# APPENDIX

*Table 2.1.* Edaphic information for field experiments conducted in 1996 and 1997.

| Location (County) | Soil type | pH |
|---|---|---|
| Isle of Wight (1996) | Slagle fine sandy loam, fine-loamy, siliceous, thermic Aquic Hapludults | 6.0 |
| James City (1997) | Dougue loam, clayey, mixed, thermic Aquic Hapludults | 6.4 |
| King William (1996) | Dragston coarse-loamy, mixed, thermic Aeric Ochaquults | 6.3 |
| King and Queen (1997) | Dragston coarse-loamy, mixed, thermic Aeric Ochaquults | 6.2 |
| Augusta (1996) | Frederick – Nixa complex, clayey, kaolinitic, mesic Typic Paleudults | 6.5 |
| Augusta (1997) | Frederick – Nixa complex, clayey, kaolinitic, mesic Typic Paleudults | 6.4 |

*Table 2.2.* Planting, application, and crop and weed characteristics for field experiments conducted in 1996 and 1997.

| Location (County) | Planting Date | Application Date | Hybrid | Corn Growth Stage | Bermudagrass Growth Stage |
|---|---|---|---|---|---|
| Isle of Wight (1996) | 4-08-96 | 5-30-96 | DK 592 | 22”-25” | 8”-10” runner |
| James City (1997) | 4-20-97 | 6-13-97 | DK 683 | 24”-28” | 8”-10” runner |
| King William (1996) | 4-02-96 | 5-30-96 | DK 592 | 16”-20” | 12”-14” runner |
| King and Queen (1997) | 4-25-97 | 6-14-97 | DK 683 | 20”-24” | 8”-10” runner |
| Augusta (1996) | 5-03-96 | 6-17-96 | DK 592 | 24”-26” | 8”-10” runner |
| Augusta (1997) | 5-15-97 | 7-03-97 | DK 683 | 24”-26” | 8”-10” runner |

*Table 2.3.* Herbicide application effects on bermudagrass control, crop injury, and corn yield - Isle of Wight Co., VA - 1996.

| Treatment | Rate (kg/ha) | Application Method | Crop Injury % | | Bermudagrass Control % | | Yield (kg/ha) |
|---|---|---|---|---|---|---|---|
| | | | 25 DAT | 69 DAT | 25 DAT | 69 DAT | |
| Sethoxydim | 0.21 | POST | 3 | 0 | 83 | 50 | 5220 |
| | 0.21 | PDR | 3 | 0 | 90 | 92 | 6320 |
| Quizalofop - P | 0.08 | POST | 6 | 10 | 90 | 78 | 4730 |
| | 0.08 | PDR | 3 | 0 | 95 | 94 | 4960 |
| Fluazifop-P | 0.21 | POST | 64 | 76 | 88 | 98 | 1710 |
| | 0.21 | PDR | 5 | 1 | 86 | 100 | 5330 |
| Clethodim | 0.14 | POST | 76 | 95 | 84 | 28 | 130 |
| | 0.14 | PDR | 59 | 68 | 95 | 83 | 2760 |
| Control | | | 1 | 0 | 0 | 0 | 5755 |
| LSD (0.05) | | | 9 | 11 | 6 | 13 | 1600 |

*Table 2.4.* Herbicide application effects on bermudagrass control, crop injury, and corn yield - James City Co., Va. - 1997.

