

## Chapter 17. Sweet Corn Production<sup>1</sup>

Katia Viana Xavier, Ramdas Kanissery, Craig Frey, Anna Mészáros, Nicholas S. Dufault, Johan Desaeger, Jawwad Qureshi, and Julien Beuzelin<sup>2</sup>

### Botany and Planting

**Sweet corn**— *Zea mays* var. *rugosa*, Poaceae (Gramineae).

Table 1. Planting dates for sweet corn.

| Planting Region | Dates   |
|-----------------|---------|
| North Florida   | Feb–Apr |
| Central Florida | Jan–Apr |
| South Florida   | Sep–Mar |

Table 2. Planting information for sweet corn.

| Planting Parameters          | Measurements  |
|------------------------------|---------------|
| Distance between rows (in)   | 28–36         |
| Distance between plants (in) | 6–8           |
| Seeding depth (in)           | 1.0–1.5       |
| Seed per acre (lb)           | 6–15          |
| Days to maturity from seed   | 64–90         |
| Plant population (acre)      | 24,000–32,000 |

### Cultivars

Table 3. Description of major sweet corn cultivars currently available.

| Type                                      | Genes Controlling Sweetness                                                        | Storage Life (Days) | Relative Sugar Content                 |
|-------------------------------------------|------------------------------------------------------------------------------------|---------------------|----------------------------------------|
| Sugary                                    | Full complement of sugary                                                          | 1–3                 | Normal                                 |
| Sugary Enhanced, also “Modified” and “EH” | Full complement of sugary (su) and half or full complement of sugary enhancer (se) | 3–5                 | Slight to moderate or even high levels |
| Supersweet, also “Ultra,” “Extra” sweet   | No sugary (su); full complement of shrunken-2 (sh2)                                | 5–10                | High                                   |
| Synergistic, also “Sweet-Gene Hybrid”     | Full complement of sugary (su) and half complement of shrunken-2 (sh2)             | 3–5                 | Moderate                               |
| Improved Supersweet                       | Half complement of sugary (su) and full complement of shrunken-2 (sh2)             | 5–10                | Very high                              |
| ADX                                       | No sugary (su) or shrunken-2 (sh2) genes; full complement of ae, du, and wx genes. | 5–10                | Moderate to high                       |

Table 4. Supersweet (shrunk-2) sweet corn cultivars arranged by kernel color.

| <b>Corn</b> | <b>Cultivars</b>                                                                                                                 |
|-------------|----------------------------------------------------------------------------------------------------------------------------------|
| Yellow      | Accentuate, Alliance, Astronaut, Gallant MXR, GSS 1170, Hercules, Passion, Primetime, Seminole Gold, SV 1077, SV 1446            |
| White       | Coronado, Devotion, Glacial, Platinum XR, 3174 XTH, 3380 XTH                                                                     |
| Bicolor     | Affection, Awesome XR, Battalion, BSS 1075, Coastal, Courage MXR, Honor XR, Obsession, Salute XR, Seminole Sweet, Starship, 7143 |

The following tables list registered pesticides that should be integrated with other pest management methods. Additional information on integrated management methods can be requested from UF/IFAS Extension horticulture or agriculture agents. A list of local UF/IFAS Extension county offices is available at <https://sfyl.ifas.ufl.edu/find-your-local-office/>.

Table 5. Herbicides approved for managing weeds in sweet corn. **Labels change frequently. Be sure to read a current product label before applying any chemical.** Contact: Ramdas Kaniserry, UF/IFAS Southwest Florida Research and Education Center.

|                     | Active Ingredient lb a.i./Acre                               | Trade Name Product/Acre                                                                                              | MOA Code | Weeds Controlled/Remarks                                                                                                                                                                                                            |
|---------------------|--------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>PREEMERGENCE</b> | <b>Atrazine</b><br>Mineral Soil 1.0–2.0<br>Muck Soil 2.0–3.0 | (AAtrex) 4 L<br>Mineral: 2–4 pt<br>Muck: 4–6 pt<br>(AAtrex Nine-0) 90 WDG<br>Mineral: 1.1–2.2 lb<br>Muck: 2.2–3.3 lb | 5        | Germinating broadleaf and grass weeds. Apply to moist soil. No more than 2.5 lb a.i./A per calendar year. Consult labels for plant-back restrictions on rotational crops.                                                           |
|                     | <b>Carfentrazone</b><br>up to 0.031                          | (Aim) 2 EC<br>up to 2 fl oz                                                                                          | 14       | Apply as a preplant burndown for emerged broadleaf weeds. Use crop oil concentrate, methylated seed oil, or nonionic surfactant at recommended rates. No more than 0.096 lb a.i./A per season. No pretransplant interval.           |
|                     | <b>Dimethenamid-P</b><br>0.56–0.84                           | (Outlook) 6 EC<br>12–18 fl oz                                                                                        | 15       | Annual broadleaf and grass weeds. After application, incorporate into soil by rainfall, sprinkler irrigation, or mechanical tillage. Consult label for rate based on soil texture.                                                  |
|                     | <b>EPTC</b><br>4.0–6.0                                       | (Eradicane) 6.7 E<br>4.75–7.33 pt                                                                                    | 8        | Annual broadleaf, grass weeds, and nutsedge. Use lower rates on lighter soils (sand). Control of perennial weeds such as bermudagrass or nutsedge is increased through incorporation.                                               |
|                     | <b>Flufenacet</b><br>0.49–0.68                               | (Define DF) 60 DF<br>13–18 oz<br>(Define SC) 4 SC<br>15–19 fl oz                                                     | 15       | Annual broadleaf and grass weeds. Rainfall, irrigation, or light cultivation is required within 7–10 days of application. Consult label for rate based on soil texture.                                                             |
|                     | <b>Glyphosate</b>                                            | (various formulations)<br>consult labels                                                                             | 9        | Emerged broadleaf and grass weeds. Apply as a preplant burndown. Tank-mix with a residual herbicide to broaden spectrum of weed control. Consult label for individual product directions.                                           |
|                     | <b>Mesotrione</b><br>0.188–0.24                              | (Callisto) 4 SC<br>6.0–7.7 fl oz                                                                                     | 28       | Annual broadleaf weeds. Tank-mix with a preemergence grass herbicide for grass control. No more than 7.7 fl oz/A per season.                                                                                                        |
|                     | <b>Paraquat</b><br>0.5–1.0                                   | (Gramoxone) 2 SL<br>2.0–4.0 pt<br>(Gramoxone) 3 SL<br>1.3–2.7 pt<br>(Firestorm) 3 SL<br>1.3–2.7 pt                   | 22       | Emerged broadleaf and grass weeds. Apply as a preplant burndown. No more than 3 applications per year. Tank-mix with a residual preemergence herbicide to broaden the spectrum of weed control. Consult label for new restrictions. |
|                     | <b>Pelargonic acid</b>                                       | (Scythe) 4.2 EC<br>3%–10% v/v                                                                                        | 27       | Emerged broadleaf and grass weeds. Apply as a preplant burndown treatment. Product is a contact, nonselective, foliar-applied herbicide with no residual control. May be tank-mixed with soil residual compounds.                   |

