

Table 1. Soybean cyst nematode (SCN) reproduction and agronomic performance of soybean varieties in southeast Iowa (Crawfordsville) in a SCN-infested field and a noninfested field in 2002.

| Brand | Variety | Relative maturity | SCN-infested field | | | | | | | Noninfested field | | | | |
|----------------------------|------------------------|-------------------|--------------------|-------------------|-----------------|---------------|-----------------|------------|-------------------------------|-------------------|-----------------|---------------|-----------------|------------|
| | | | Maturity date | Stand (plants/ft) | Height (inches) | Lodging (1-5) | Yield (bu/acre) | Yield rank | SCN # ⁽¹⁾ (100 cc) | Stand (plants/ft) | Height (inches) | Lodging (1-5) | Yield (bu/acre) | Yield rank |
| Pioneer | 93B01 (S) ² | 3.0 | 9/16 | 8.9 | 31.0 | 1.8 | 43.1 | 38 | 8,000 | 7.3 | 30.3 | 2.0 | 53.5 | 19 |
| Prairie Brand Seed Co. | PB-2920NRR | 2.9 | 9/19 | 8.8 | 31.0 | 1.8 | 53.1 | 25 | 1,850 | 7.1 | 32.3 | 2.0 | 49.6 | 34 |
| JC Robinson/Golden Harvest | H-2991 RR ¹ | 2.9 | 9/20 | 7.8 | 31.8 | 1.8 | 54.4 | 16 | 2,625 | 7.5 | 31.3 | 1.3 | 52.1 | 26 |
| Midwest Seed Genetics | GR2931 | 2.9 | 9/20 | 7.4 | 32.3 | 1.0 | 53.1 | 25 | 1,000 | 7.1 | 31.3 | 2.0 | 52.2 | 25 |
| Pioneer | 93B53 (S) ² | 3.5 | 9/20 | 7.2 | 33.8 | 1.8 | 47.7 | 36 | 8,900 | 6.8 | 33.3 | 1.8 | 56.9 | 8 |
| Garst Seed Co. | Garst/AgriPro 3212RR/N | 3.2 | 9/21 | 7.2 | 35.8 | 2.3 | 51.6 | 29 | 2,300 | 6.9 | 34.3 | 2.0 | 52.8 | 22 |
| Pioneer | 93B35 (S) ² | 3.3 | 9/21 | 7.2 | 30.3 | 1.3 | 48.2 | 35 | 8,475 | 7.0 | 31.3 | 1.3 | 51.9 | 27 |
| Dennis Ewing Farm Seeds | D-340 RR/SCN | 3.3 | 9/22 | 8.1 | 32.0 | 2.0 | 54.1 | 18 | 1,500 | 7.5 | 31.3 | 1.5 | 54.4 | 16 |
| Stine Seed Company | Stine S2802-4 | 2.8 | 9/22 | 7.9 | 32.5 | 1.5 | 52.1 | 27 | 2,975 | 7.4 | 31.3 | 2.0 | 53.5 | 19 |
| Ottillie RO Seed | Ottillie 8333 RRN | 3.3 | 9/22 | 8.8 | 33.3 | 1.8 | 43.6 | 37 | 7,975 | 7.9 | 34.3 | 1.8 | 53.9 | 17 |
| Monsanto | ASGROW AG3201 | 3.2 | 9/23 | 7.9 | 34.8 | 1.3 | 57.3 | 6 | 1,625 | 7.4 | 34.8 | 2.0 | 52.8 | 22 |
| Kruger Seed Company | K-303 RR/SCN | 2.9 | 9/23 | 7.6 | 31.8 | 1.8 | 54.0 | 19 | 2,500 | 6.6 | 30.3 | 2.0 | 51.1 | 30 |
| Prairie Brand Seed Co. | PB-3292NRR | 3.2 | 9/23 | 7.5 | 37.3 | 1.8 | 50.7 | 31 | 8,000 | 6.8 | 36.8 | 1.3 | 56.2 | 11 |