| Treatment | Rate (kg/ha) | Application Method | Crop Injury % | | Bermudagrass Control % | | Yield (kg/ha) |
|---|---|---|---|---|---|---|---|
| | | | 24 DAT | 72 DAT | 24 DAT | 72 DAT | |
| Sethoxydim | 0.21 | POST | 0 | 0 | 65 | 73 | 6861 |
| | 0.21 | PDR | 0 | 0 | 71 | 66 | 6838 |
| Quizalofop - P | 0.08 | POST | 4 | 4 | 86 | 95 | 6545 |
| | 0.08 | PDR | 0 | 0 | 93 | 99 | 6174 |
| Fluazifop-P | 0.21 | POST | 23 | 33 | 84 | 92 | 5835 |
| | 0.21 | PDR | 3 | 3 | 81 | 96 | 4820 |
| Clethodim | 0.14 | POST | 25 | 36 | 79 | 73 | 6217 |
| | 0.14 | PDR | 9 | 13 | 78 | 76 | 6576 |
| Fluazifop-P + | 0.21 | POST | 10 | 15 | 75 | 86 | 6081 |
| Fenoxaprop | 0.21 | PDR | 0 | 5 | 80 | 90 | 5718 |
| Control | | | 0 | 0 | 0 | 0 | 3961 |
| LSD (0.05) | | | 4 | 10 | 6 | 10 | 1332 |

*Table 2.5.* Herbicide application effects on bermudagrass control, crop injury, and corn yield - Augusta Co., Va. - 1996.

| Treatment | Rate (kg/ha) | Application Method | Crop Injury % | | Bermudagrass Control % | | Yield (kg/ha) |
|---|---|---|---|---|---|---|---|
| | | | 26 DAT | 54 DAT | 26 DAT | 54 DAT | |
| Sethoxydim | 0.21 | POST | 0 | 0 | 85 | 83 | 6640 |
| | 0.21 | PDR | 0 | 0 | 86 | 80 | 6470 |
| Quizalofop - P | 0.08 | POST | 0 | 0 | 99 | 96 | 7500 |
| | 0.08 | PDR | 0 | 0 | 99 | 94 | 7890 |
| Fluazifop-P | 0.21 | POST | 28 | 13 | 89 | 93 | 7130 |
| | 0.21 | PDR | 0 | 0 | 86 | 96 | 7480 |
| Clethodim | 0.14 | POST | 36 | 19 | 79 | 78 | 6770 |
| | 0.14 | PDR | 2 | 1 | 84 | 90 | 7440 |
| Control | | | 0 | 0 | 0 | 0 | 6140 |
| LSD (0.05) | | | 3 | 6 | 10 | 9 | NS |

*Table 2.6.* Herbicide application effects on bermudagrass control, crop injury, and corn yield - Augusta Co., Va. - 1997.

| Treatment | Rate (kg/ha) | Application Method | Crop Injury % | | Bermudagrass Control % | | Yield (kg/ha) |
|---|---|---|---|---|---|---|---|
| | | | 21 DAT | 35 DAT | 21 DAT | 35 DAT | |
| Sethoxydim | 0.21 | POST | 0 | -- | 48 | 5 | 995 |
| | 0.21 | PDR | 0 | -- | 45 | 13 | 1347 |
| Quizalofop - P | 0.08 | POST | 4 | -- | 34 | 6 | 1112 |
| | 0.08 | PDR | 1 | -- | 48 | 24 | 1815 |
| Fluazifop-P | 0.21 | POST | 10 | -- | 44 | 15 | 1026 |
| | 0.21 | PDR | 0 | -- | 48 | 44 | 1710 |
| Clethodim | 0.14 | POST | 13 | -- | 43 | 10 | 866 |
| | 0.14 | PDR | 4 | -- | 46 | 10 | 1288 |
| Fluazifop-P + | 0.21 | POST | 9 | -- | 42 | 13 | 1503 |
| Fenoxaprop | 0.21 | PDR | 0 | -- | 51 | 25 | 1471 |
| Control | | | 4 | -- | 0 | 0 | 722 |
| LSD (0.05) | | | 5 | -- | 11 | 6 | NS |

*Table 2.7.* Herbicide combinations and effects on bermudagrass control, crop injury, and corn yield- King William Co., Va.- 1996.