|               | Active Ingredient lb a.i./Acre                                     | Trade Name Product/Acre                                                                                                         | MOA Code | Weeds Controlled/Remarks                                                                                                                                                                                                                                                       |
|---------------|--------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|               | <b>Pendimethalin</b><br>Mineral Soil 0.75–1.0<br>Muck Soil 1.0–2.0 | (Acumen, Prowl) 3.3 EC<br>Mineral: 1.8–2.4 pt<br>Muck: 2.4–4.8 pt<br>(Prowl H20) 3.8<br>Mineral: 2.0–3.0 pt<br>Muck: 2.0–4.0 pt | 3        | Broadleaf and grass weeds. Overhead irrigation or rainfall is required within 7 days of application.                                                                                                                                                                           |
|               | <b>Pyraflufen ethyl</b><br>0.001–0.003                             | (ET Herbicide) 0.208 EC<br>0.5–2.0 fl oz                                                                                        | 14       | Emerged broadleaf weeds. Apply as a preplant burndown treatment.                                                                                                                                                                                                               |
|               | <b>Simazine</b><br>2.0                                             | (Princep, Simazine) 4 L<br>2.0 qt<br>(Princep, Simazine) 90 WDG<br>2.2 lb                                                       | 5        | Broadleaf and grass weeds. If a second application is required, do not exceed 2.5 lb a.i./A per calendar year. Simazine 4 L and Simazine 90 DF can be applied to muck soils at 2.5 lb a.i./A. PHI 45 days.                                                                     |
|               | <b>S-metolachlor</b><br>1.0–1.6                                    | (Brawl, Dual Magnum) 7.62 EC<br>1.0–1.67 pt<br>(Cinch, Dual II Magnum) 7.64 EC<br>1.0–1.67 pt                                   | 15       | Annual broadleaf and grass weeds. Use a lower rate on lighter soils. Weed control is increased with 0.5–1 in. of rainfall or irrigation. No more than 3.9 pt/A per crop year depending on soil texture.                                                                        |
| POSTEMERGENCE | <b>Atrazine</b><br>Mineral Soil 1.0–2.0<br>Muck Soil 2.0–3.0       | (AAtrex) 4 L<br>Mineral: 2–4 pt<br>Muck: 4–6 pt<br>(AAtrex Nine-0) 90 WDG<br>Mineral: 1.1–2.2 lb<br>Muck: 2.2–3.3 lb            | 5        | Broadleaf and some grass weeds. Apply before weeds exceed 1.5 in. tall and before corn exceeds 12 in. tall. No more than 2.5 lb a.i./A per calendar year. Consult label for plant-back restrictions on rotational crops.                                                       |
|               | <b>Bentazon</b><br>0.75–1.0                                        | (Basagran) 4 L<br>1.5–2.0 pt<br>(Basagran) 5 L<br>1.2–1.6 pt                                                                    | 6        | Certain broadleaf and sedge weeds. Consult label for weeds controlled/weed size table. No more than 4 pt/A per season.                                                                                                                                                         |
|               | <b>Carfentrazone</b><br>0.008–0.016                                | (Aim) 2 EC<br>0.5–1.0 fl oz                                                                                                     | 14       | Emerged broadleaf weeds. Apply up to the 14-leaf stage of corn growth. After the V8 stage of growth, apply as a directed application. No more than 2.0 fl oz/A per season including preplant burndown and crop application. PHI 3 days.                                        |
|               | <b>Halosulfuron</b><br>0.03–0.05                                   | (Sandea) 75 DF<br>0.6–1.0 oz                                                                                                    | 2        | Broadleaf weeds and nutsedge. Apply over the top or with drop nozzles from the spike stage through the layby stage of corn. A sequential application of 0.66 oz/A may be made using drop nozzles to avoid spraying into the plant whorl. No more than 2 applications per year. |
|               | <b>Mesotrione</b><br>0.094                                         | (Callisto) 4 SC<br>3 fl oz                                                                                                      | 28       | Broadleaf weeds. Treat up to 30 in. tall or up to the 8-leaf stage. Include a crop oil concentrate or nonionic surfactant in the spray solution. Slight leaf bleaching may occur. No more than 7.7 fl oz/A per season.                                                         |

|  | Active Ingredient lb a.i./Acre                                    | Trade Name Product/Acre                                                                                                         | MOA Code | Weeds Controlled/Remarks                                                                                                                                                                                                                                                                                                                                                                                                      |
|--|-------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <b>Nicosulfuron</b><br>0.03–0.06                                  | (Accent) 75 WDG<br>0.6–1.3 oz<br>(Accent Q) 54.5 WDG<br>0.9–1.8 oz                                                              | 2        | Broadleaf and grass weeds. Sensitivity to sweet corn varieties is variable. Do not apply to 'Merit' sweet corn. Do not apply to corn that has previously been treated with Counter or Thimet insecticides because this may result in injury. Consult label for acceptable insecticides. Apply as broadcast to corn plants less than 12 in. tall. Use drop nozzles to direct the spray to corn plants that are 12–18 in. tall. |
|  | <b>Pendimethalin</b><br>Mineral Soil 0.7–1.0<br>Muck Soil 1.0–2.0 | (Acumen, Prowl) 3.3 EC<br>Mineral: 1.8–2.4 pt<br>Muck: 2.4–4.8 pt<br>(Prowl H20) 3.8<br>Mineral: 2.0–3.0 pt<br>Muck: 2.0–4.0 pt | 3        | Broadleaf and grass weeds. Apply after 4 in. tall until corn is 20–24 in. tall or the V8 growth stage. Direct the spray to the base of the plants.                                                                                                                                                                                                                                                                            |
|  | <b>S-metolachlor</b><br>up to 1.9                                 | (Brawl, Dual Magnum) 7.62 EC<br>up to 2.0 pt<br>(Cinch, Dual II Magnum) 7.64 EC<br>up to 2.0 pt                                 | 15       | Annual broadleaf and grass weeds. Apply after crop emergence up to 40 in. tall. Direct spray to the base of the plants when plants are taller than 5 in. Use a lower rate on lighter soils. Weed control is increased with 0.5–1 in. of rainfall or irrigation. No more than 3.9 pt/A per crop year depending on soil texture. PHI 30 days.                                                                                   |
|  | <b>Tembotrione</b><br>0.08                                        | (Laudis) 3.5 EC<br>3 fl oz                                                                                                      | 27       | Annual broadleaf and grass weeds. Crop tolerance is dependent on variety, so apply to a small area if tolerance is unknown. Do not use it on 'Merit' or 'Shogun'. May be applied from corn emergence through the V7 stage of growth. No more than 3 fl oz/A per season.                                                                                                                                                       |
|  | <b>Topramezone</b><br>0.020–0.022                                 | (Armezon, Impact) 2.8<br>0.75–1.0 fl oz                                                                                         | 27       | Broadleaf and grass weeds. Consult label for maximum size of certain weed species for control. PHI 45 days.                                                                                                                                                                                                                                                                                                                   |

Table 6. Insecticides labeled for management of arthropod pests of sweet corn. **Labels change frequently. Be sure to read a current product label before applying any chemical. Please refer to chapter 19 for information on biopesticides, including materials labeled for certified organic production.** Contact: Julien Beuzelin, UF/IFAS Everglades Research and Education Center.

| Insect or Mite Pest | MOA Code <sup>1</sup> | Trade Name (Active Ingredient)                     | Max Rate/Acre                       |                       | REI (Hours) | Days to Harvest                                                       | Remarks <sup>3</sup>                                                                                       |
|---------------------|-----------------------|----------------------------------------------------|-------------------------------------|-----------------------|-------------|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
|                     |                       |                                                    | Appl.                               | Season <sup>2</sup>   |             |                                                                       |                                                                                                            |
| Aphids              | 1A                    | *Lannate LV<br>*Lannate SP (methomyl)              | LV: 0.75–1.5 pt<br>SP: 0.25–0.50 lb | LV: 21 pt<br>SP: 7 lb | 48          | Ears: 0<br>Forage: 3<br>Stover: 21                                    | Certain hybrid varieties are susceptible to methomyl injury. Treat a small area to determine safety first. |
|                     | 1B                    | Fyfanon 57% EC (malathion)                         | 1.5 pt                              | –                     | 12          | 5                                                                     | No more than 2 applications per year. Crop injury may occur in the whorl to silking stages.                |
|                     | 3A                    | *Asana XL Insecticide (esfenvalerate)              | 5.8–9.6 fl oz                       | 96 fl oz              | 12          | 1                                                                     | –                                                                                                          |
|                     | 3A                    | *Brigade 2EC Insecticide/Miticide (bifenthrin)     | 2.1–6.4 fl oz                       | 12.8 fl oz            | 12          | 1                                                                     | Many other brands available with same active ingredient.                                                   |
|                     | 3A                    | *Capture LFR (bifenthrin)                          | At plant: 3.4–17.0 fl oz            | 17.0 fl oz            | 12          | At planting                                                           | For mixing with liquid fertilizer.                                                                         |
|                     | 3A                    | *Delta Gold (deltamethrin)                         | 1.5–2.4 fl oz                       | 38.4 fl oz            | 12          | Ears and forage: 1<br>Stover: 21                                      | –                                                                                                          |
|                     | 3A                    | *Fastac CS (alpha-cypermethrin)                    | 2.8–3.8 fl oz                       | 11.4 fl oz            | 12          | 3                                                                     | –                                                                                                          |
|                     | 3A                    | *Hero Insecticide (bifenthrin + zeta-cypermethrin) | 4.0–10.3 fl oz                      | 27.39 fl oz           | 12          | 3                                                                     | See label when using more than 1 product containing bifenthrin or zeta-cypermethrin.                       |
|                     | 3A                    | *Mustang Maxx (zeta-cypermethrin)                  | 2.8–4.0 fl oz                       | 24 fl oz              | 12          | 3                                                                     | –                                                                                                          |
|                     | 3A                    | *Warrior II (lambda-cyhalothrin)                   | 1.28–1.92 fl oz                     | 30.72 fl oz           | 24          | Ears (foliar):1<br>For feeding livestock or at-plant applications: 21 | Many other brands with same active ingredient available.                                                   |
|                     | 3A + 4C               | Ridgeback (bifenthrin + sulfoxaflor)               | 4.5–13.8 fl oz                      | 27.6 fl oz per year   | 24          | 7                                                                     | –                                                                                                          |

