Table A1. The effect of agronomic factors on plants/m2 and lodging in spring oats

|  |  |  |  |
| --- | --- | --- | --- |
|  | df | Plants/m2 | Lodging % |
|  | Site 1(S) | Site 2(S) | Site 3(S) | Site 4(S) | Site 1(S) | Site 2(S) | Site 3(S) | Site 4(S) |
| ***Seed Rate*** | 2 |  |  |  |  |  |  |  |  |
| 250 Seeds/m2 |  | 206.7 | 235.4 | 219.6 | 232.0 | 42.5 | 43.0 | 40.6 | 3.9612 |
| 350 Seeds/m2 |  | 254.9 | 322.3 | 287.4 | 314.8 | 45.1 | 44.4 | 53.9 | 10.4109 |
| 450 Seeds/m2 |  | 309.9 | 401.6 | 332.7 | 389.0 | 53.1 | 47.8 | 57.8 | 19.1927 |
| LSD |  |  |  |  |  |  |  |  |  |
| **P** |  | **<0.0001** | **<0.001** | **<0.0001** | **<0.0001** | **<0.05** | n.s. | **<0.0001** | **<0.0001** |
| ***Applied N*** ***(kg N/Ha****)* | 5 |  |  |  |  |  |  |  |  |
| 40 |  | 257.6 | 331.9 | 282.0 | 311.0 | 10.0 | 10.1 | 0.0 | 4.6 |
| 70 |  | 262.2 | 319.6 | 283.3 | 311.4 | 21.1 | 27.3 | 16.7 | 7.9 |
| 100 |  | 255.6 | 311.6 | 273.8 | 313.3 | 35.2 | 38.9 | 53.3 | 10.8 |
| 130 |  | 254.0 | 313.9 | 278.4 | 316.4 | 63.2 | 51.3 | 75.5 | 12.0 |
| 160 |  | 259.8 | 321.5 | 281.1 | 305.8 | 72.1 | 67.2 | 78.9 | 14.8 |
| 190 |  | 253.8 | 320.1 | 280.4 | 313.6 | 79.7 | 75.5 | 80.3 | 17.0 |
| LSD |  |  |  |  |  |  |  |  |  |
| **P** |  | n.s. | n.s. | n.s. | n.s. | **<0.0001** | **<0.0001** | **<0.0001** | **<0.0001** |
| ***PGR Application*** | 1 |  |  |  |  |  |  |  |  |
| PGR - |  | 257.8 | 310.0 | 273.6 | 310.6 | 51.0 | 46.2 | 60.6 | 14.9 |
| PGR + |  | 256.4 | 329.5 | 286.2 | 313.2 | 42.7 | 43.9 | 40.9 | 7.5 |
| LSD |  |  |  |  |  |  |  |  |  |
| **P** |  | n.s. | **<0.01** | n.s. | n.s. | **<0.01** | n.s. | **<0.0001** | **<0.0001** |
| **Interactions** |  |  |  |  |  |  |  |  |  |
| SR\*N | 10 | n.s. | n.s. | n.s. | n.s. | n.s. | n.s. | n.s. | n.s. |
| SR\*PGR | 2 | n.s. | n.s. | n.s. | n.s. | n.s. | n.s. | n.s. | n.s. |
| N\*PGR | 5 | n.s. | n.s. | n.s. | n.s. | n.s. | n.s. | n.s. | n.s. |
| SR\*N\*PGR | 10 | n.s. | n.s. | n.s. | n.s. | n.s. | n.s. | n.s. | n.s. |

Table A2. The effect of agronomic factors on plants/m2 and lodging in winter oats

|  |  |  |  |
| --- | --- | --- | --- |
|  | df | Plants/m2 | Lodging % |
|  | Site 1(W) | Site 2(W) | Site 3(W) | Site 1(W) | Site 2(W) | Site 3(W) |
| ***Seed Rate*** | 2 |  |  |  |  |  |
| 250 Seeds/m2 |  | 202.9 | 127.8 | 204.7 | 9.2 | - | 1.6 |
| 350 Seeds/m2 |  | 266.4 | 174.4 | 284.8 | 13.0 | - | 1.2 |
| 450 Seeds/m2 |  | 298.3 | 172.9 | 318.6 | 11.3 | - | 1.3 |
| LSD |  |  |  |  |  | - |  |
| **P** |  | **<0.0001** | **<0.0001** | **<0.0001** | n.s. | - | n.s. |
| ***Applied N (kg N/ha)*** | 4 |  |  |  |  | - |  |
| 80  |  | - | 153.0 | 264.67 | - | - | 0.1 |
| 110 |  | 245.5 | 171.5 | 272.35 | 2.6 | - | 0.3 |
| 140  |  | 264.2 | 146.8 | 275.04 | 11.7 | - | 0.3 |
| 170  |  | 254.8 | 156.0 | 279.99 | 11.5 | - | 1.9 |
| 200 |  | 259.1 | 164.5 | 284.72 | 19.0 | - | 4.2 |
| LSD |  |  |  |  |  | - |  |
| **P** |  | n.s. | **<0.05** | n.s. | **<0.05** | - | **<0.0001** |
| ***Interactions*** |  |  |  |  |  |  |  |
| SR\*N | 8 | n.s. | n.s. | n.s. | n.s. | n.s. | n.s. |