| Treatment | Rate (kg/ha) | Appl. Method | Crop Injury % 26 DAT | Crop Injury % 72 DAT | Bermudagrass Control % 26 DAT | Bermudagrass Control % 72 DAT | Yield (kg/ha) |
|---|---|---|---|---|---|---|---|
| Sethoxydim | 0.21 | POST | 0 | 0 | 81 | 18 | 10606 |
| Sethoxydim + Bromoxynil | 0.21+0.28 | POST | 0 | 0 | 76 | 5 | 9796 |
| Sethoxydim + Primisulfuron | 0.21+0.04 | POST | 0 | 0 | 83 | 16 | 8977 |
| Sethoxydim +Bentazon | 0.21+0.56 | POST | 0 | 0 | 48 | 6 | 10175 |
| Sethoxydim + Bentazon + Atrazine | 0.21+0.58, 0.54 | POST | 0 | 0 | 45 | 0 | 9933 |
| Sethoxydim + Dicamba | 0.21+0.56 | POST | 0 | 0 | 79 | 20 | 9640 |
| Sethoxydim + 2,4-D Amine | 0.21+0.56 | POST | 0 | 0 | 69 | 5 | 8110 |
| Sethoxydim + Dicamba + Atrazine | 0.21+0.42, 0.70 | POST | 0 | 0 | 39 | 5 | 10097 |
| Sethoxydim + Halosulfuron | 0.21+0.04 | POST | 0 | 0 | 36 | 0 | 6959 |
| Sethoxydim + Primisulfuron + Prosulfuron | 0.21+0.02, 0.02 | POST | 0 | 0 | 69 | 5 | 11553 |
| Sethoxydim + Flumiclorac | 0.21+0.03 | POST | 2 | 0 | 50 | 0 | 8790 |
| Control | | | 0 | 0 | 0 | 0 | 10467 |
| LSD (0.05) | | | 1 | 0 | 19 | 10 | 1936 |

*Table 2.8.* Herbicide combinations and effects on bermudagrass control, crop tolerance, and corn yield - King and Queen Co., Va. – 1997.

| Treatment | Rate (kg/ha) | Appl. Method | Crop Injury % 26 DAT | Crop Injury % 61 DAT | Bermudagrass Control % 26 DAT | Bermudagrass Control % 61 DAT | Yield (kg/ha) |
|---|---|---|---|---|---|---|---|
| Sethoxydim | 0.21 | POST | 0 | 0 | 81 | 75 | 6030 |
| Sethoxydim + Bromoxynil | 0.21+0.28 | POST | 0 | 0 | 83 | 66 | 6315 |
| Sethoxydim + Primisulfuron | 0.21+0.04 | POST | 1 | 0 | 79 | 70 | 5210 |
| Sethoxydim +Bentazon | 0.21+0.56 | POST | 0 | 0 | 63 | 35 | 5023 |
| Sethoxydim + Bentazon + Atrazine | 0.21+0.58, 0.54 | POST | 1 | 0 | 73 | 48 | 5745 |
| Sethoxydim + Dicamba | 0.21+0.56 | POST | 0 | 0 | 85 | 45 | 3813 |
| Sethoxydim + 2,4-D Amine | 0.21+0.56 | POST | 0 | 0 | 80 | 45 | 5570 |
| Sethoxydim + Dicamba + Atrazine | 0.21+0.42, 0.70 | POST | 1 | 0 | 83 | 65 | 6108 |
| Sethoxydim + Halosulfuron | 0.21+0.04 | POST | 1 | 0 | 85 | 86 | 4840 |
| Sethoxydim + Primisulfuron + Prosulfuron | 0.21+0.02, 0.02 | POST | 0 | 0 | 84 | 46 | 5359 |
| Sethoxydim + Flumiclorac | 0.21+0.03 | POST | 0 | 0 | 81 | 73 | 3883 |
| Control | | | 0 | 0 | 0 | 0 | 3962 |
| LSD (0.05) | | | 1.5 | 0 | 6.4 | 14.5 | 1815 |

