest Sequence Number

1, 2 – Treatment Number

1, 2 – Soil Sample Sequence Number

| | | | | | | | | | | | | | | | | |
|-------|-----|----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----|
| Rep 4 | 300 | 4 | 5 | 12 | 13 | 20 | 21 | 28 | 29 | 36 | 37 | 44 | 45 | 52 | 53 | |
| | | 3 | 5 | 13 | 6 | 10 | 2 | 4 | 7 | 12 | 1 | 8 | 14 | 9 | 11 | |
| | 240 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | |
| Rep 3 | 220 | 3 | 6 | 11 | 14 | 19 | 22 | 27 | 30 | 35 | 38 | 43 | 46 | 51 | 54 | |
| | | 1 | 14 | 2 | 7 | 11 | 3 | 9 | 12 | 5 | 13 | 4 | 8 | 10 | 6 | |
| | 160 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | |
| Rep 2 | 140 | 2 | 7 | 10 | 15 | 18 | 23 | 26 | 31 | 34 | 39 | 42 | 47 | 50 | 55 | |
| | | 4 | 8 | 3 | 1 | 11 | 13 | 12 | 7 | 14 | 6 | 9 | 10 | 2 | 5 | |
| | 80 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | |
| Rep 1 | 60 | 1 | 8 | 9 | 16 | 17 | 24 | 25 | 32 | 33 | 40 | 41 | 48 | 49 | 56 | |
| | | 8 | 2 | 4 | 6 | 14 | 9 | 10 | 5 | 7 | 12 | 1 | 3 | 13 | 11 | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | |
| | | 0 | 16 | 32 | 48 | 64 | 80 | 96 | 112 | 128 | 144 | 160 | 176 | 192 | 208 | 224 |