| Insect or Mite Pest                                                                              | MOA Code <sup>1</sup> | Trade Name (Active Ingredient)                                | Max Rate/Acre                                                                                                 |                                                                 | REI (Hours)                          | Days to Harvest                     | Remarks <sup>3</sup>                                                                                       |
|--------------------------------------------------------------------------------------------------|-----------------------|---------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|--------------------------------------|-------------------------------------|------------------------------------------------------------------------------------------------------------|
|                                                                                                  |                       |                                                               | Appl.                                                                                                         | Season <sup>2</sup>                                             |                                      |                                     |                                                                                                            |
|                                                                                                  | 3A + 28               | <b>*Besiege</b><br>(lambda-cyhalothrin + chlorantraniliprole) | 6–10 fl oz                                                                                                    | 31 fl oz per year                                               | 24                                   | 1                                   | –                                                                                                          |
|                                                                                                  | 3A + 28               | <b>*Elevest</b><br>(bifenthrin + chlorantraniliprole)         | 4.8–9.6 fl oz                                                                                                 | –                                                               | 12                                   | 1                                   | No more than 2 applications per year.                                                                      |
|                                                                                                  | 4A                    | <b>Assail 30 SG</b><br><b>Assail 70 WP</b><br>(acetamiprid)   | <b>30 SG:</b> 2.1–2.9 oz<br><b>70 WP:</b> 0.9–1.2 oz                                                          | <b>30 SG:</b> 11.2 oz per year<br><b>70 WP:</b> 4.8 oz per year | 12                                   | 1                                   | Other brands available with same active ingredient.                                                        |
|                                                                                                  | 4A + 15               | <b>Cormoran</b><br>(acetamiprid + novaluron)                  | 9–12 fl oz                                                                                                    | 40 fl oz                                                        | 12                                   | 7                                   | –                                                                                                          |
|                                                                                                  | 4C                    | <b>Transform WG</b><br>(sulfoxaflor)                          | 0.75–1.5 oz                                                                                                   | 3.0 oz per year                                                 | 24                                   | 7                                   | –                                                                                                          |
|                                                                                                  | 4D                    | <b>Sivanto Prime</b><br>(flupyradifurone)                     | 7.0–14.0 fl oz                                                                                                | 28 fl oz per year                                               | 4                                    | Ears and forage: 7<br>Stover: 21    | –                                                                                                          |
| <b>Beetles</b><br>(includes banded cucumber beetle, flea beetles, sap beetles, seed corn beetle) | 1A                    | <b>*Lannate LV</b><br><b>*Lannate SP</b><br>(methomyl)        | <b>LV:</b> 0.75–1.5 pt<br><b>SP:</b> 0.25–0.50 lb                                                             | <b>LV:</b> 21 pt<br><b>SP:</b> 7 lb                             | 48                                   | Ears: 0<br>Forage: 3<br>Stover: 21  | Certain hybrid varieties are susceptible to methomyl injury. Treat a small area to determine safety first. |
|                                                                                                  | 1A                    | <b>Sevin 4F</b><br><b>Sevin XLR Plus</b><br>(carbaryl)        | 1–2 qt                                                                                                        | 16 qt per year                                                  | 24 (21 days for detasseling workers) | Ears: 2<br>Forage: 14<br>Fodder: 48 | –                                                                                                          |
|                                                                                                  | 1B                    | <b>*Counter 15G Lock 'N Load</b><br>(terbufos)                | Banded or in furrow:<br>6.0–8.0 oz/1000 row ft<br>Postemergence incorporated: 8 oz/1000 row ft at cultivation | –                                                               | 48                                   | 60                                  | No more than 1 application.                                                                                |
|                                                                                                  | 1B                    | <b>Fyfanon 57% EC</b><br><b>Fyfanon ULV AG</b><br>(malathion) | 57% EC: 1.5 pt<br>ULV AG: 4–8 fl oz                                                                           | –                                                               | 12                                   | 5                                   | No more than 2 applications per year. Crop injury may occur in the whorl to silking stages.                |
|                                                                                                  | 1B                    | <b>*Thimet 20-G</b><br>(phorate)                              | 4.5–6.0 oz/1000 row ft                                                                                        | –                                                               | 48                                   | At planting                         | No more than 1 application.                                                                                |
|                                                                                                  | 3A                    | <b>*Asana XL Insecticide</b><br>(esfenvalerate)               | 5.8–9.6 fl oz                                                                                                 | 96 fl oz                                                        | 12                                   | 1                                   | –                                                                                                          |

| Insect or Mite Pest | MOA Code <sup>1</sup> | Trade Name (Active Ingredient)                                | Max Rate/Acre                                                                                  |                                                                 | REI (Hours) | Days to Harvest                                                    | Remarks <sup>3</sup>                                     |
|---------------------|-----------------------|---------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|-------------|--------------------------------------------------------------------|----------------------------------------------------------|
|                     |                       |                                                               | Appl.                                                                                          | Season <sup>2</sup>                                             |             |                                                                    |                                                          |
|                     | 3A                    | <b>*Baythroid XL</b><br>(beta-cyfluthrin)                     | 0.8–2.8 fl oz                                                                                  | 28 fl oz                                                        | 12          | 0                                                                  | –                                                        |
|                     | 3A                    | <b>*Brigade 2EC Insecticide/Miticide</b><br>(bifenthrin)      | 2.1–6.4 fl oz                                                                                  | 12.8 fl oz                                                      | 12          | 1                                                                  | Many other brands available with same active ingredient. |
|                     | 3A                    | <b>*Capture LFR</b><br>(bifenthrin)                           | Preplant incorporated:<br>4.0–5.3 fl oz<br>At plant: 3.4–17.0 fl oz<br>Preemergence: 3.4 fl oz | 17.0 fl oz                                                      | 12          | Preplant incorporated, at planting, preemergence application       | For mixing with liquid fertilizer.                       |
|                     | 3A                    | <b>*Delta Gold</b><br>(deltamethrin)                          | 1.0–2.4 fl oz                                                                                  | 38.4 fl oz                                                      | 12          | Ears and forage: 1<br>Stover: 21                                   | –                                                        |
|                     | 3A                    | <b>*Fastac CS</b><br>(alpha-cypermethrin)                     | 2.2–3.8 fl oz                                                                                  | 11.4 fl oz                                                      | 12          | 3                                                                  | –                                                        |
|                     | 3A                    | <b>*Force 3G</b><br>(tefluthrin)                              | 4-5 oz/1000 row ft                                                                             | –                                                               | 48          | At planting or cultivation within 30 days of seedling emergence    | No more than 1 application.                              |
|                     | 3A                    | <b>*Hero Insecticide</b><br>(bifenthrin + zeta-cypermethrin)  | 4.0–10.3 fl oz                                                                                 | 27.39 fl oz                                                     | 12          | 3                                                                  | –                                                        |
|                     | 3A                    | <b>*Mustang Maxx</b><br>(zeta-cypermethrin)                   | 2.24–4.0 fl oz                                                                                 | 24 fl oz                                                        | 12          | 3                                                                  | –                                                        |
|                     | 3A                    | <b>*Warrior II</b><br>(lambda-cyhalothrin)                    | At plant: 0.33 fl oz/1000 row ft<br>Foliar: 1.28–1.92 fl oz                                    | 30.72 fl oz                                                     | 24          | Ears (foliar): 1<br>Feeding livestock or at-plant applications: 21 | Many other brands available with same active ingredient. |
|                     | 3A + 4C               | <b>Ridgeback</b><br>(bifenthrin + sulfoxaflor)                | 4.5–13.8 fl oz                                                                                 | 27.6 fl oz per year                                             | 24          | 7                                                                  | –                                                        |
|                     | 3A + 28               | <b>*Besiege</b><br>(lambda-cyhalothrin + chlorantraniliprole) | 6–10 fl oz                                                                                     | 31 fl oz per year                                               | 24          | 1                                                                  | –                                                        |
|                     | 3A + 28               | <b>*Elevest</b><br>(bifenthrin + chlorantraniliprole)         | 4.8–9.6 fl oz                                                                                  | –                                                               | 12          | 1                                                                  | No more than 2 applications per year.                    |
|                     | 4A                    | <b>Assail 30 SG</b><br><b>Assail 70 WP</b><br>(acetamiprid)   | <b>30 SG:</b> 4.0–5.3 oz<br><b>70 WP:</b> 1.7–2.3 oz                                           | <b>30 SG:</b> 11.2 oz per year<br><b>70 WP:</b> 4.8 oz per year | 12          | 7                                                                  | Other brands available with same active ingredient.      |