*Table 2.9.* Herbicide combinations and effects on bermudagrass control, crop tolerance, and corn yield - Augusta Co., Va. - 1996.

| Treatment | Rate (kg/ha) | Appl. Method | Crop Injury % 26 DAT | Crop Injury % 54 DAT | Bermudagrass Control % 26 DAT | Bermudagrass Control % 54 DAT | Yield (kg/ha) |
|---|---|---|---|---|---|---|---|
| Sethoxydim | 0.21 | POST | 0 | 0 | 85 | 83 | 8263 |
| Sethoxydim + Bromoxynil | 0.21+0.28 | POST | 0 | 0 | 85 | 83 | 8547 |
| Sethoxydim + Primisulfuron | 0.21+0.04 | POST | 1 | 0 | 88 | 85 | 7864 |
| Sethoxydim +Bentazon | 0.21+0.56 | POST | 0 | 0 | 85 | 81 | 8809 |
| Sethoxydim + Bentazon + Atrazine | 0.21+0.58, 0.54 | POST | 0 | 0 | 48 | 44 | 7923 |
| Sethoxydim + Dicamba | 0.21+0.56 | POST | 0 | 0 | 88 | 74 | 7170 |
| Sethoxydim + 2,4-D Amine | 0.21+0.56 | POST | 1 | 1 | 85 | 68 | 8106 |
| Sethoxydim + Dicamba + Atrazine | 0.21+0.42, 0.70 | POST | 0 | 0 | 81 | 81 | 8255 |
| Sethoxydim + Halosulfuron | 0.21+0.04 | POST | 0 | 0 | 81 | 88 | 9375 |
| Sethoxydim + Primisulfuron + Prosulfuron | 0.21+0.02, 0.02 | POST | 0 | 0 | 90 | 89 | 8782 |
| Sethoxydim + Flumiclorac | 0.21+0.03 | POST | 2 | 1 | 85 | 91 | 8411 |
| Sethoxydim + Pyridate | 0.21+0.78 | POST | 0 | 0 | 79 | 79 | 8989 |
| Sethoxydim + Primisulfuron | 0.21+0.03 | POST | 1 | 1 | 83 | 78 | 8360 |
| Control | | | 0 | 0 | 0 | 0 | 7638 |
| LSD (0.05) | | | 1.9 | 3.9 | 6.8 | 6.1 | 1651 |

*Table 2.10.* Herbicide combinations and effects on bermudagrass control, crop tolerance, and corn yield - Augusta Co., Va. - 1997.

| Treatment | Rate (kg/ha) | Appl. Method | Crop Injury % 21 DAT | Crop Injury % 35 DAT | Bermudagrass Control % 21 DAT | Bermudagrass Control % 35 DAT | Yield (kg/ha) |
|---|---|---|---|---|---|---|---|
| Sethoxydim | 0.21 | POST | 0 | NR | 48 | 8 | 995 |
| Sethoxydim + Bromoxynil | 0.21+0.28 | POST | 0 | NR | 35 | 5 | 1530 |
| Sethoxydim + Primisulfuron | 0.21+0.04 | POST | 1 | NR | 55 | 7 | 820 |
| Sethoxydim +Bentazon | 0.21+0.56 | POST | 1 | NR | 40 | 6 | 703 |
| Sethoxydim + Bentazon + Atrazine | 0.21+0.58, 0.54 | POST | 1 | NR | 36 | 0 | 363 |
| Sethoxydim + Dicamba | 0.21+0.56 | POST | 3 | NR | 51 | 9 | 742 |
| Sethoxydim + 2,4-D Amine | 0.21+0.56 | POST | 4 | NR | 40 | 14 | 2022 |
| Sethoxydim + Dicamba + Atrazine | 0.21+0.42, 0.70 | POST | 10 | NR | 54 | 11 | 1386 |
| Sethoxydim + Halosulfuron | 0.21+0.04 | POST | 3 | NR | 44 | 8 | 956 |
| Sethoxydim + Primisulfuron + Prosulfuron | 0.21+0.02, 0.02 | POST | 5 | NR | 56 | 8 | 1854 |
| Sethoxydim + Flumiclorac | 0.21+0.03 | POST | 4 | NR | 39 | 8 | 2818 |
| Sethoxydim + Pyridate | 0.21+0.07 | POST | 3 | NR | 45 | 8 | 3337 |
| Sethoxydim + Primisulfuron | 0.21+0.03 | POST | 5 | NR | 60 | 13 | 722 |
| Control | | | 4 | NR | 0 | 0 | 722 |
| LSD (0.05) | | | 4.6 | | 10.7 | 6 | 1073 |