| United Agri Products | Dyna-Grow 3321 NRR | 3.2 | 9/24 | 7.9 | 36.5 | 2.0 | 57.2 | 7 | 1,825 | 7.7 | 35.5 | 1.8 | 51.1 | 30 |
| Latham Seed Co. | Latham 1138RRN | 3.2 | 9/24 | 7.7 | 35.5 | 1.8 | 55.2 | 12 | 3,925 | 8.8 | 35.0 | 1.8 | 56.7 | 9 |
| Public | MPV 331 NRR | 3.3 | 9/24 | 8.3 | 34.5 | 2.3 | 53.3 | 22 | 1,400 | 7.7 | 33.0 | 2.0 | 51.6 | 29 |
| Syngenta Seeds | X233R ³ | 3.3 | 9/24 | 9.3 | 36.3 | 2.3 | 50.4 | 33 | 2,025 | 8.2 | 37.8 | 2.3 | 50.3 | 33 |
| Kruger Seed Company | K-344 RR/SCN | 3.2 | 9/25 | 9.0 | 37.0 | 1.8 | 53.3 | 22 | 5,450 | 7.4 | 37.5 | 1.3 | 57.1 | 7 |
| Prairie Brand Seed Co. | PB-3592NRR | 3.5 | 9/26 | 6.5 | 34.0 | 1.0 | 55.8 | 10 | 2,600 | 8.1 | 32.8 | 2.0 | 52.9 | 21 |
| Merschman Seeds, Inc. | Merschman Hoover VRR | 3.4 | 9/26 | 7.7 | 34.3 | 2.0 | 55.7 | 11 | 2,350 | 7.3 | 31.5 | 1.8 | 49.2 | 36 |
| Stine Seed Company | Stine S3402-4 | 3.4 | 9/26 | 8.2 | 34.0 | 1.5 | 55.2 | 12 | 3,025 | 6.4 | 33.0 | 2.0 | 51.9 | 27 |
| Syngenta Seeds | X235R ³ | 3.5 | 9/26 | 9.0 | 38.5 | 1.8 | 50.7 | 31 | 2,225 | 8.3 | 38.3 | 1.0 | 48.6 | 37 |
| Wilson Seeds Inc. | 3790 NRR ⁴ | 3.7 | 9/27 | 8.2 | 34.8 | 2.0 | 58.6 | 4 | 4,800 | 6.5 | 33.3 | 2.0 | 56.2 | 11 |
| Merschman Seeds, Inc. | Merschman Truman RR | 3.5 | 9/27 | 9.1 | 37.5 | 2.0 | 56.4 | 9 | 2,650 | 8.1 | 36.3 | 2.0 | 47.1 | 38 |
| Public | MPV 381 NRR | 3.8 | 9/27 | 9.3 | 35.3 | 2.0 | 54.6 | 14 | 8,600 | 7.2 | 36.5 | 2.0 | 58.7 | 2 |
| Public | MPV 350 NRR | 3.5 | 9/27 | 9.4 | 36.3 | 2.0 | 54.4 | 16 | 1,950 | 7.2 | 36.5 | 1.8 | 49.6 | 34 |
| Monsanto | ASGROW AG3703 | 3.7 | 9/27 | 8.4 | 38.0 | 2.0 | 53.8 | 20 | 2,075 | 8.0 | 37.3 | 1.5 | 53.9 | 17 |
| Dennis Ewing Farm Seed | D-388 RR/SCN | 3.8 | 9/27 | 8.6 | 33.5 | 2.3 | 51.4 | 30 | 5,375 | 7.7 | 34.8 | 2.0 | 58.4 | 4 |
| Stine Seed Company | Stine S3842-4 | 3.8 | 9/27 | 7.7 | 35.0 | 1.8 | 49.3 | 34 | 7,000 | 7.1 | 33.5 | 2.0 | 56.2 | 11 |
| Midwest Seed Genetics | GR3931 | 3.9 | 9/28 | 8.5 | 36.8 | 1.8 | 59.4 | 1 | 1,875 | 6.7 | 34.0 | 1.8 | 56.2 | 11 |
| Kruger Seed Company | K-389 RR/SCN | 3.7 | 9/28 | 9.0 | 34.3 | 1.8 | 58.4 | 5 | 4,400 | 8.8 | 32.0 | 2.0 | 56.7 | 9 |
| Sand Seed Service | SOI 340N ⁵ | 3.4 | 9/28 | 10.4 | 33.3 | 2.0 | 53.2 | 24 | 750 | 8.2 | 38.0 | 2.3 | 50.9 | 32 |