| Insect or Mite Pest                                                                                          | MOA Code <sup>1</sup> | Trade Name (Active Ingredient)                         | Max Rate/Acre                                                                                                 |                                     | REI (Hours)                          | Days to Harvest                     | Remarks <sup>3</sup>                                                                                                                                                     |
|--------------------------------------------------------------------------------------------------------------|-----------------------|--------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------------------|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                              |                       |                                                        | Appl.                                                                                                         | Season <sup>2</sup>                 |                                      |                                     |                                                                                                                                                                          |
|                                                                                                              | 4A + 15               | <b>Cormoran</b><br>(acetamiprid + novaluron)           | 9–12 fl oz                                                                                                    | 40 fl oz                            | 12                                   | 7                                   | –                                                                                                                                                                        |
|                                                                                                              | 15                    | <b>Rimon 0.83EC</b><br>(novaluron)                     | 6–12 fl oz                                                                                                    | 60 fl oz                            | 12                                   | 1                                   | –                                                                                                                                                                        |
| <b>Caterpillars</b><br>(includes beet armyworm, corn borer, corn earworm, cutworms, fall armyworm, webworms) | 1A                    | <b>*Lannate LV</b><br><b>*Lannate SP</b><br>(methomyl) | <b>LV:</b> 0.75–1.5 pt<br><b>SP:</b> 0.25–0.50 lb                                                             | <b>LV:</b> 21 pt<br><b>SP:</b> 7 lb | 48                                   | Ears: 0<br>Forage: 3<br>Stover: 21  | Certain hybrid varieties are susceptible to methomyl injury. Treat a small area to determine safety first.                                                               |
|                                                                                                              | 1A                    | <b>*Methomyl 5G</b><br>(methomyl)                      | 1.5–3.0 lb                                                                                                    | 30 lb                               | 48                                   | Forage: 3<br>Ears: 21               | For corn earworm and fall armyworm control. Apply as a banded application, directing granules to the whorl of the plants. Apply from the 4th leaf stage until tasseling. |
|                                                                                                              | 1A                    | <b>Sevin 4F</b><br><b>Sevin XLR Plus</b><br>(carbaryl) | 1–2 qt                                                                                                        | 16 qt per year                      | 24 (21 days for detasseling workers) | Ears: 2<br>Forage: 14<br>Fodder: 48 | –                                                                                                                                                                        |
|                                                                                                              | 1B                    | <b>*Counter 15G Lock 'n Load</b><br>(terbufos)         | Banded or in furrow:<br>6.0–8.0 oz/1000 row ft<br>Postemergence incorporated: 8 oz/1000 row ft at cultivation | –                                   | 48                                   | 60                                  | No more than 1 application.                                                                                                                                              |
|                                                                                                              | 1B                    | <b>Fyfanon 57% EC</b><br>(malathion)                   | 1.5 pt                                                                                                        | –                                   | 12                                   | 5                                   | No more than 2 applications per year. Crop injury may occur in the whorl to silking stages.                                                                              |
|                                                                                                              | 1B                    | <b>*Mocap 15G</b><br>(ethoprop)                        | Broadcast: 20 lb                                                                                              | –                                   | 48                                   | At planting                         | No more than 1 application, spread out over 3 days before planting and at planting.                                                                                      |
|                                                                                                              | 3A                    | <b>*Asana XL Insecticide</b><br>(esfenvalerate)        | 5.8–9.6 fl oz                                                                                                 | 96 fl oz                            | 12                                   | 1                                   | –                                                                                                                                                                        |
|                                                                                                              | 3A                    | <b>*Baythroid XL</b><br>(beta-cyfluthrin)              | 0.8–2.8 fl oz                                                                                                 | 28 fl oz                            | 12                                   | 0                                   | –                                                                                                                                                                        |

| Insect or Mite Pest | MOA Code <sup>1</sup> | Trade Name (Active Ingredient)                             | Max Rate/Acre                                                                               |                     | REI (Hours) | Days to Harvest                                                    | Remarks <sup>3</sup>                                     |
|---------------------|-----------------------|------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------|-------------|--------------------------------------------------------------------|----------------------------------------------------------|
|                     |                       |                                                            | Appl.                                                                                       | Season <sup>2</sup> |             |                                                                    |                                                          |
|                     | 3A                    | <b>*Brigade 2EC Insecticide/Miticide</b> (bifenthrin)      | In-furrow T-band at plant: 0.15–0.30 fl oz/1000 row ft<br>Foliar: 2.1–6.4 fl oz             | 12.8 fl oz          | 12          | 1                                                                  | Many other brands available with same active ingredient. |
|                     | 3A                    | <b>*Capture LFR</b> (bifenthrin)                           | Preplant incorporated: 4.0–5.3 fl oz<br>At plant: 3.4–17.0 fl oz<br>Preemergence: 3.4 fl oz | 17.0 fl oz          | 12          | Preplant incorporated, at planting, preemergence application       | For mixing with liquid fertilizer.                       |
|                     | 3A                    | <b>*Delta Gold</b> (deltamethrin)                          | 1.0–2.4 fl oz                                                                               | 38.4 fl oz          | 12          | Ears and forage: 1<br>Stover: 21                                   | –                                                        |
|                     | 3A                    | <b>*Fastac CS</b> (alpha-cypermethrin)                     | 2.2–3.8 fl oz                                                                               | 11.4 fl oz          | 12          | 3                                                                  | –                                                        |
|                     | 3A                    | <b>*Force 3G</b> (tefluthrin)                              | 3–4 oz/1000 row ft                                                                          | –                   | 48          | At planting                                                        | No more than 1 application.                              |
|                     | 3A                    | <b>*Hero Insecticide</b> (bifenthrin + zeta-cypermethrin)  | 4.0–10.3 fl oz                                                                              | 27.39 fl oz         | 12          | 3                                                                  | –                                                        |
|                     | 3A                    | <b>*Mustang Maxx</b> (zeta-cypermethrin)                   | 2.24–4.0 fl oz                                                                              | 24 fl oz            | 12          | 3                                                                  | –                                                        |
|                     | 3A                    | <b>*Warrior II</b> (lambda-cyhalothrin)                    | At plant: 0.33 fl oz/1000 row ft<br>Foliar: 1.28–1.92 fl oz                                 | 30.72 fl oz         | 24          | Ears (foliar): 1<br>Feeding livestock or at-plant applications: 21 | Many other brands with same active ingredient available. |
|                     | 3A + 4C               | <b>Ridgeback</b> (bifenthrin + sulfoxaflor)                | 4.5–13.8 fl oz                                                                              | 27.6 fl oz per year | 24          | 7                                                                  | –                                                        |
|                     | 3A + 28               | <b>*Besiege</b> (lambda-cyhalothrin + chlorantraniliprole) | 6–10 fl oz                                                                                  | 31 fl oz per year   | 24          | 1                                                                  | –                                                        |
|                     | 3A + 28               | <b>*Elevest</b> (bifenthrin + chlorantraniliprole)         | 4.8–9.6 fl oz                                                                               | –                   | 12          | 1                                                                  | No more than 2 applications per year.                    |
|                     | 4A + 15               | <b>Cormoran</b> (acetamiprid + novaluron)                  | 9–12 fl oz                                                                                  | 40 fl oz            | 12          | 7                                                                  | –                                                        |
|                     | 5                     | <b>Radiant SC</b> (spinetoram)                             | 3–6 fl oz                                                                                   | 36 fl oz per year   | 4           | Ears: 1<br>Forage or fodder: 3                                     | –                                                        |
|                     | 5 + 18                | <b>Intrepid Edge</b> (spinetoram + methoxyfenozide)        | 4–12 fl oz                                                                                  | 51 fl oz per year   | 4           | Ears and fodder: 3<br>Dry fodder: 21                               | –                                                        |

| Insect or Mite Pest | MOA Code <sup>1</sup> | Trade Name (Active Ingredient)                           | Max Rate/Acre                                                                                                 |                     | REI (Hours)                          | Days to Harvest                      | Remarks <sup>3</sup>                                                  |
|---------------------|-----------------------|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|---------------------|--------------------------------------|--------------------------------------|-----------------------------------------------------------------------|
|                     |                       |                                                          | Appl.                                                                                                         | Season <sup>2</sup> |                                      |                                      |                                                                       |
|                     | 15                    | <b>Rimon 0.83EC</b><br>(novaluron)                       | 6–12 fl oz                                                                                                    | 60 fl oz            | 12                                   | 1                                    | –                                                                     |
|                     | 18                    | <b>Intrepid 2F</b><br>(methoxyfenozide)                  | 4–16 fl oz                                                                                                    | 64 fl oz per year   | 4                                    | Ears and forage: 3<br>Dry fodder: 21 | Other brands available with same active ingredient.                   |
|                     | 22                    | <b>Avaunt</b><br><b>Avaunt eVo</b><br>(indoxacarb)       | 2.5–3.5 oz                                                                                                    | 14 oz               | 12 (14 days for hand harvesting)     | Ears: 3<br>Fodder and stover: 35     | Whorl stage through tassel push applications only.                    |
|                     | 28                    | <b>Coragen</b><br>(chlorantraniliprole)                  | 3.5–7.5 fl oz                                                                                                 | 15.4 fl oz per year | 4                                    | 1                                    | –                                                                     |
|                     | 28                    | <b>Vantacor</b><br>(chlorantraniliprole)                 | In-furrow at plant:<br>1.7–2.5 fl oz<br>Foliar: 1.2–2.5 fl oz                                                 | 5.1 fl oz per year  | 4                                    | 1                                    | Can be applied by overhead sprinkler chemigation system.              |
|                     | 32                    | <b>Spear-Lep</b><br>(GS-omega/kappa-Hctx-Hv1a)           | 1–2 pt                                                                                                        | 10 gal per year     | 4                                    | 0                                    | Must be tank-mixed with a <i>Bacillus thuringiensis</i> (Bt) product. |
| Chinch bugs         | 1A                    | <b>Sevin 4F</b><br><b>Sevin XLR Plus</b><br>(carbaryl)   | 1–2 qt                                                                                                        | 16 qt per year      | 24 (21 days for detasseling workers) | Ears: 2<br>Forage: 14<br>Fodder: 48  | –                                                                     |
|                     | 1B                    | <b>*Counter 15G Lock 'n Load</b><br>(terbufos)           | Banded or in furrow:<br>6.0–8.0 oz/1000 row ft<br>Postemergence incorporated: 8 oz/1000 row ft at cultivation | –                   | 48                                   | 60                                   | No more than 1 application.                                           |
|                     | 3A                    | <b>*Asana XL Insecticide</b><br>(esfenvalerate)          | 5.8–9.6 fl oz                                                                                                 | 96 fl oz            | 12                                   | 1                                    | –                                                                     |
|                     | 3A                    | <b>*Baythroid XL</b><br>(beta-cyfluthrin)                | 0.8–2.8 fl oz                                                                                                 | 28 fl oz            | 12                                   | 0                                    | –                                                                     |
|                     | 3A                    | <b>*Brigade 2EC Insecticide/Miticide</b><br>(bifenthrin) | 2.1–6.4 fl oz                                                                                                 | 12.8 fl oz          | 12                                   | 1                                    | Many other brands available with same active ingredient.              |
|                     | 3A                    | <b>*Delta Gold</b><br>(deltamethrin)                     | 1.5–2.4 fl oz                                                                                                 | 38.4 fl oz          | 12                                   | Ears and forage: 1<br>Stover: 21     | –                                                                     |
|                     | 3A                    | <b>*Fastac CS</b><br>(alpha-cypermethrin)                | 2.2–3.8 fl oz                                                                                                 | 11.4 fl oz          | 12                                   | 3                                    | –                                                                     |