*Table 3.1*. Herbicide application effects on weed control in sethoxydim-tolerant corn, Blacksburg, VA – 1996.

| | | | Broadleaf and Grass Weed Control 19 DAT | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| TREATMENT | Rate (kg/ha) | Injury 7 DAT | CYPES | AMARE | CHEAL | PANDI | IPOHE | DATST | DIGSA |
| Sethoxydim Control | 0.21 | 3 | 0 | 0 | 0 | 94 | 0 | 0 | 94 |
| Atrazine + Bentazon | 0.54, 0.58 | 4 | 89 | 100 | 100 | 100 | 100 | 100 | 93 |
| Dicamba | 0.56 | 18 | 0 | 94 | 100 | 100 | 100 | 100 | 99 |
| 2,4 – D | 0.56 | 15 | 0 | 98 | 99 | 100 | 100 | 86 | 100 |
| Atrazine + Dicamba | 0.70, 0.42 | 16 | 69 | 100 | 100 | 100 | 96 | 100 | 93 |
| Bromoxynil | 0.28 | 8 | 0 | 84 | 89 | 95 | 81 | 100 | 93 |
| Nicosulfuron | 0.034 | 29 | 73 | 100 | 81 | 89 | 91 | 100 | 79 |
| Primisulfuron | 0.039 | 8 | 70 | 100 | 90 | 91 | 80 | 100 | 91 |
| Halosulfuron | 0.034 | 5 | 86 | 96 | 44 | 95 | 93 | 86 | 90 |
| Primisulfuron + Prosulfuron | 0.02, 0.02 | 5 | 68 | 91 | 90 | 88 | 89 | 100 | 83 |

*Table 3.1. continued*

| TREATMENT | Rate (kg/ha) | Injury 7 DAT | Broadleaf and Grass Weed Control 19 DAT | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | CYPES | AMARE | CHEAL | PANDI | IPOHE | DATST | DIGSA |
| Flumiclorac | 0.03 | 9 | 0 | 98 | 91 | 95 | 89 | 95 | 95 |
| Pyridate | 0.78 | 5 | 0 | 100 | 100 | 95 | 80 | 93 | 94 |
| Bentazon | 0.56 | 5 | 85 | 88 | 86 | 100 | 54 | 100 | 96 |
| Control | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| LSD (0.05) | | 8 | 7 | 9 | 8 | 5 | 6 | 8 | 8 |

*Table 3.2.* Herbicide application effects on weed control in sethoxydim-tolerant corn, Blacksburg, VA – 1996.

