Analysis of variance and treatment means by interaction effect for NDVI readings at corn stages of V4, V6, V8, and V10 and intercepted photosynthetically active radiation (IPAR), grain yield (kg ha-1) and grain N Uptake (kg ha-1) for corn at Efaw, OK, 2011.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Trt** | **Seeds hill-1** | **Plants spacing(m)** | **NDVI V4** | **NDVI V6** | **NDVI V8** | **NDVI V10** | **IPAR (%)** | **Grain yield****(kg ha-1)** | **N Uptake (kg ha-1)** |
| 1 | 1 | 0.16 | 0.402 | 0.519 | 0.798 | 0.737 | 0.571 | 3173 | 42.4 |
| 2 | 2 | 0.16 | 0.484 | 0.647 | 0.820 | 0.772 | 0.679 | 2663 | 36.6 |
| 3 | 3 | 0.16 | 0.533 | 0.702 | 0.859 | 0.783 | 0.605 | 2776 | 35.9 |
| 4 | 1 | 0.32 | 0.310 | 0.501 | 0.658 | 0.786 | 0.507 | 2000 | 28.1 |
| 5 | 2 | 0.32 | 0.417 | 0.544 | 0.795 | 0.774 | 0.650 | 2980 | 40.3 |
| 6 | 3 | 0.32 | 0.469 | 0.607 | 0.796 | 0.780 | 0.575 | 2364 | 31.8 |
| 7 | 1 | 0.48 | 0.309 | 0.581 | 0.656 | 0.779 | 0.608 | 1877 | 27.3 |
| 8 | 2 | 0.48 | 0.348 | 0.532 | 0.747 | 0.758 | 0.625 | 2510 | 36.6 |
| 9 | 3 | 0.48 | 0.393 | 0.612 | 0.783 | 0.756 | 0.695 | 2496 | 34.4 |
| 10 | TR | 0.32 | 0.408 | 0.577 | 0.778 | 0.736 | 0.678 | 2548 | 35.8 |
| **SED** |  | **0.03** | **0.08** | **0.03** | **0.03** | **0.08** | **638** | **8.5** |
| **C.V.(%)** | **10** | **17** | **5** | **5** | **16** | **31** | **30** |

TR-- Twin rows at 76.2cm between;

SED -Standard Error between two equally replicated means.

C.V. (%) - Coefficient of Variation

Analysis of variance and treatment means by interaction effect for NDVI readings at corn stages of V4, V6, and V8 and intercepted photosynthetically active radiation (IPAR), grain yield (kg ha-1) and grain N Uptake (kg ha-1) for corn at Lake Carl Blackwell (LCB) East, OK, 2011.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Trt** | **Seeds hill-1** | **Plants spacing(m)** | **NDVI V4** | **NDVI V6** | **NDVI V8** | **IPAR (%)** | **Grain yield****(kg ha-1)** | **N Uptake****(kg ha-1)** |
| 1 | 1 | 0.16 | 0.316 | 0.499 | 0.648 | 0.711 | 1303 | 20.8 |
| 2 | 2 | 0.16 | 0.383 | 0.639 | 0.709 | 0.761 | 410 | 6.7 |
| 3 | 3 | 0.16 | 0.417 | 0.616 | 0.684 | 0.758 | 567 | 9.1 |
| 4 | 1 | 0.32 | 0.267 | 0.390 | 0.512 | 0.607 | 863 | 14.8 |
| 5 | 2 | 0.32 | 0.387 | 0.502 | 0.635 | 0.590 | 844 | 13.3 |
| 6 | 3 | 0.32 | 0.384 | 0.545 | 0.658 | 0.606 | 921 | 14.9 |
| 7 | 1 | 0.48 | 0.282 | 0.318 | 0.407 | 0.535 | 724 | 12.0 |
| 8 | 2 | 0.48 | 0.265 | 0.358 | 0.481 | 0.648 | 1144 | 19.1 |
| 9 | 3 | 0.48 | 0.302 | 0.432 | 0.567 | 0.640 | 821 | 13.6 |
| 10 | TR | 0.32 | 0.273 | 0.432 | 0.554 | 0.685 | 1233 | 19.9 |
| **SED** |  |  | **0.06** | **0.07** | **0.05** | **0.14** | **266** | **3.8** |
| **C.V.(%)** |  |  | **21** | **18** | **11** | **26** | **37** | **33** |

TR-- Twin rows at 76.2cm between;

SED -Standard Error between two equally replicated means.

