

**Table 1. Soybean cyst nematode (SCN) reproduction and agronomic performance of conventional (non-Roundup Ready®) soybean varieties in northern Iowa (Kanawha) in a SCN-infested field (average population at planting, 4,213 eggs/100cc soil) in 2002.**

| Brand                  | Variety                        | Relative maturity | Stand (plants/ft) | Height (inches) | Lodging (1-5) | Yield (bu/acre) | Yield rank | SCN # <sup>(1)</sup> (100 cc) | IDC Score <sup>(2)</sup> (1-5) |
|------------------------|--------------------------------|-------------------|-------------------|-----------------|---------------|-----------------|------------|-------------------------------|--------------------------------|
| Thompson               | T-3204CN                       | 2.0               | 5.7               | 31.3            | 2.0           | 46.4            | 10         | 1,850                         | 1.0                            |
| Gold Country Seed      | Gold Country X6219CYST         | 1.9               | 3.9               | 31.5            | 2.0           | 45.2            | 14         | 2,125                         | 1.3                            |
| Pioneer                | 92B05 (S) <sup>3</sup>         | 2.0               | 6.2               | 31.8            | 1.8           | 46.0            | 11         | 2,125                         | 2.5                            |
| Public                 | Bell                           | 1.9               | 6.1               | 32.8            | 2.0           | 45.0            | 15         | 1,875                         | 2.3                            |
| Public                 | Freeborn                       | 1.7               | 5.0               | 36.3            | 2.0           | 45.5            | 13         | 2,725                         | 1.8                            |
| Public                 | BSR 101 (S) <sup>3</sup>       | 1.9               | 4.7               | 35.3            | 1.8           | 41.7            | 19         | 3,225                         | 1.0                            |
| Dennis Ewing Farm Seed | D-2220+ SCN                    | 2.2               | 6.0               | 31.3            | 2.0           | 50.5            | 3          | 4,075                         | 1.5                            |
| Dennis Ewing Farm Seed | D-2323 SCN                     | 2.3               | 6.0               | 33.0            | 2.0           | 49.4            | 6          | 2,213                         | 1.3                            |
| Public                 | IA 1008                        | 1.9               | 5.9               | 39.3            | 2.0           | 47.8            | 8          | 1,575                         | 1.5                            |
| Public                 | IA 2021 (S) <sup>3</sup>       | 2.5               | 5.2               | 32.8            | 2.3           | 43.8            | 17         | 1,213                         | 1.3                            |
| Pioneer                | 9234 <sup>4</sup>              | 2.3               | 5.1               | 35.5            | 2.0           | 43.5            | 18         | 2,313                         | 1.0                            |
| Public                 | IA 1009                        | 1.8               | 5.8               | 36.8            | 2.3           | 50.0            | 4          | 2,575                         | 1.5                            |
| Public                 | Turner                         | 2.3               | 5.4               | 40.0            | 2.8           | 49.0            | 7          | 2,588                         | 1.3                            |
| Pioneer                | 9233 (S) <sup>3</sup>          | 2.3               | 4.6               | 36.0            | 2.0           | 47.6            | 9          | 1,925                         | 2.0                            |
| Public                 | Kenwood 94 (S) <sup>3</sup>    | 2.5               | 3.7               | 35.8            | 2.8           | 40.2            | 21         | 1,013                         | 2.3                            |
| Monsanto               | ASGROW A2553 (S) <sup>3</sup>  | 2.5               | 6.1               | 32.0            | 2.0           | 54.1            | 1          | 2,000                         | 1.5                            |
| Garst Seed Company     | Garst/AgriPro D259N            | 2.5               | 4.9               | 35.5            | 2.3           | 49.9            | 5          | 2,025                         | 1.0                            |
| Latham Seed Company    | Latham EX-552CN <sup>5,6</sup> | 2.3               | 6.0               | 41.3            | 3.0           | 44.7            | 16         | 1,775                         | 2.3                            |
| Sand Seed Service      | SOI 247N                       | 2.4               | 5.7               | 37.8            | 2.0           | 51.9            | 2          | 2,450                         | 1.8                            |
| ProfiSeed              | PS 2310 CN                     | 2.3               | 5.8               | 39.3            | 2.8           | 41.1            | 20         | 2,850                         | 2.8                            |
| Public                 | Jack                           | 2.9               | 5.1               | 47.5            | 3.0           | 45.9            | 12         | 2,400                         | 2.0                            |
|                        | LSD <sup>7</sup>               | ---               | NS                | 3.2             | 0.4           | 4.7             | ---        | NS                            | 2.0                            |

Values presented in table are means. Plots were planted on May 16, 2002, and harvested on October 9, 2002. Entries are listed in order of maturity date for the northeast variety trials location of Mason City, Iowa, then by decreasing order of yield. Unless otherwise noted, source of resistance is PI 88788.