| | | Broadleaf and Grass Weed Control 47 DAT | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| TREATMENT | Rate (kg/ha) | CYPES | AMARE | CHEAL | PANDI | IPOHE | DATST | DIGSA | Yield (kg/ha) |
| Sethoxydim Control | 0.21 | 0 | 0 | 0 | 95 | 0 | 0 | 94 | 7400 |
| Atrazine + Bentazon | 0.54, 0.58 | 95 | 100 | 100 | 97 | 90 | 100 | 91 | 8940 |
| Dicamba | 0.56 | 6 | 100 | 100 | 100 | 95 | 100 | 100 | 7420 |
| 2,4 – D | 0.56 | 15 | 96 | 100 | 100 | 96 | 99 | 99 | 8020 |
| Atrazine + Dicamba | 0.70, 0.42 | 49 | 100 | 100 | 96 | 89 | 100 | 94 | 8410 |
| Bromoxynil | 0.28 | 0 | 84 | 88 | 96 | 80 | 100 | 94 | 8950 |
| Nicosulfuron | 0.034 | 81 | 100 | 73 | 95 | 84 | 95 | 86 | 8290 |
| Primisulfuron | 0.039 | 76 | 98 | 90 | 90 | 81 | 100 | 90 | 8510 |
| Halosulfuron | 0.034 | 100 | 100 | 50 | 100 | 75 | 95 | 98 | 8430 |
| Primisulfuron + Prosulfuron | 0.02, 0.02 | 59 | 90 | 86 | 93 | 86 | 100 | 85 | 8910 |

*Table 3.2. continued.*

| | | Broadleaf and Grass Weed Control 47 DAT | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| TREATMENT | Rate (kg/ha) | CYPES | AMARE | CHEAL | PANDI | IPOHE | DATST | DIGSA | Yield (kg/ha) |
| Flumiclorac | 0.03 | 15 | 95 | 78 | 94 | 78 | 90 | 94 | 7930 |
| Pyridate | 0.78 | 8 | 98 | 100 | 91 | 78 | 98 | 89 | 8310 |
| Bentazon | 0.56 | 90 | 89 | 79 | 98 | 45 | 98 | 95 | 8660 |
| Control | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4830 |
| LSD (0.05) | | 8 | 7 | 9 | 8 | 5 | 6 | 8 | 1160 |

*Table 3.3.* Herbicide application effects with sethoxydim on weed control in sethoxydim-tolerant corn, Blacksburg, VA – 1997.

| | | | Broadleaf and Grass Weed Control 22 DAT | | | |
|---|---|---|---|---|---|---|
| TREATMENT | Rate (kg/ha) | Injury 7 DAT | SETFA | IPOHE | DIGSA | SIDSP |
| Sethoxydim Control | 0.21 | 0 | 98 | 0 | 96 | 0 |
| Atrazine + Bentazon | 0.54, 0.58 | 0 | 94 | 94 | 95 | 100 |
| Dicamba | 0.56 | 5 | 95 | 92 | 96 | 86 |
| 2,4 – D | 0.56 | 15 | 93 | 91 | 93 | 89 |
| Atrazine + Dicamba | 0.70, 0.42 | 16 | 94 | 91 | 96 | 96 |
| Bromoxynil | 0.28 | 8 | 95 | 71 | 93 | 73 |
| Nicosulfuron | 0.034 | 29 | 94 | 83 | 94 | 78 |
| Primisulfuron | 0.039 | 8 | 88 | 81 | 86 | 85 |
| Halosulfuron | 0.034 | 5 | 94 | 68 | 94 | 53 |
| Primisulfuron + Prosulfuron | 0.02, 0.02 | 5 | 86 | 86 | 86 | 85 |

*Table 3.3. continued.*

| TREATMENT | Rate (kg/ha) | Injury 7 DAT | Broadleaf and Grass Weed Control 22 DAT | | | |
|---|---|---|---|---|---|---|
| | | | SETFA | IPOHE | DIGSA | SIDSP |
| Flumiclorac | 0.03 | 4 | 94 | 44 | 94 | 68 |
| Pyridate | 0.78 | 1 | 86 | 59 | 91 | 81 |
| Bentazon | 0.56 | 0 | 94 | 56 | 96 | 96 |
| Control | | 0 | 0 | 0 | 0 | 0 |
| LSD (0.05) | | 1.7 | 4 | 11 | 4 | 9 |

*Table 3.4.* Herbicide application effects on weed control in sethoxydim-tolerant corn, Blacksburg, VA – 1997.