C.V. (%) - Coefficient of Variation Analysis of variance and treatment means by interaction effect for NDVI readings at corn stages of V4, V6, V8, and V10 and intercepted photosynthetically active radiation (IPAR), grain yield (kg ha-1) and grain N Uptake (kg ha-1) for corn at Lake Carl Blackwell (LCB) West, OK, 2011.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Trt** | **Seeds hill-1** | **Plants spacing(m)** | **NDVI V4** | **NDVI V6** | **NDVI V8** | **NDVI V10** | **IPAR (%)** | **Grain yield****(kg ha-1)** | **N Uptake (kg ha-1)** |
| 1 | 1 | 0.16 | 0.340 | 0.640 | 0.742 | 0.744 | 0.791 | 1011 | 15.6 |
| 2 | 2 | 0.16 | 0.555 | 0.810 | 0.775 | 0.812 | 0.940 | 1341 | 20.2 |
| 3 | 3 | 0.16 | 0.539 | 0.778 | 0.802 | 0.805 | 0.915 | 1348 | 19.4 |
| 4 | 1 | 0.32 | 0.315 | 0.566 | 0.822 | 0.745 | 0.714 | 600 | 9.4 |
| 5 | 2 | 0.32 | 0.386 | 0.684 | 0.774 | 0.769 | 0.737 | 1382 | 20.3 |
| 6 | 3 | 0.32 | 0.435 | 0.707 | 0.760 | 0.783 | 0.871 | 1234 | 17.2 |
| 7 | 1 | 0.48 | 0.275 | 0.485 | 0.796 | 0.711 | 0.623 | 334 | 5.4 |
| 8 | 2 | 0.48 | 0.348 | 0.617 | 0.813 | 0.771 | 0.807 | 808 | 12.6 |
| 9 | 3 | 0.48 | 0.338 | 0.660 | 0.734 | 0.749 | 0.762 | 852 | 13.6 |
| 10 | TR | 0.32 | 0.410 | 0.699 | 0.731 | 0.786 | 0.908 | 1294 | 19.5 |
| **SED** |  | **0.02** | **0.04** | **0.05** | **0.02** | **0.07** | **248** | **3.7** |
| **C.V.(%)** | **8** | **7** | **8** | **4** | **10** | **30** | **30** |

TR-- Twin rows at 76.2cm between;

SED -Standard Error between two equally replicated means.