<sup>1</sup>Final SCN egg population density (eggs/100 cc soil); there were no significant differences among initial SCN population densities; field infested with HG Type 2.5.7 (race 5) SCN.

<sup>2</sup>Iron deficiency chlorosis screening was conducted at two locations near Ames; resistant check = 1 and susceptible check = 2.9.

<sup>3</sup>Susceptible check variety.

<sup>4</sup>PI 548402 (Peking) source of resistance.

<sup>5</sup>Experimental variety.

<sup>6</sup>PI 437654 (Hartwig) and PI 88788 sources of resistance.

**Table 2. Soybean cyst nematode (SCN) reproduction and agronomic performance of Roundup Ready® soybean varieties in northern Iowa (Kanawha) in a SCN-infested field (average population at planting, 3,357 eggs/100cc soil) in 2002.**

| Brand                      | Variety                             | Relative maturity | Stand (plants/ft) | Height (inches) | Lodging (1-5) | Yield (bu/acre) | Yield rank | SCN # <sup>(1)</sup> (100 cc) | IDC Score <sup>(2)</sup> (1-5) |
|----------------------------|-------------------------------------|-------------------|-------------------|-----------------|---------------|-----------------|------------|-------------------------------|--------------------------------|
| Pioneer                    | 92B05 (S) <sup>3</sup>              | 2.0               | 7.9               | 34.0            | 2.0           | 47.5            | 35         | 1,413                         | 2.5                            |
| Wilson Seeds Inc.          | 1981 RR <sup>4</sup>                | 1.9               | 6.4               | 39.0            | 2.0           | 47.9            | 34         | 1,275                         | 1.0                            |
| Syngenta Seeds             | S18-U9                              | 1.8               | 6.4               | 35.8            | 1.8           | 44.9            | 36         | 1,675                         | 2.5                            |
| Monsanto                   | ASGROW AG1902                       | 1.9               | 4.7               | 32.5            | 2.0           | 48.1            | 33         | 2,438                         | 2.0                            |
| JC Robinson/Golden Harvest | X 2276RR <sup>5</sup>               | 2.2               | 7.2               | 35.0            | 2.0           | 52.5            | 9          | 1,625                         | 2.8                            |
| Gold Country Seed Inc.     | Gold Country 2121NRR                | 2.1               | 7.0               | 35.8            | 2.0           | 53.6            | 5          | 875                           | 4.0                            |
| Wilson Seeds Inc.          | 2350 RR (S) <sup>3</sup>            | 2.3               | 5.5               | 36.0            | 2.3           | 51.5            | 21         | 1,500                         | 1.8                            |
| JC Robinson/Golden Harvest | X 1969RR <sup>5</sup>               | 1.9               | 6.9               | 34.3            | 2.0           | 51.0            | 24         | 1,513                         | 2.5                            |
| Latham Seed Co.            | Latham 388RRN                       | 1.9               | 6.7               | 35.5            | 2.0           | 50.7            | 25         | 1,238                         | 2.0                            |
| Kruger Seed Company        | K-221 RR/SCN <sup>6</sup>           | 2.2               | 5.7               | 35.8            | 1.8           | 53.4            | 6          | 1,913                         | 1.8                            |
| Stine Seed Company         | Stine S1962-4                       | 1.9               | 6.5               | 37.0            | 1.8           | 52.8            | 8          | 1,288                         | 2.5                            |
| Merschman Seeds, Inc.      | Merschman Venus RR                  | 1.9               | 5.6               | 35.3            | 2.0           | 51.7            | 18         | 825                           | 2.0                            |
| Garst Seed Company         | Garst/AgriPro 2013RR/N <sup>6</sup> | 2.0               | 5.6               | 35.5            | 1.8           | 50.5            | 28         | 1,063                         | 2.0                            |
| Kruger Seed Company        | K-242 RR/SCN                        | 2.3               | 6.2               | 33.3            | 2.0           | 50.0            | 31         | 988                           | 2.5                            |
| Sand Seed Service          | SOI 2042NRR                         | 2.0               | 6.0               | 35.5            | 2.0           | 53.0            | 7          | 1,225                         | 2.0                            |
| ProfiSeed                  | PS 4225 CN                          | 2.2               | 6.9               | 36.3            | 2.0           | 52.0            | 14         | 1,300                         | 2.3                            |
| Gold Country Seed Inc.     | Gold Country 3221NRR                | 2.1               | 6.3               | 36.8            | 1.8           | 51.8            | 16         | 1,475                         | 3.0                            |