| Insect or Mite Pest | MOA Code <sup>1</sup> | Trade Name (Active Ingredient)                                | Max Rate/Acre      |                     | REI (Hours) | Days to Harvest                                                 | Remarks <sup>3</sup>                  |
|---------------------|-----------------------|---------------------------------------------------------------|--------------------|---------------------|-------------|-----------------------------------------------------------------|---------------------------------------|
|                     |                       |                                                               | Appl.              | Season <sup>2</sup> |             |                                                                 |                                       |
|                     | 3A                    | <b>*Force 3G</b><br>(tefluthrin)                              | 4–5 oz/1000 row ft | –                   | 48          | At planting or cultivation within 30 days of seedling emergence | No more than 1 application.           |
|                     | 3A                    | <b>*Hero Insecticide</b><br>(bifenthrin + zeta-cypermethrin)  | 4.0–10.3 fl oz     | 27.39 fl oz         | 12          | 3                                                               | –                                     |
|                     | 3A                    | <b>*Mustang Maxx</b><br>(zeta-cypermethrin)                   | 2.24–4.0 fl oz     | 24 fl oz            | 12          | 3                                                               | –                                     |
|                     | 3A                    | <b>*Warrior II</b><br>(lambda-cyhalothrin)                    | 1.28–1.92 fl oz    | 30.72 fl oz         | 24          | Ears: 1<br>Feeding livestock: 21                                | –                                     |
|                     | 3A + 4C               | <b>Ridgeback</b><br>(bifenthrin + sulfoxaflor)                | 4.5–13.8 fl oz     | 27.6 fl oz per year | 24          | 7                                                               | –                                     |
|                     | 3A + 28               | <b>*Besiege</b><br>(lambda-cyhalothrin + chlorantraniliprole) | 6–10 fl oz         | 31 fl oz per year   | 24          | 1                                                               | –                                     |
|                     | 3A + 28               | <b>*Elevest</b><br>(bifenthrin + chlorantraniliprole)         | 4.8–9.6 fl oz      | –                   | 12          | 1                                                               | No more than 2 applications per year. |
| Corn silk flies     | 1B                    | <b>Fyfanon ULV AG</b><br>(malathion)                          | 6–8 fl oz          | –                   | 12          | 5                                                               | No more than 2 applications per year. |
|                     | 3A                    | <b>*Asana XL Insecticide</b><br>(esfenvalerate)               | 9.6 fl oz          | 96 fl oz            | 12          | 1                                                               | –                                     |
|                     | 3A                    | <b>*Baythroid XL</b><br>(beta-cyfluthrin)                     | 0.8–2.8 fl oz      | 28 fl oz            | 12          | 0                                                               | –                                     |
|                     | 3A                    | <b>*Fastac CS</b><br>(alpha-cypermethrin)                     | 2.8–3.8 fl oz      | 11.4 fl oz          | 12          | 3                                                               | –                                     |
|                     | 3A                    | <b>*Hero Insecticide</b><br>(bifenthrin + zeta-cypermethrin)  | 4.0–10.3 fl oz     | 27.39 fl oz         | 12          | 3                                                               | –                                     |
|                     | 3A                    | <b>*Mustang Maxx</b><br>(zeta-cypermethrin)                   | 2.24–4.0 fl oz     | 24 fl oz            | 12          | 3                                                               | –                                     |
|                     | 3A                    | <b>*Warrior II</b><br>(lambda-cyhalothrin)                    | 1.92 fl oz         | 30.72 fl oz         | 24          | Ears: 1<br>Feeding livestock: 21                                | –                                     |
|                     | 3A + 4C               | <b>Ridgeback</b><br>(bifenthrin + sulfoxaflor)                | 4.5–13.8 fl oz     | 27.6 fl oz per year | 24          | 7                                                               | –                                     |

| Insect or Mite Pest | MOA Code <sup>1</sup> | Trade Name (Active Ingredient)                                | Max Rate/Acre                                   |                                                                 | REI (Hours) | Days to Harvest                  | Remarks <sup>3</sup>                                                                        |
|---------------------|-----------------------|---------------------------------------------------------------|-------------------------------------------------|-----------------------------------------------------------------|-------------|----------------------------------|---------------------------------------------------------------------------------------------|
|                     |                       |                                                               | Appl.                                           | Season <sup>2</sup>                                             |             |                                  |                                                                                             |
|                     | 3A + 28               | <b>*Besiege</b><br>(lambda-cyhalothrin + chlorantraniliprole) | 10 fl oz                                        | 31 fl oz per year                                               | 24          | 1                                | –                                                                                           |
|                     | 4A                    | <b>Assail 30 SG</b><br><b>Assail 70 WP</b><br>(acetamiprid)   | <b>30 SG:</b> 5.3 oz<br><b>70 WP:</b> 2.3 oz    | <b>30 SG:</b> 11.2 oz per year<br><b>70 WP:</b> 4.8 oz per year | 12          | 7                                | Other brands available with same active ingredient.                                         |
|                     | 4A + 15               | <b>Cormoran</b><br>(acetamiprid + novaluron)                  | 12 fl oz                                        | 40 fl oz                                                        | 12          | 7                                | –                                                                                           |
| Grasshoppers        | 1B                    | <b>Fyfanon 57% EC</b><br><b>Fyfanon ULV AG</b><br>(malathion) | <b>57% EC:</b> 1.5 pt<br><b>ULV AG:</b> 8 fl oz | –                                                               | 12          | 5                                | No more than 2 applications per year. Crop injury may occur in the whorl to silking stages. |
|                     | 3A                    | <b>*Asana XL Insecticide</b><br>(esfenvalerate)               | 5.8–9.6 fl oz                                   | 96 fl oz                                                        | 12          | 1                                | –                                                                                           |
|                     | 3A                    | <b>*Baythroid XL</b><br>(beta-cyfluthrin)                     | 0.8–2.8 fl oz                                   | 28 fl oz                                                        | 12          | 0                                | –                                                                                           |
|                     | 3A                    | <b>*Brigade 2EC Insecticide/Miticide</b><br>(bifenthrin)      | 2.1–6.4 fl oz                                   | 12.8 fl oz                                                      | 12          | 1                                | Many other brands available with same active ingredient.                                    |
|                     | 3A                    | <b>*Delta Gold</b><br>(deltamethrin)                          | 1.0–1.5 fl oz                                   | 38.4 fl oz                                                      | 12          | Ears and forage: 1<br>Stover: 21 | –                                                                                           |
|                     | 3A                    | <b>*Fastac CS</b><br>(alpha-cypermethrin)                     | 2.8–3.8 fl oz                                   | 11.4 fl oz                                                      | 12          | 3                                | –                                                                                           |
|                     | 3A                    | <b>*Hero Insecticide</b><br>(bifenthrin + zeta-cypermethrin)  | 4.0–10.3 fl oz                                  | 27.39 fl oz                                                     | 12          | 3                                | –                                                                                           |
|                     | 3A                    | <b>*Mustang Maxx</b><br>(zeta-cypermethrin)                   | 2.8–4.0 fl oz                                   | 24 fl oz                                                        | 12          | 3                                | –                                                                                           |
|                     | 3A                    | <b>*Warrior II</b><br>(lambda-cyhalothrin)                    | 1.28–1.92 fl oz                                 | 30.72 fl oz                                                     | 24          | Ears: 1<br>Feeding livestock: 21 | –                                                                                           |
|                     | 3A + 4C               | <b>Ridgeback</b><br>(bifenthrin + sulfoxaflor)                | 4.5–13.8 fl oz                                  | 27.6 fl oz per year                                             | 24          | 7                                | –                                                                                           |
|                     | 3A + 28               | <b>*Besiege</b><br>(lambda-cyhalothrin + chlorantraniliprole) | 6–10 fl oz                                      | 31 fl oz per year                                               | 24          | 1                                | –                                                                                           |

