

# Crops – Commercial

## Grain Sorghum

| Insect   | Insecticide   | Amount of Concentrate per Acre              | Pounds Active Ingredient per Acre | Acres Treated per Gallon or Pound SP | Economic Threshold When to Treat  |
|--|---|---|-----------------------------------|--------------------------------------|---|
| <b>Chinch bugs</b>                                 | imidacloprid<br>Gaucho 600                            | 8 fluid ounces per hundredweight seed       |                                   |                                      | <b>-Seed Treatments</b><br>-Preventive. Rates are based on 1,000 row feet.  |
|  | thiamethoxam<br>Cruiser 5FS                           | 5.1 fluid ounces per hundredweight seed     |                                   |                                      |   |
|  | clothianidin<br>Nipsit Inside (5)                     | 5.1-6.4 fluid ounces per hundredweight seed |                                   |                                      |   |
|  | cyfluthrin<br>Tombstone (2)                           | 2.0-2.8 ounces                              | 0.038-0.044                       | 64-45.7                              | <b>-Foliar sprays</b><br>Treat when two or more adults are found on 20% seedling plants. For larger plants, a judgment decision based on bug counts, crop vigor and growing conditions will determine need for treatment.   |
|  | gamma-cyhalothrin<br>Declare (1.25)                   | 1.54 ounces                                 | 0.015                             | 83.1                                 |   |
|  | z-cypermethrin<br>Mustang Max (0.8)                   | 3.2-4.0 ounces                              | 0.02-0.025                        | 40-32                                |   |
|  | lambda-cyhalothrin<br>Warrior II (2.08)               | 1.92 ounces                                 | 0.03                              | 66.7                                 |   |
|  | beta-cyfluthrin<br>Baythroid XL (1)                   | 2.0-2.8 ounces                              | 0.02                              | 64-45.7                              |   |
|  | a-cypermethrin<br>Fastac (0.83)                       | 3.2-3.9 ounces                              | 0.02-0.025                        | 40-32.8                              |   |
| <b>Corn earworm, fall armyworm (whorl feeders)</b> | spinosad<br>Blackhawk (0.36)                          | 1.7-3.3 ounces                              | 0.038-0.075                       | 9.4-4.8                              | -Treatment in the whorl stage is rarely needed.<br>-Treat seed heads for one or more worms per head until the hard dough stage.<br><b>-Use pyrethroids with caution:</b> Pyrethroid resistance is prevalent in corn earworms in Louisiana.<br>-Heligen is only effective on corn earworm. |
|  | chlorantraniliprole<br>Vantacor (5)                   | 1.2 – 2.5 ounces                            | 0.047-0.098                       | 106.7 – 51.2                         |   |
|  | lambda-cyhalothrin,<br>chlorantraniliprole<br>Besiege | 6.0-10.0 ounces                             | premix                            | 21.3-12.8                            |   |
|  | spinosad<br>Blackhawk (0.36)                          | 1.7-3.3 ounces                              | 0.038-0.074                       | 4.8-9.4                              |   |
| <b>Head Worms</b>                                  | chlorantraniliprole<br>Vantacor (5)                   | 1.2 – 2.5 ounces                            | 0.047-0.098                       | 106.7 – 51.2                         |   |
|  | lambda-cyhalothrin,<br>chlorantraniliprole<br>Besiege | 6.0-10.0 ounces                             | premix                            | 21.3-12.8                            |   |
|  | NPV<br>Heligen  | 1.0 – 1.6                                   | ---                               | 128 - 80                             |   |
| <b>Aphids except Sugarcane Aphid</b>               | dimethoate<br>Dimethoate (4)                          | 8.0-16.0 ounces                             | 0.25-0.5                          | 16-8                                 | -Treatments are rarely needed for corn leaf aphids.<br>-Infestations of greenbug are rare.  |
| <b>Sugarcane aphid</b>                             | imidacloprid<br>Gaucho (600)                          | 8 fluid ounces per hundredweight seed       | ---                               | ---                                  | <b>-Seed Treatments</b><br>-Insecticide-treated grain sorghum seed may prevent sugarcane aphid colonization for up to 40 days after emergence.  |
|  | thiamethoxam<br>Cruiser (5)                           | 5.1 fluid ounces per hundredweight seed     | ---                               | ---                                  |   |
|  | clothianidin<br>Nipsit Inside (5)                     | 5.1-6.4 fluid ounces per hundredweight seed | ---                               | ---                                  |   |