Table 1. Continued.

| Brand | Variety | Relative maturity | SCN-infested field | | | | | | | Noninfested field | | | | |
|------------------------|---------------------------|-------------------|--------------------|-------------------|-----------------|---------------|-----------------|------------|-------------------------------|-------------------|-----------------|---------------|-----------------|------------|
| | | | Maturity date | Stand (plants/ft) | Height (inches) | Lodging (1-5) | Yield (bu/acre) | Yield rank | SCN # ⁽¹⁾ (100 cc) | Stand (plants/ft) | Height (inches) | Lodging (1-5) | Yield (bu/acre) | Yield rank |
| Dennis Ewing Farm Seed | D-401 RR/SCN ⁶ | 3.9 | 9/29 | 8.3 | 37.0 | 1.0 | 59.4 | 1 | 2,000 | 7.6 | 34.8 | 1.5 | 55.8 | 15 |
| Garst Seed Co. | Garst/AgriPro 3712RR/N | 3.7 | 9/29 | 9.3 | 31.3 | 1.5 | 54.5 | 15 | 17,350 | 7.5 | 33.3 | 2.0 | 58.5 | 3 |
| Syngenta Seeds | S37-N4 ⁷ | 3.7 | 9/29 | 8.4 | 41.0 | 2.0 | 53.8 | 20 | 2,475 | 7.0 | 38.3 | 2.3 | 52.7 | 24 |
| United Agri Products | Dyna-Grow 3362 NRR | 3.6 | 9/29 | 8.3 | 31.0 | 1.5 | 52.1 | 27 | 8,425 | 7.7 | 32.3 | 2.0 | 58.3 | 5 |
| Sand Seed Service | SOI 3632NRR | 3.6 | 9/30 | 8.8 | 33.3 | 1.5 | 58.9 | 3 | 10,275 | 7.4 | 32.5 | 2.0 | 58.3 | 5 |
| Merschman Seeds, Inc. | Merschman Kennedy VIRR | 3.8 | 9/30 | 9.1 | 33.0 | 1.5 | 56.8 | 8 | 12,250 | 7.1 | 34.5 | 1.8 | 58.9 | 1 |
| | ISD ⁸ | --- | 2.7 | NS | 2.9 | 0.6 | 6.8 | --- | 4,169 | NS | 2.6 | 0.5 | 2.7 | --- |

Values presented in table are means. Infested and noninfested plots were planted on May 21, 2002, and harvested on October 8, 2002. Varieties are listed in order of maturity date in the infested location, then by decreasing order of yield in the infested location. Unless otherwise noted, source of resistance is PI 88 788, and the variety is Roundup Ready®.

¹Final SCN egg population density (eggs/100 cc soil). There were no significant differences among initial SCN population densities. Average initial SCN population was 2,090 eggs/100 cc soil. Field infested with HG Type 0 (Race 3) SCN.

²Susceptible check variety.

³Experimental variety.

⁴Peeking source of resistance.

⁵Conventional non-Roundup Ready® variety.

⁶Variety formerly D-393 RR/SCN.

⁷Variety formerly X139R.

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