| Insect or Mite Pest | MOA Code <sup>1</sup> | Trade Name (Active Ingredient)                                | Max Rate/Acre   |                     | REI (Hours)                          | Days to Harvest                     | Remarks <sup>3</sup>                                                                        |
|---------------------|-----------------------|---------------------------------------------------------------|-----------------|---------------------|--------------------------------------|-------------------------------------|---------------------------------------------------------------------------------------------|
|                     |                       |                                                               | Appl.           | Season <sup>2</sup> |                                      |                                     |                                                                                             |
|                     | 3A + 28               | <b>*Elevest</b><br>(bifenthrin + chlorantraniliprole)         | 4.8–9.6 fl oz   | –                   | 12                                   | 1                                   | No more than 2 applications per year.                                                       |
|                     | 4A + 15               | <b>Cormoran</b><br>(acetamiprid + novaluron)                  | 9–12 fl oz      | 40 fl oz            | 12                                   | 7                                   | –                                                                                           |
|                     | 15                    | <b>Rimon 0.83EC</b><br>(novaluron)                            | 6–12 fl oz      | 60 fl oz            | 12                                   | 1                                   | –                                                                                           |
|                     | 28                    | <b>Coragen</b><br>(chlorantraniliprole)                       | 2.0–5.0 fl oz   | 15.4 fl oz per year | 4                                    | 1                                   | –                                                                                           |
|                     | 28                    | <b>Vantacor</b><br>(chlorantraniliprole)                      | 1.2–2.5 fl oz   | 5.1 fl oz per year  | 4                                    | 1                                   | Foliar only. Can be applied by overhead sprinkler chemigation system.                       |
| Leafhoppers         | 1A                    | <b>Sevin 4F</b><br><b>Sevin XLR Plus</b><br>(carbaryl)        | 1–2 qt          | 16 qt per year      | 24 (21 days for detasseling workers) | Ears: 2<br>Forage: 14<br>Fodder: 48 | –                                                                                           |
|                     | 1B                    | <b>Fyfanon 57% EC</b><br>(malathion)                          | 1.5 pt          | –                   | 12                                   | 5                                   | No more than 2 applications per year. Crop injury may occur in the whorl to silking stages. |
|                     | 3A                    | <b>*Fastac CS</b><br>(alpha-cypermethrin)                     | 2.2–3.8 fl oz   | 11.4 fl oz          | 12                                   | 3                                   | –                                                                                           |
|                     | 3A                    | <b>*Hero Insecticide</b><br>(bifenthrin + zeta-cypermethrin)  | 4.0–10.3 fl oz  | 27.39 fl oz         | 12                                   | 3                                   | –                                                                                           |
|                     | 3A                    | <b>*Mustang Maxx</b><br>(zeta-cypermethrin)                   | 2.24–4.0 fl oz  | 24 fl oz            | 12                                   | 3                                   | –                                                                                           |
|                     | 3A                    | <b>*Warrior II</b><br>(lambda-cyhalothrin)                    | 1.28–1.92 fl oz | 30.72 fl oz         | 24                                   | Ears: 1<br>Feeding livestock: 21    | Many other brands with same active ingredient available.                                    |
|                     | 3A + 4C               | <b>Ridgeback</b><br>(bifenthrin + sulfoxaflor)                | 4.5–13.8 fl oz  | 27.6 fl oz per year | 24                                   | 7                                   | –                                                                                           |
|                     | 3A + 28               | <b>*Besiege</b><br>(lambda-cyhalothrin + chlorantraniliprole) | 6–10 fl oz      | 31 fl oz per year   | 24                                   | 1                                   | –                                                                                           |
|                     | 4D                    | <b>Sivanto Prime</b><br>(flupyradifurone)                     | 7.0–14.0 fl oz  | 28 fl oz per year   | 4                                    | Ear and forage: 7<br>Stover: 21     | –                                                                                           |

| Insect or Mite Pest                                                                      | MOA Code <sup>1</sup> | Trade Name (Active Ingredient)                           | Max Rate/Acre                                                                                                 |                                     | REI (Hours)                          | Days to Harvest                                                    | Remarks <sup>3</sup>                                                                                       |
|------------------------------------------------------------------------------------------|-----------------------|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------------------|--------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
|                                                                                          |                       |                                                          | Appl.                                                                                                         | Season <sup>2</sup>                 |                                      |                                                                    |                                                                                                            |
| <b>Soil pests</b><br>(includes corn rootworms, seed corn maggot, white grubs, wireworms) | 1A                    | <b>*Lannate LV</b><br><b>*Lannate SP</b><br>(methomyl)   | <b>LV:</b> 0.75–1.5 pt<br><b>SP:</b> 0.25–0.50 lb                                                             | <b>LV:</b> 21 pt<br><b>SP:</b> 7 lb | 48                                   | Ears: 0<br>Forage: 3<br>Stover: 21                                 | Certain hybrid varieties are susceptible to methomyl injury. Treat a small area to determine safety first. |
|                                                                                          | 1A                    | <b>Sevin 4F</b><br><b>Sevin XLR Plus</b><br>(carbaryl)   | 1–2 qt                                                                                                        | 16 qt per year                      | 24 (21 days for detasseling workers) | Ears: 2<br>Forage: 14<br>Fodder: 48                                | –                                                                                                          |
|                                                                                          | 1B                    | <b>*Counter 15G Lock 'n Load</b><br>(terbufos)           | Banded or in furrow:<br>6.0–8.0 oz/1000 row ft<br>Postemergence incorporated: 8 oz/1000 row ft at cultivation | –                                   | 48                                   | 60                                                                 | No more than 1 application.                                                                                |
|                                                                                          | 1B                    | <b>*Mocap 15G</b><br>(ethoprop)                          | At planting: 8 oz/1000 row ft                                                                                 | –                                   | 48                                   | At planting                                                        | No more than 1 application.                                                                                |
|                                                                                          | 1B                    | <b>*Thimet 20-G</b><br>(phorate)                         | At planting or cultivation: 4.5–6.0 oz/1000 row ft                                                            | –                                   | 48                                   | Ears, forage: 30                                                   | No more than 1 application.                                                                                |
|                                                                                          | 3A                    | <b>*Asana XL Insecticide</b><br>(esfenvalerate)          | 5.8–9.6 fl oz                                                                                                 | 96 fl oz                            | 12                                   | 1                                                                  | –                                                                                                          |
|                                                                                          | 3A                    | <b>*Baythroid XL</b><br>(beta-cyfluthrin)                | 0.8–2.8 fl oz                                                                                                 | 28 fl oz                            | 12                                   | 0                                                                  | –                                                                                                          |
|                                                                                          | 3A                    | <b>*Brigade 2EC Insecticide/Miticide</b><br>(bifenthrin) | In-furrow T-band at plant: 0.15–0.30 fl oz/1000 row ft<br>Foliar: 2.1–6.4 fl oz                               | 12.8 fl oz                          | 12                                   | 1                                                                  | Many other brands available with same active ingredient.                                                   |
|                                                                                          | 3A                    | <b>*Capture LFR</b><br>(bifenthrin)                      | Preplant incorporated: 4.0–5.3 fl oz<br>At plant: 3.4–17.0 fl oz<br>Preemergence: 3.4 fl oz                   | 17.0 fl oz                          | 12                                   | Preplant incorporated at planting, preemergence application        | For mixing with liquid fertilizer.                                                                         |
|                                                                                          | 3A                    | <b>*Force 3G</b><br>(tefluthrin)                         | 4–5 oz/1000 row ft                                                                                            | –                                   | 48                                   | At planting or cultivation within 30 days of seeding emergence     | No more than 1 application.                                                                                |
|                                                                                          | 3A                    | <b>*Warrior II</b><br>(lambda-cyhalothrin)               | At plant: 0.33 fl oz/1000 row ft<br>Foliar: 1.28–1.92 fl oz                                                   | 30.72 fl oz                         | 24                                   | Ears (foliar): 1<br>Feeding livestock or at-plant applications: 21 | Many other brands available with same active ingredient.                                                   |