| Kruger Seed Company        | K-202 RR/SCN                        | 2.0               | 7.3               | 35.0            | 2.0           | 51.5            | 21         | 1,088                         | 2.5                            |
| United Agri Products       | Dyna-Gro 3199 NRR                   | 1.9               | 6.9               | 34.8            | 2.0           | 50.6            | 27         | 1,400                         | 2.3                            |
| Prairie Brand Seed Co.     | PB-1992NRR                          | 2.0               | 6.1               | 35.3            | 2.0           | 50.5            | 28         | 1,150                         | 2.3                            |
| Garst Seed Company         | Garst/AgriPro 2112RR/N              | 2.1               | 6.9               | 33.5            | 2.0           | 50.2            | 30         | 1,250                         | 1.5                            |
| Albert Lea Seed House      | Viking 2108 CNRR <sup>7</sup>       | 2.1               | 5.0               | 37.5            | 2.0           | 53.9            | 3          | 1,200                         | 2.0                            |
| Monsanto                   | DEKALB DKB24-51                     | 2.4               | 6.7               | 35.5            | 2.0           | 52.2            | 12         | 1,188                         | 2.5                            |
| Prairie Brand Seed Co.     | PB-2092NRR <sup>6</sup>             | 2.0               | 6.2               | 37.0            | 2.0           | 51.8            | 16         | 1,988                         | 2.0                            |
| Crow's Hybrid              | CRX231N <sup>5</sup>                | 2.3               | 5.3               | 37.0            | 2.0           | 51.7            | 18         | 750                           | 2.8                            |
| Pioneer                    | 92B36 (S) <sup>3</sup>              | 2.3               | 6.6               | 33.8            | 2.0           | 51.7            | 18         | 1,150                         | 2.8                            |
| Royster-Clark, Inc.        | Vigoro V20N3RR                      | 2.0               | 6.9               | 37.5            | 2.0           | 51.3            | 23         | 1,950                         | 2.5                            |
| Prairie Brand Seed Co.     | PB-2392NRR                          | 2.3               | 7.5               | 36.3            | 2.0           | 50.7            | 25         | 1,563                         | 2.5                            |
| Ottillie RO Seed           | Ottillie 8232 RRN                   | 2.3               | 6.8               | 35.5            | 2.0           | 52.3            | 11         | 1,650                         | 2.5                            |
| Stine Seed Company         | Stine S2342-4                       | 2.2               | 6.3               | 36.0            | 2.0           | 52.0            | 14         | 850                           | 2.8                            |
| Dennis Ewing Farm Seed     | D-277 RR/SCN                        | 2.5               | 7.4               | 36.8            | 2.0           | 57.1            | 1          | 1,075                         | 1.8                            |
| Four Star Seed Company     | 3252RR                              | 2.5               | 5.2               | 32.5            | 2.0           | 53.8            | 4          | 1,750                         | 1.8                            |
| Pioneer                    | 92B74 (S) <sup>3</sup>              | 2.7               | 6.7               | 34.5            | 2.0           | 52.5            | 9          | 2,225                         | 2.0                            |
| Garst Seed Company         | Garst/AgriPro 2612RR/N              | 2.6               | 6.6               | 34.0            | 2.0           | 49.5            | 32         | 800                           | 1.3                            |
| Dairyland Seed Co., Inc.   | DSR-255/RR                          | 2.5               | 6.6               | 38.8            | 2.0           | 55.1            | 2          | 613                           | 2.3                            |
| Dairyland Seed Co., Inc.   | DSR-274/RR                          | 2.7               | 7.2               | 36.5            | 3.0           | 52.1            | 13         | 825                           | 1.5                            |
|                            | LSD <sup>8</sup>                    | ---               | NS                | 2.7             | 0.3           | 3.5             | ---        | NS                            | 2.0                            |

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<sup>5</sup>Experimental variety.

<sup>6</sup>PI 437654 (Hartwig) and PI 88788 sources of resistance.

<sup>7</sup>PI 437654 (Hartwig) source of resistance.

<sup>8</sup>Least significant difference: values are from Fisher's least-significant-difference test (P= 0.05), NS = no significant differences among the varieties.