## Crops – Commercial

| Insect               | Insecticide                          | Amount of Concentrate per Acre              | Pounds Active Ingredient per Acre | Acres Treated per Gallon or Pound SP | Economic Threshold When to Treat  |
|----------------------|--------------------------------------|---|-----------------------------------|--------------------------------------|---|
|                      | sulfoxaflor Transform (50)           | 0.75 – 1.5 ounce                            | 0.023 – 0.047                     | 16.0 – 10.7                          | <b>-Foliar Sprays</b><br>-Treat when an average of 50 aphids per leaf is detected on 20% of leaves in a field. Edge treatments may be justified.<br>-Pyrethroids for sorghum midge control may flare aphids.<br>-Use of defoliants may aid in harvest efficiency. |
|                      | flupyradifurone Sivanto (1.67)       | 4-7 ounces                                  | 0.052-0.091                       | 18.3-32                              |   |
| <b>Cutworms</b>      | esfenvalerate Asana XL (0.66)        | 5.8-9.6 ounces                              | 0.03-0.05                         | 22-13.3                              | -Treat before injury reduces stand below optimum plant population.  |
|                      | z-cypermethrin Mustang Max (0.8)     | 1.28-4.0 ounces                             | 0.008-0.025                       | 100-32                               |   |
|                      | beta-cyfluthrin Baythroid XL (1)     | 1.0-1.3 ounces                              | 0.008-0.01                        | 128-98.5                             |   |
|                      | cyfluthrin Tombstone (2)             | 1.0-1.3 ounces                              | 0.016-0.020                       | 128-98.5                             |   |
|                      | lambda-cyhalothrin Warrior II (2.08) | 0.96-1.28 ounces                            | 0.015-0.02                        | 133.3-100                            |   |
|                      | gamma-cyhalothrin Declare (1.25)     | 0.77-1.02 ounces                            | 0.0075-0.01                       | 166.2-125.5                          |   |
|                      | a-cypermethrin Fastac (0.83)         | 1.3-3.8 ounces                              | 0.008-0.025                       | 98.5-33.7                            |   |
| <b>Fire ants</b>     | thiamethoxam Cruiser (5)             | 5.1 fluid ounces per hundredweight seed     |                                   |                                      | -Preventive seed treatments.  |
|                      | imidacloprid Gaucho (480/600)        | 8/6.4 fluid ounces per hundredweight seed   |                                   |                                      |   |
|                      | clothianidin Poncho 600              | 5.1-6.4 fluid ounces per hundredweight seed |                                   |                                      |   |
| <b>Sorghum midge</b> | methomyl Lannate (2.4)               | 12.0-24.0 ounces                            | 0.225-0.45                        | 10.6-5.3                             | -At 25% to 30% bloom, treat for one or more midges per head.<br>-Additional treatments at 5- to 7-day intervals may be needed.<br>-Plant early and uniformly.   |
|                      | lambda-cyhalothrin Warrior II (2.08) | 0.96-1.28 ounces                            | 0.015-0.02                        | 133.3-100                            |   |
|                      | cyfluthrin Tombstone (2)             | 1.0-1.3 ounces                              | 0.016-0.02                        | 128-98.5                             |   |
|                      | gamma-cyhalothrin Declare (1.25)     | 0.77-1.02 ounces                            | 0.0075-0.01                       | 166.2-125.5                          |   |
|                      | z-cypermethrin Mustang Max (0.8)     | 1.28-4.0 ounces                             | 0.008-0.025                       | 100-32                               |   |
|                      | esfenvalerate Asana XL (0.66)        | 2.9-5.8 ounces                              | 0.015-0.030                       | 44.1-22                              |   |
|                      | beta-cyfluthrin Baythroid XL (1)     | 1.0-1.3 ounces                              | 0.008-0.01                        | 128-98.5                             |   |
|                      | a-cypermethrin Fastac (0.83)         | 1.3-3.8 ounces                              | 0.008-0.025                       | 98.5-33.7                            |   |

## Crops – Commercial

| Insect                 | Insecticide                                     | Amount of Concentrate per Acre | Pounds Active Ingredient per Acre | Acres Treated per Gallon or Pound SP | Economic Threshold When to Treat  |
|------------------------|---|--------------------------------|-----------------------------------|--------------------------------------|---|
|                        | lambda-cyhalothrin, chlorantraniliprole Besiege | 5.0-6.0 ounces                 | premix                            | 21.3-25.6                            |   |
| <b>Sorghum webworm</b> | spinosad Blackhawk (0.36)                       | 1.7-3.3 ounces                 | 0.038-0.074                       | 4.8-9.4                              | -Treat seed heads for four or more worms per head until the hard dough stage. |
|                        | methomyl Lannate (2.4)                          | 24.0 ounces                    | 0.45                              | 5.3                                  |   |
|                        | chlorantraniliprole Vantacor (5)                | 1.2 – 2.5 ounces               | 0.047-0.098                       | 106.7 – 51.2                         |   |
|                        | lambda-cyhalothrin, chlorantraniliprole Besiege | 6.0-10.0 ounces                | premix                            | 21.3-12.8                            |   |
| <b>Stalk borers</b>    | a-cypermethrin Fastac (0.83)                    | 1.8-3.8 ounces                 | 0.012-0.025                       | 71.1-33.7                            | -Treat before larvae bore into stalk.   |
|                        | cyfluthrin Tombstone (2)                        | 1.3-2.8 ounces                 | 0.02- 0.044                       | 98.5-45.7                            |   |
|                        | lambda-cyhalothrin Warrior II (2.08)            | 1.28-1.92 ounces               | 0.02- 0.03                        | 100-66.7                             |   |
|                        | gamma-cyhalothrin Declare (1.25)                | 1.02-1.54 ounces               | 0.01- 0.015                       | 125.5-83.1                           |   |
|                        | beta-cyfluthrin Baythroid XL (1)                | 1.3-2.8 ounces                 | 0.01- 0.022                       | 98.5-45.7                            |   |
|                        | z-cypermethrin Mustang Max (0.8)                | 1.76-4.0 ounces                | 0.011-0.025                       | 72.7-32                              |   |
|                        | chlorantraniliprole Vantacor (5)                | 1.2 – 2.5 ounces               | 0.047-0.098                       | 106.7 – 51.2                         |   |
|                        | lambda-cyhalothrin, chlorantraniliprole Besiege | 6.0-10.0 ounces                | premix                            | 21.3-12.8                            |   |