| Insect or Mite Pest | MOA Code <sup>1</sup> | Trade Name (Active Ingredient)                                | Max Rate/Acre   |                     | REI (Hours) | Days to Harvest                                      | Remarks <sup>3</sup>                                                                                                             |
|---------------------|-----------------------|---------------------------------------------------------------|-----------------|---------------------|-------------|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
|                     |                       |                                                               | Appl.           | Season <sup>2</sup> |             |                                                      |                                                                                                                                  |
|                     | 3A + 28               | <b>*Besiege</b><br>(lambda-cyhalothrin + chlorantraniliprole) | 6-10 fl oz      | 31 fl oz per year   | 24          | 1                                                    | -                                                                                                                                |
|                     | 3A + 28               | <b>*Elevest</b><br>(bifenthrin + chlorantraniliprole)         | 4.8-9.6 fl oz   | -                   | 12          | 1                                                    | No more than 2 applications per year.                                                                                            |
| Spider mites        | 3A                    | <b>*Brigade 2EC Insecticide/Miticide</b><br>(bifenthrin)      | 5.12-6.4 fl oz  | 12.8 fl oz          | 12          | 1                                                    | Many other brands with same active ingredient available.                                                                         |
|                     | 3A                    | <b>*Hero Insecticide</b><br>(bifenthrin + zeta-cypermethrin)  | 10.3 fl oz      | 27.39 fl oz         | 12          | 3                                                    | -                                                                                                                                |
|                     | 3A + 4C               | <b>Ridgeback</b><br>(bifenthrin + sulfoxaflor)                | 4.5-13.8 fl oz  | 27.6 fl oz          | 24          | 7                                                    | -                                                                                                                                |
|                     | 3A + 28               | <b>*Elevest</b><br>(bifenthrin + chlorantraniliprole)         | 7.7-9.6 fl oz   | -                   | 12          | 1                                                    | No more than 2 applications per year.                                                                                            |
|                     | 6                     | <b>*Agri-Mek SC</b><br>(abamectin)                            | 1.75-3.50 fl oz | 7 fl oz per year    | 12          | 7                                                    | Must be mixed with a nonionic activator-type wetting, spreading, or penetrating adjuvant. Do not use binder or sticker adjuvant. |
|                     | 23                    | <b>Oberon 2SC</b><br>(spiromesifen)                           | 5.7-16 fl oz    | 17 fl oz            | 12          | Ears, green forage, silage: 5<br>Grain or stover: 30 | -                                                                                                                                |

| Insect or Mite Pest                         | MOA Code <sup>1</sup> | Trade Name (Active Ingredient)              | Max Rate/Acre                                                                                              |                     | REI (Hours) | Days to Harvest | Remarks <sup>3</sup>                                                                        |
|---------------------------------------------|-----------------------|---------------------------------------------|------------------------------------------------------------------------------------------------------------|---------------------|-------------|-----------------|---------------------------------------------------------------------------------------------|
|                                             |                       |                                             | Appl.                                                                                                      | Season <sup>2</sup> |             |                 |                                                                                             |
| Thrips (check label for species controlled) | 1B                    | <b>*Counter 15G Lock 'n Load</b> (terbufos) | Banded or in furrow: 6.0–8.0 oz/1000 row ft<br>Postemergence incorporated: 8 oz/1000 row ft at cultivation | –                   | 48          | 60              | No more than 1 application.                                                                 |
|                                             | 1B                    | <b>Fyfanon 57% EC</b> (malathion)           | 1.5 pt                                                                                                     | –                   | 12          | 5               | No more than 2 applications per year. Crop injury may occur in the whorl to silking stages. |

<sup>1</sup> Mode of Action (MOA) codes for plant pest insecticides from the Insecticide Resistance Action Committee (IRAC) Mode of Action Classification v. 11.1 January 2024. Number codes are used to distinguish the main insecticide mode of action groups, with additional letters for certain subgroups within each main group. All insecticides within the same group (with the same number) indicate the same active ingredient or similar mode of action. This information must be considered for the insecticide resistance management decisions.

<sup>2</sup> Always double-check labels regarding maximum application limits. Many labels are changing from a maximum rate per season (or crop cycle) to a maximum rate per year.

<sup>3</sup> Information provided in this table applies only to Florida. Be sure to read a current product label before applying any product. The use of brand names and any mention or listing of commercial products or services in the publication does not imply endorsement by UF/IFAS Extension nor discrimination against similar products or services not mentioned.

\*Restricted use insecticide.

Table 7. Sweet corn fungicides ordered by disease and then FRAC group according to their mode of action. **Labels change frequently. Be sure to read a current product label before applying any chemical. Please refer to chapter 19 for information on biopesticides, including materials labeled for certified organic production.** Contact: Katia Viana Xavier, UF/IFAS Everglades Research and Education Center.

| Pertinent Diseases or Pathogens | Fungicide Group <sup>1</sup> | Chemical (Active Ingredients)                                                                                                                                                                  | Max Rate/Acre                   |                      | Min. Days to                     |                                       | Remarks <sup>3</sup>                                     |
|---------------------------------|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------|----------------------------------|---------------------------------------|----------------------------------------------------------|
|                                 |                              |                                                                                                                                                                                                | Appl.                           | Season <sup>2</sup>  | Harvest                          | Reentry                               |                                                          |
| Bacterial stalk rot             | M1                           | (copper compounds)<br><b>Many brands available:</b> AmeriCop 40 DF, Badge SC, Badge X2, ChampION++, Copper Count N, Cueva, Kocide 2000, Kocide 3000, Mastercop, Nu-Cop 50 DF, Top Cop w/Sulfur | See individual label            | See individual label | 1                                | Varies by product from 4 hr to 2 days | –                                                        |
| Damping-off                     | M3                           | <b>Signet 480FS</b> (thiram)                                                                                                                                                                   | 5.0 oz/100 lb of seed           | –                    | –                                | 1                                     | Seed treatment only.                                     |
| Damping-off seedling blight     | 3                            | <b>Vortex</b> (ipconazole)                                                                                                                                                                     | 0.085 fl oz/ 100 lb of seed     | –                    | –                                | 0.5                                   | Seed treatment only.                                     |
|                                 | 4 + 3                        | <b>Dividend Extreme</b> (mefenoxam + difenoconazole)                                                                                                                                           | 5 fl oz/100 lb of seed          | –                    | –                                | 2                                     | Seed treatment only.                                     |
|                                 | 11                           | <b>Dynasty</b> (azoxystrobin)                                                                                                                                                                  | 0.153 fl oz/ 100 lb of seed     | –                    | –                                | 4                                     | Seed treatment only.                                     |
|                                 | 11                           | <b>Trilex</b> (trifloxystrobin)                                                                                                                                                                | 0.32–0.96 fl oz/ 100 lb of seed | –                    | –                                | –                                     | Seed treatment only.                                     |
| Eye spot                        | 3                            | (propiconazole)<br><b>Many brands available:</b> Amtide Propiconazole 41.8, Bumper 41.8EC, Fitness, Propiconazole E-AG 41.8EC, Propimax EC, Tilt                                               | 4 fl oz                         | 16 fl oz             | 14                               | 0.5–1                                 | No more than 4 total applications.                       |
|                                 | 3 + 7 + 11                   | <b>Miravis Neo</b> (propiconazole + pydiflumetofen + azoxystrobin)                                                                                                                             | 13.7 fl oz                      | 44.5 fl oz           | 14                               | 0.5                                   | No more than 2 sequential applications.                  |
|                                 | 3 + 11                       | <b>Delaro</b> (prothioconazole + trifloxystrobin)                                                                                                                                              | 8 fl oz                         | 32 fl oz             | Forage and ears: 0<br>Fodder: 14 | 0.5                                   | No more than 2 sequential applications.                  |
|                                 | 7                            | <b>Vertisan</b> (penthiopyrad)                                                                                                                                                                 | 24 fl oz                        | 48 fl oz             | 7                                | 0.5                                   | Soil and foliar treatments. See label for details.       |
|                                 | 7 + 11                       | <b>Priaxor</b> (fluxapyroxad + pyraclostrobin)                                                                                                                                                 | 8 fl oz                         | 16 fl oz             | 7                                | 0.5                                   | Alternate with fungicides of dissimilar modes of action. |
|                                 | 11                           | <b>Aftershock</b> (fluoxastrobin)                                                                                                                                                              | Foliar: 3.8 fl oz               | 15.27 fl oz          | 7                                | 0.5                                   | Soil and foliar treatments. See label for details.       |