| | | | Broadleaf and Grass Weed Control 54 DAT | | | | |
|---|---|---|---|---|---|---|---|
| TREATMENT | Rate (kg/ha) | Injury 54 DAT | SETFA | IPOHE | DIGSA | SIDSP | Yield (kg/ha) |
| Sethoxydim Control | 0.21 | 0 | 98 | 0 | 100 | 0 | 5580 |
| Atrazine + Bentazon | 0.54, 0.58 | 0 | 89 | 90 | 99 | 98 | 7230 |
| Dicamba | 0.56 | 1 | 88 | 96 | 99 | 88 | 6450 |
| 2,4 – D | 0.56 | 1 | 91 | 76 | 99 | 80 | 6480 |
| Atrazine + Dicamba | 0.70, 0.42 | 1 | 89 | 94 | 99 | 89 | 6500 |
| Bromoxynil | 0.28 | 0 | 91 | 68 | 100 | 69 | 7175 |
| Nicosulfuron | 0.034 | 1 | 83 | 64 | 99 | 66 | 6715 |
| Primisulfuron | 0.039 | 1 | 73 | 64 | 100 | 64 | 6930 |
| Halosulfuron | 0.034 | 1 | 93 | 61 | 100 | 60 | 6420 |
| Primisulfuron + Prosulfuron | 0.02, 0.02 | 1 | 81 | 78 | 99 | 78 | 7590 |

*Table 3.4. continued.*

| TREATMENT | Rate (kg/ha) | Injury 54 DAT | Broadleaf and Grass Weed Control 54 DAT | | | | Yield (kg/ha) |
|---|---|---|---|---|---|---|---|
| | | | SETFA | IPOHE | DIGSA | SIDSP | |
| Flumiclorac | 0.03 | 0 | 88 | 36 | 100 | 55 | 6860 |
| Pyridate | 0.78 | 0 | 90 | 56 | 100 | 84 | 7025 |
| Bentazon | 0.56 | 0 | 86 | 55 | 98 | 85 | 7320 |
| Control | | 0 | 0 | 0 | 0 | 0 | 5855 |
| LSD (0.05) | | 0.5 | 6 | 12 | 2 | 10 | 1050 |

*Table 4.1.* Herbicide application effects on injury and yield of sethoxydim–tolerant corn hybrids, Blacksburg, VA.-1995.

| Treatment | Rate | Injury(%)35 DAT | | Injury(%)72 DAT | | Yield (kg/ha) | |
|---|---|---|---|---|---|---|---|
| | | DK 592 | CARGILL | DK 592 | CARGILL | DK 592 | CARGILL |
| Sethoxydim | 1 X | 0 | 2 | 0 | 0 | 7760 | 5900 |
| | 2 X | 0 | 0 | 0 | 0 | 8090 | 7340 |
| | 4 X | 0 | 0 | 2 | 2 | 6980 | 6330 |
| | 8 X | 7 | 10 | 2 | 0 | 7550 | 7630 |
| Fluazifop-P | 1 X | 5 | 0 | 25 | 18 | 2910 | 3320 |
| | 4 X | 17 | 22 | 43 | 50 | 1510 | 1090 |
| | 8 X | 25 | 30 | 57 | 67 | 1300 | 690 |
| Quizalofop-P | 1 X | 0 | 5 | 2 | 5 | 7150 | 4620 |
| | 4 X | 18 | 18 | 57 | 65 | 960 | 1110 |
| | 8 X | 18 | 18 | 100 | 100 | 0 | 0 |
| Clethodim | 1 X | 17 | 30 | 52 | 97 | 1960 | 440 |
| | 4 X | 30 | 27 | 80 | 98 | 420 | 0 |
| | 8 X | 17 | 23 | 65 | 78 | 380 | 0 |
| LSD (0.05) | | 11 | 8 | 17 | 11 | 1740 | 1910 |