Note: Refer to label for application instructions/restrictions on application method, i.e., in-furrow, surface band, T-band, etc.

# Crops – Commercial

## Grain Sorghum

Insecticide Precautions and Limitations (Refer to insecticide label for complete information.)

- **Asana XL:** Toxic to fish. Do not apply directly to water. Maximum active ingredient per acre per season: 0.15 lb. Preharvest interval: 21 days. REI: 12 hours.
- **Baythroid:** Toxic to fish and aquatic invertebrates. Maximum active ingredient per acre per season: 0.066 lb. Preharvest interval: 14 days. REI: 12 hours.
- **Besiege:** Toxic to fish, and aquatic organisms and toxic to wildlife. Maximum active ingredient per acre per season: 0.06 lb lambda-cyhalothrin or 0.2 lb chlorantraniliprole. Preharvest interval: 30 days. REI: 24 hours.
- **Bifenthrin:** Same as Brigade.
- **Blackhawk:** Toxic to bees. Toxic to aquatic invertebrates, do not apply directly to water. Maximum active ingredient per acre per season: 0.28 lb. Preharvest interval for grain and straw: 21 days; for forage, fodder, and hay: 3 days. REI: 4 hours.
- **Brigade:** Do not apply within 30 days of harvest. Do not graze or cut for feed within 30 days of last application. Toxic to bees, fish, and aquatic invertebrates. Maximum active ingredient per acre per season: 0.3 lb. REI: 24 hours.
- **Counter:** Toxic to birds, fish, and other wildlife. Keep out of any body of water. REI: 48 hours.
- **Cruiser:** Toxic to wildlife and aquatic invertebrates. Do not apply directly to water and do not allow drift or runoff. REI: 12 hours.
- **Cyfluthrin:** Same as Baythroid, but maximum active ingredient per acre per season: 0.131 lb.
- **Declare:** Same as Karate, but maximum active ingredient per acre per season: 0.04 lb.
- **Dimethoate:** Toxic to wildlife and aquatic organisms. Do not apply after heading. Avoid runoff when spraying. Do not feed or graze within 28 days of the last application. Maximum active ingredient per acre per season: 1 lb. REI: 48 hours.
- **Force:** Highly toxic to fish and other aquatic organisms. Do not apply directly to water or wetlands or within 20 yards of water. Rotate only to corn or soybeans. REI: 0 hours.
- **Gaicho 600:** Highly toxic to birds and aquatic invertebrates. Do not graze or feed livestock on treated seed areas for 45 days after planting. REI: 12 hours.
- **Intrepid:** Drift and runoff may be toxic to sensitive aquatic vertebrates. Do not apply by air within 150 feet or by ground within 25 feet of surface water. REI: 4 hours.
- **Warrior II:** Toxic to fish, aquatic organisms, and bees. Do not graze livestock on treated areas or harvest for livestock feed. Maximum active ingredient per acre per season: 0.08 lb. Preharvest interval: 30 days. REI: 24 hours.
- **Lannate:** Toxic to fish, birds, bees, and other wildlife. Keep out of any body of water. Do not graze or feed to livestock within 14 days of last application. Do not harvest for grain within 14 days of last application. Maximum active ingredient per acre per season: 0.9 lb. REI: 48 hours.
- **Mustang Maxx:** Toxic to bees, fish, and aquatic vertebrates. Maximum active ingredient per acre per season: 0.125 lb. Preharvest interval: 14 days. REI: 12 hours.
- **Poncho:** Do not use treated seed for feed, food, or oil. Refer to the label for replant restrictions following treated seed planting. Treated seeds exposed on the soil surface may be hazardous to wildlife.
- **Vantacor:** Maximum active ingredient per acre per season: 0.2 lb. Preharvest interval: 14 days. REI: 4 hours.
- **Respect:** Toxic to bees, fish and aquatic vertebrates. Maximum active ingredient per acre per season: 0.125 lb. Preharvest interval: 14 days. REI: 12 hours.
- **Sevin:** Maximum active ingredient per acre per season: 6 lb. Preharvest interval for grain/fodder: 21 days; preharvest interval for grazing/silage: 14 days. REI: 12 hours.