| | | | Seeding | | 2023 | | | | | | | | | |
|---------|----------|---------------------------|---------------------|-----------------------|------------|------------|---------|--------|---------------|---------|---------|-------|----------------|---------|
| | Response | Management | rate ⁽²⁾ | Term. | Precip. | AGB (lb/a) | | | Yield (bu/a)* | | | | Response ratio | |
| Site ID | crop | comparison ⁽¹⁾ | (lb/a) | timing ⁽³⁾ | region (4) | Cover 1 | Cover 2 | p>f | No cover | Cover 1 | Cover 2 | p>f | Cover 1 | Cover 2 |
| RC11 | Corn | Rate: 40 vs. 80 | | PRE | SE | (5) | | | 215.9 | 206.7 | 208.9 | 0.057 | 0.957 | 0.968 |
| RC12 | Corn | Rate: 40 vs. 80 | | PRE | SE | (5) | | | 225.0 | 213.5 | 215.1 | 0.235 | 0.949 | 0.956 |
| RK06 | Corn | Rate: 50 vs. 100 | | PP | SW | (6) | | | | Pend | | | | |
| IF12 | Corn | Rate: 50 vs. 100 | | LP | Ν | 1,745 | 1,480 | 0.246 | | | | | | |
| IF19 | Corn | Cover vs. no cover | 43 | РР | SC | 176 | | nc | 180.5 | 174.8 | | 0.082 | 0.968 | |
| WW07 | Corn | Term. Timing: PP vs. PRE | 50 | | SC | 323 | 641 | 0.042 | 183.9 | 179.6 | 168.1 | 0.464 | 0.977 | 0.914 |
| WW08 | Corn | Term. Timing: PP vs. PRE | 80 | | SC | 391 | 841 | 0.005 | 183.9 | 152.9 | 169.9 | 0.188 | 0.831 | 0.924 |
| JF17 | Corn | N rate: 100 vs 140 | | LP | N | (6) | | | 153.0 | 168.2 | 180.7 | 0.040 | 1.099 | 1.181 |
| JF18 | Corn | N rate: 100 vs 140 | | LP | Ν | (6) | | | 153.0 | 143.2 | 136.6 | 0.326 | 0.936 | 0.893 |
| DG06 | Soybean | Rate: 28 vs. 56 | | PRE | N | (5) | | | | Pend | | | | |
| RC10 | Soybean | Rate: 50 vs. 80 | | PRE | SE | 1,039 | 1,447 | 0.318 | 58.2 | 59.7 | 57.7 | 0.513 | 1.026 | 0.991 |
| RC07 | Soybean | Rate: 50 vs. 100 | | PRE | SE | 2,150 | 2,052 | 0.785 | 53.0 | 47.7 | 45.0 | 0.015 | 0.900 | 0.849 |
| RK05 | Soybean | Rate: 50 vs. 100 | | РР | SW | (6) | | | Pending | | | | | |
| RC08 | Soybean | Term. Timing: PP vs. PRE | 50 | | SE | 906 | 1,006 | 0.713 | 37.7 | 41.8 | 40.5 | 0.330 | 1.109 | 1.074 |
| IF13 | Soybean | Term. Timing: PP vs. PRE | 55 | | SC | 155 | 589 | 0.012 | 57.2 | 60.4 | 56.4 | 0.076 | 1.056 | 0.986 |
| F15 | Soybean | Term. Timing: PP vs. PRE | 55 | | SC | 343 | 1,090 | 0.006 | 59.5 | 58.5 | 55.0 | 0.070 | 0.983 | 0.924 |
| WW09 | Soybean | Term. Timing: PP vs. PRE | 55 | | SC | 107 | 920 | 0.001 | 43.7 | 46.2 | 45.2 | 0.673 | 1.057 | 1.034 |
| RC09 | Soybean | Term. Timing: PP vs. PRE | 80 | | SE | 894 | 803 | 0.492 | 38.4 | 44.8 | 41.3 | 0.003 | 1.167 | 1.076 |
| WW05 | Soybean | Term. Timing: PP vs. EP | 50 | | SC | 105 | 1,688 | 0.002 | 45.0 | 47.8 | 41.5 | 0.025 | 1.062 | 0.922 |
| F14 | Soybean | Term. Timing: PP vs. EP | 55 | | SC | 155 | 412 | 0.002 | 59.5 | 60.5 | 55.0 | 0.137 | 1.017 | 0.924 |
| JF16 | Soybean | Term. Timing: PP vs. EP | 55 | | SC | 343 | 1,791 | 0.001 | 58.9 | 58.4 | 46.8 | 0.004 | 0.992 | 0.795 |
| WW10 | Soybean | Term. Timing: PP vs. EP | 55 | | SC | 107 | 1,295 | <0.001 | 45.4 | 46.2 | 42.0 | 0.431 | 1.018 | 0.925 |
| WW06 | Soybean | Term. Timing: PP vs. EP | 80 | | SC | 142 | 1,778 | <0.001 | 45.0 | 46.5 | 39.9 | 0.015 | 1.033 | 0.887 |
| JF20 | Soybean | Cover vs. no cover | 43 | PP | SC | 148 | | nc | 49.9 | 50.3 | 49.9 | 0.794 | 1.008 | 1.000 |
| DG07 | Soybean | Placement ⁽⁷⁾ | 28 | | Ν | (5) | | (5) | | Pend | | | | |
| | | | | | | | | | | | | | | |

Table 6. Individual trial site results: cover crop AGB, response crop yield and response ratios, 2023.

⁽¹⁾ Cover 1 vs. Cover 2

*Yield reported at standard moisture: corn, 15%; soybean, 13%

⁽²⁾ Cereal rye seeding rate, trial rate if seeding rate is not the comparison. ** indicates a non-rye trial, discussed in text.

⁽³⁾ Individual site termination timings are reported in Table 4; PP, preplant; PRE, preemergence; EP, early postemergence, <7 DAE; LP, late postemergence, >7 DAE.

⁽⁴⁾ References grouping of NWS Reporting Stations and precipitation amounts reported in Table 5.

⁽⁵⁾ Unsampled, stand too variable to get a representative sample.

⁽⁶⁾ Unsampled, stand terminated without sufficient notice for sampling.

⁽⁷⁾ Placement: In-row vs. between rows, references rye establishment in advance of 2023 response.

nc, no rye treatment comparison. Site JF20 treatment comparison not applied, response ratio 2 represents a second replicated comparison.