

USING FREE PHOS 24 IN THE DEEP BAND - WINTER WHEAT

| Treatment (in addition to base check) | Yield (Bu/a) | Bushels Over Check | Test Wgt (Lb/Bu) |
|---|-----------------|-----------------------|---------------------|
| 14 lbs P - 2.5 Gal 11-37 + 1 Gal Free pHOS 24 | 129 | ↑ 16.5 | 62.5 |
| 18 lbs P - 3.5 Gal 11-37 + Gal Free pHOS 24 | 120 | ↑ 7.4 | 62.9 |
| 3 lbs P - 1 Gal Free pHOS 24 (no added 11-37) | 116 | → 4.2 | 63.0 |
| Base + 4 Gal 6% Humic Acid | 116 | → 4.0 | 62.9 |
| Base + 2 Gal 6% Humic Acid | 114 | → 1.4 | 63.1 |
| Base Check - 110N-P20-S15-C110 | 112 | | 63.2 |
| LOCATION MEAN (bu/a) | 117.4 | | 63.0 |
| CV (%) | 2.4% | | 0.5% |
| SD | 2.8 | | 0.3 |

^ Variety used was WB1529, a soft white winter wheat

^ All treatments received **110N-20P-15S-10CI (Base Check)** deep banded unless otherwise stated. Shanked in 5" -6" below soil surface using a Ripper Shooter

KEY FINDINGS

- This study suggests it will take a lot of humic acid to equal the efficiency of the combination of organic acids in Free pHOS 24. **It took 4 gallons of humic acid PLUS 4.5 gal of 11-37 to equal the performance of 1 gal of Free pHOS 24**
- The base treatment of 20 lbs of P is 4.5 gal of 11-37
 - 1:2:5 ratio Free pHOS 24 : 11-37 was top yielding in this trial
 - 1:3:5 ratio was not as optimal ROI or yield
 - Results suggest an optimal ratio of Free pHOS 24 is needed to protect P
- This experiment will be conducted again maintaining a 1:2.5 ratio with higher P rates