*Table 4.2.* Herbicide application effects on injury to sethoxydim-tolerant corn hybrids-24 DAT, Blacksburg, VA-1996.

| Treatment | Rate | Injury (%) | | | |
|---|---|---|---|---|---|
| | | DK 592 | CARGILL 7800 | CARGILL 4800 | RX 680 |
| Sethoxydim | 1 X | 1 | 0 | 0 | 0 |
| | 2 X | 4 | 3 | 3 | 3 |
| | 4 X | 0 | 0 | 0 | 0 |
| | 8 X | 8 | 4 | 3 | 4 |
| Fluazifop-P | 1 X | 41 | 34 | 24 | 38 |
| | 4 X | 79 | 81 | 75 | 85 |
| | 8 X | 93 | 95 | 90 | 95 |
| Quizalofop-P | 1 X | 10 | 11 | 10 | 15 |
| | 4 X | 85 | 81 | 88 | 93 |
| | 8 X | 98 | 99 | 97 | 99 |
| Clethodim | 1 X | 69 | 73 | 84 | 84 |
| | 4 X | 93 | 95 | 94 | 97 |
| | 8 X | 96 | 99 | 96 | 99 |
| LSD (0.05) | | 10 | 9 | 8 | 8 |

*Table 4.3.* Herbicide application effects on injury to sethoxydim-tolerant corn hybrids-53 DAT, Blacksburg, VA-1996.

| Treatment | Rate | Injury (%) | | | |
|---|---|---|---|---|---|
| | | DK 592 | CARGILL 7800 | CARGILL 4800 | RX 680 |
| Sethoxydim | 1 X | 0 | 0 | 0 | 0 |
| | 2 X | 0 | 0 | 0 | 0 |
| | 4 X | 3 | 0 | 0 | 0 |
| | 8 X | 3 | 0 | 0 | 0 |
| Fluazifop-P | 1 X | 18 | 11 | 3 | 5 |
| | 4 X | 64 | 66 | 51 | 79 |
| | 8 X | 97 | 99 | 95 | 100 |
| Quizalofop-P | 1 X | 0 | 0 | 0 | 1 |
| | 4 X | 91 | 77 | 86 | 99 |
| | 8 X | 100 | 100 | 100 | 100 |
| Clethodim | 1 X | 39 | 50 | 73 | 74 |
| | 4 X | 100 | 100 | 100 | 100 |
| | 8 X | 100 | 100 | 100 | 100 |
| LSD (0.05) | | 10 | 13 | 11 | 6 |

*Table 4.4.* Herbicide application effects on the yield of sethoxydim-tolerant corn hybrids, Blacksburg, VA-1996.

| Treatment | Rate | Yield (kg/ha) | | | |
|---|---|---|---|---|---|
| | | DK 592 | CARGILL 7800 | CARGILL 4800 | RX 680 |
| Sethoxydim | 1 X | 8280 | 8690 | 8030 | 7540 |
| | 2 X | 8370 | 8300 | 7170 | 6980 |
| | 4 X | 7400 | 7934 | 7260 | 7070 |
| | 8 X | 6900 | 7420 | 8050 | 7500 |
| Fluazifop-P | 1 X | 7010 | 7540 | 7390 | 7280 |
| | 4 X | 3780 | 3250 | 4430 | 1460 |
| | 8 X | 270 | 310 | 500 | 25 |
| Quizalofop-P | 1 X | 7760 | 8200 | 6800 | 5950 |
| | 4 X | 930 | 2070 | 990 | 125 |
| | 8 X | 60 | 0 | 0 | 110 |
| Clethodim | 1 X | 5580 | 4140 | 2370 | 1510 |
| | 4 X | 0 | 0 | 0 | 0 |
| | 8 X | 0 | 0 | 0 | 0 |
| LSD (0.05) | | 1420 | 1560 | 1720 | 1200 |