C.V. (%) - Coefficient of Variation

|  |
| --- |
| Analysis of variance and treatment means by interaction effect for NDVI readings at corn stages of V4, V6, V8, V10 and V12 and intercepted photosynthetically active radiation (IPAR), grain yield (kg ha-1) and grain N Uptake (kg ha-1) for corn at Efaw research station, Oklahoma 2012. |
| **Sources** | **NDVI V4** | **NDVI V6** | **NDVI V8** | **NDVI V10** | **NDVI V12** | **IPAR (%)** | **Grain yield****(kg ha-1)** | **N Uptake****(kg ha-1)** |
| **Trt** | **Seeds hill-1** | **Plants spacing(m)** | Treatments Means |
| 1 | 1 | 0.16 | 0.419 | 0.563 | 0.759 | 0.769 | 0.856 | 0.500 | 11064.00 | 138.56 |
| 2 | 2 | 0.16 | 0.569 | 0.692 | 0.813 | 0.767 | 0.851 | 0.537 | 9967.07 | 113.28 |
| 3 | 3 | 0.16 | 0.666 | 0.716 | 0.845 | 0.792 | 0.864 | 0.681 | 9600.81 | 113.68 |
| 4 | 1 | 0.32 | 0.312 | 0.619 | 0.600 | 0.677 | 0.815 | 0.337 | 6802.64 | 86.02 |
| 5 | 2 | 0.32 | 0.411 | 0.639 | 0.754 | 0.753 | 0.854 | 0.533 | 10583.18 | 132.73 |
| 6 | 3 | 0.32 | 0.491 | 0.635 | 0.784 | 0.760 | 0.854 | 0.491 | 11264.94 | 136.45 |
| 7 | 1 | 0.48 | 0.260 | 0.479 | 0.512 | 0.626 | 0.790 | 0.296 | 6509.89 | 77.27 |
| 8 | 2 | 0.48 | 0.336 | 0.477 | 0.640 | 0.717 | 0.840 | 0.402 | 7423.79 | 91.54 |
| 9 | 3 | 0.48 | 0.376 | 0.552 | 0.711 | 0.757 | 0.862 | 0.459 | 11681.18 | 146.30 |
| 10 | TR | TR | 0.380 | 0.484 | 0.712 | 0.763 | 0.860 | 0.608 | 10167.89 | 127.11 |
| **SED** | 0.02 | 0.05 | 0.03 | 0.02 | 0.01 | 0.06 | 1326.93 | 18.81 |
| **C.V.(%)** | 7 | 11 | 5 | 4 | 2 | 15 | 17 | 20 |
| TR-- Twin rows at 76.2cm between; |   |
| SED --Standard Error of the difference between two equally replicated means; |   |
| C.V. (%) -- Coefficient of Variation; |   |

|  |
| --- |
| Analysis of variance and treatment means by interaction effect for NDVI readings at corn stages of V4, V6, V8, V10 and V12 and intercepted photosynthetically active radiation (IPAR), grain yield (kg ha-1) and grain N Uptake (kg ha-1) for corn at Lake Carl Blackwell West research station, Oklahoma 2012. |
| **Sources** | **NDVI V4** | **NDVI V6** | **NDVI V8** | **NDVI V10** | **NDVI V12** | **IPAR (%)** | **Grain yield****(kg ha-1)** | **N Uptake****(kg ha-1)** |
| **Trt** | **Seeds hill-1** | **Plants spacing(m)** | Treatments Means |
| 1 | 1 | 0.16 | 0.273 | 0.278 | 0.452 | 0.409 | 0.510 | 0.254 | 2366 | 35.38 |
| 2 | 2 | 0.16 | 0.292 | 0.361 | 0.617 | 0.540 | 0.691 | 0.252 | 3880 | 56.08 |
| 3 | 3 | 0.16 | 0.328 | 0.411 | 0.667 | 0.500 | 0.727 | 0.370 | 4185 | 56.79 |
| 4 | 1 | 0.32 | 0.274 | 0.321 | 0.462 | 0.417 | 0.479 | 0.283 | 2555 | 39.46 |
| 5 | 2 | 0.32 | 0.260 | 0.311 | 0.405 | 0.488 | 0.530 | 0.204 | 1516 | 23.81 |
| 6 | 3 | 0.32 | 0.307 | 0.342 | 0.593 | 0.480 | 0.656 | 0.314 | 2446 | 38.72 |
| 7 | 1 | 0.48 | 0.206 | 0.253 | 0.411 | 0.414 | 0.424 | 0.244 | 1859 | 27.94 |
| 8 | 2 | 0.48 | 0.269 | 0.325 | 0.427 | 0.442 | 0.517 | 0.198 | 3761 | 54.44 |
| 9 | 3 | 0.48 | 0.344 | 0.448 | 0.440 | 0.469 | 0.547 | 0.197 | 2036 | 31.05 |
| 10 | TR | TR | 0.258 | 0.304 | 0.477 | 0.471 | 0.547 | 0.263 | 3632 | 51.75 |
| **SED** | 0.04 | 0.05 | 0.05 | 0.05 | 0.04 | 0.05 | 1022.51 | 12.80 |
| **C.V.(%)** | 16 | 17 | 13 | 14 | 9 | 22 | 41 | 35 |
| TR-- Twin rows at 76.2cm between; |   |
| SED --Standard Error of the difference between two equally replicated means; |   |
| C.V. (%) -- Coefficient of Variation; |   |