| Pertinent Diseases or Pathogens | Fungicide Group <sup>1</sup> | Chemical (Active Ingredients)                            | Max Rate/Acre |                     | Min. Days to |         | Remarks <sup>3</sup>                                                                                                    |
|---------------------------------|------------------------------|----------------------------------------------------------|---------------|---------------------|--------------|---------|-------------------------------------------------------------------------------------------------------------------------|
|                                 |                              |                                                          | Appl.         | Season <sup>2</sup> | Harvest      | Reentry |                                                                                                                         |
|                                 | 11                           | <b>Evito 480SC</b><br>(fluoxastrobin)                    | 3.8 fl oz     | 15.2 fl oz          | 7            | 0.5     | No more than 2 sequential and 4 total applications.                                                                     |
|                                 | 11                           | <b>Headline</b><br>(pyraclostrobin)                      | 12 fl oz      | 72 fl oz            | 7            | 0.5     | No more than 2 sequential and 6 total applications of Headline or other QoI fungicides.                                 |
|                                 | 11                           | <b>Headline SC</b><br>(pyraclostrobin)                   | 12 fl oz      | 72 fl oz            | 7            | 0.5     | No more than 2 sequential and 6 total applications of Headline or other QoI fungicides.                                 |
|                                 | 11                           | <b>Quadris</b><br>(azoxystrobin)                         | 15.5 fl oz    | 120 fl oz           | 7            | 4 hr    | No more than 1 sequential and 4 total applications of Quadris or other QoI fungicides. See label for soil applications. |
|                                 | 11 + 3                       | <b>Avaris</b><br>(azoxystrobin + propiconazole)          | 14 fl oz      | 28 fl oz            | 14           | 0.5     | See label for details.                                                                                                  |
|                                 | 11 + 3                       | <b>Evito T</b><br>(fluoxastrobin + tebuconazole)         | 9 fl oz       | 36 fl oz            | 7            | 19      | No more than 2 sequential and 4 total applications.                                                                     |
|                                 | 11 + 3                       | <b>Headline AMP</b><br>(pyraclostrobin + metconazole)    | 14.4 fl oz    | 57.6 fl oz          | 7            | 0.5     | No more than 2 sequential and 4 total applications.                                                                     |
|                                 | 11 + 3                       | <b>Helmstar Plus</b><br>(azoxystrobin + tebuconazole)    | 10.8 fl oz    | 43.2 fl oz          | 7            | 19      | Do not spray after V8 growth stage.                                                                                     |
|                                 | 11 + 3                       | <b>Quilt</b><br>(azoxystrobin + propiconazole)           | 14 fl oz      | 56 fl oz            | 14           | 0.5     | Alternate every other application with a fungicide of dissimilar mode of action.                                        |
|                                 | 11 + 3                       | <b>Quilt XCEL</b><br>(azoxystrobin + propiconazole)      | 14 fl oz      | 56 fl oz            | 14           | 0.5     | Alternate every other application with a fungicide of dissimilar mode of action.                                        |
|                                 | 11 + 3                       | <b>Stratego</b><br>(trifloxystrobin + propiconazole)     | 12 fl oz      | 24 fl oz            | 14           | 0.5     | No more than 2 sequential applications.                                                                                 |
|                                 | 11 + 3                       | <b>Stratego YLD</b><br>(trifloxystrobin + propiconazole) | 5 fl oz       | 20 fl oz            | 14           | 0.5     | No more than 2 sequential applications.                                                                                 |
|                                 | 11 + 3                       | <b>Topguard EQ</b><br>(flutriafol + azoxystrobin)        | 7 fl oz       | 14 fl oz            | –            | 3       | No more than 2 applications per season.                                                                                 |
|                                 | 11 + 3                       | <b>Veltyma</b><br>(pyraclostrobin + mefentrifluconazole) | 10 fl oz      | 20 fl oz            | 21           | 0.5     | See label for details.                                                                                                  |

| Pertinent Diseases or Pathogens                                                            | Fungicide Group <sup>1</sup> | Chemical (Active Ingredients)                                                                                                                                                            | Max Rate/Acre        |                      | Min. Days to |         | Remarks <sup>3</sup>                                                       |
|--------------------------------------------------------------------------------------------|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------|---------|----------------------------------------------------------------------------|
|                                                                                            |                              |                                                                                                                                                                                          | Appl.                | Season <sup>2</sup>  | Harvest      | Reentry |                                                                            |
| Gray leaf spot                                                                             | 3                            | (tebuconazole)<br><b>Many brands available:</b> Folicur 3.6F, Monsoon 3.6F, Orius 3.6F, Tebustar 3.6L, Tebuzol 3.6F, Toledo 3.6F                                                         | 6 fl oz              | 24 fl oz             | 7            | 0.5     | –                                                                          |
|                                                                                            | 3                            | <b>Topguard</b><br>(flutriafol)                                                                                                                                                          | 14 fl oz             | 28 fl oz             | 7            | 3       | No more than 2 applications per year.                                      |
|                                                                                            | 3                            | <b>Xyway LFR</b><br>(flutriafol)                                                                                                                                                         | 5.8–15.2 fl oz       | 15.2 fl oz           | –            | 0.5     | Apply to corn in-furrow at planting or postemergence directed to the soil. |
|                                                                                            | 3 + M2                       | <b>Unicorn</b><br>(tebuconazole + sulfur)                                                                                                                                                | 3.75 lb              | 15.0 lb              | 14           | 19      | See label for details and rotational restrictions.                         |
|                                                                                            | 3 + 7                        | <b>Revyllok</b><br>(mefentrifluconazole + fluxapyroxad)                                                                                                                                  | 15 fl oz             | 30 fl oz             | 21           | 0.5     | No more than 2 applications per season.                                    |
|                                                                                            | 3 + 7 + 11                   | <b>Miravis Neo</b><br>(propiconazole + pydiflumetofen + azoxystrobin)                                                                                                                    | 13.7 fl oz           | 44.5 fl oz           | 14           | 0.5     | No more than 2 sequential applications.                                    |
|                                                                                            | 3 + 7 + 11                   | <b>Revytek</b><br>(mefentrifluconazole + fluxapyroxad + pyraclostrobin)                                                                                                                  | 15 fl oz             | 30 fl oz             | 21           | 0.5     | See label for details.                                                     |
|                                                                                            | 3 + 33                       | <b>Viathon</b><br>(tebuconazole + potassium phosphite)                                                                                                                                   | 3.0 pt               | 16.5 pt              | 7            | 0.5     | See label for details and rotational restrictions.                         |
|                                                                                            | 7 + 11                       | <b>Priaxor</b><br>(pyraclostrobin + fluxapyroxad)                                                                                                                                        | 8 fl oz              | 16 fl oz             | 7            | 0.5     | Alternate with a fungicide of dissimilar mode of action.                   |
|                                                                                            | 3 + 11                       | <b>Veltyma</b><br>(mefentrifluconazole + pyraclostrobin)                                                                                                                                 | 10 fl oz             | 30 fl oz             | 21           | 0.5     | –                                                                          |
| Northern corn leaf blight, southern corn leaf blight, common rust, northern corn leaf spot | M3                           | (mancozeb)<br><b>Many brands available:</b> Dithane F45 Rainshield, Dithane M45, Koverall, Manzate Max, Manzate Pro-Stick, Penncozeb 75DF, Penncozeb 80WP, Roper DF, Roper DF Rainshield | 1.5 lb               | 24 lb                | 7            | 1       | Start applications at the first sign of disease.                           |
|                                                                                            | M5                           | (chlorothalonil)<br><b>Many brands available:</b> Bravo Ultrex, Bravo Weather Stik, Chlorothalonil 720, Echo 720, Echo 90DF, Echo ZN, Equus 720 SST, Initiate 720, Initiate ZN           | See individual label | See individual label | 7            | 0.5–1   | –                                                                          |

| Pertinent Diseases or Pathogens | Fungicide Group <sup>1</sup> | Chemical (Active Ingredients)                                                                                                               | Max Rate/Acre |                     | Min. Days to |         | Remarks <sup>3</sup>                                                                                     |
|---------------------------------|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------|--------------|---------|----------------------------------------------------------------------------------------------------------|
|                                 |                              |                                                                                                                                             | Appl.         | Season <sup>2</sup> | Harvest      | Reentry |                                                                                                          |
|                                 | 3                            | (propiconazole)<br><b>Many brands available:</b> Bumper 41.8 EC, Fitness, Propimax EC, Propi-Star EC, Tilt, Topaz, Willowood Propicon 3.6EC | 4 fl oz       | 16 fl oz            | 14           | 0.5     | No more than 4 total applications.                                                                       |
|                                 | 3                            | <b>Prosaro® 421 SC</b><br>(tebuconazole + prothioconazole)                                                                                  | 8.2 fl oz     | 26 fl oz            | 21           | 0.5     | See label for adjuvant information and rotational restrictions.                                          |
|                                 | 3                            | (tebuconazole)<br><b>Many brands available:</b> Monsoon, Onset 3.6L, Orius 3.6F, Tebu-Crop, Tebustar 3.6L, Tebuzol 3.6F, Toledo 3.6F        | 6 fl oz       | 24 fl oz            | 7            | 0.5     | –                                                                                                        |
|                                 | 3                            | <b>Topguard</b><br>(flutriafol)                                                                                                             | 14 fl oz      | 28 fl oz            | 7            | 3       | No more than 2 applications per year.                                                                    |
|                                 | 3                            | <b>Xyway LFR</b><br>(flutriafol)                                                                                                            | 15.2 fl oz    | 5.8–15.2 fl oz      | –            | 0.5     | Apply to corn in-furrow at planting or postemergence directed to the soil.                               |
|                                 | 3 + M2                       | <b>Unicorn</b><br>(tebuconazole + sulfur)                                                                                                   | 3.75 lb       | 15 lb               | 14           | 19      | See label for details and rotational restrictions.                                                       |
|                                 | 3 + 7                        | <b>Revylok</b><br>(mefentrifluconazole + fluxapyroxad)                                                                                      | 15 fl oz      | 30 fl oz            | 21           | 0.5     | No more than 2 applications per season.                                                                  |
|                                 | 3 + 7                        | <b>Propulse</b><br>(prothioconazole + fluopyram)                                                                                            | 13.7 fl oz    | 27.4 fl oz          | 0            | 1       | No more than 2 sequential applications.                                                                  |
|                                 | 3 + 7 + 11                   | <b>Miravis Neo</b><br>(propiconazole + pydiflumetofen + azoxystrobin)                                                                       | 13.7 fl oz    | 44.5 fl oz          | 14           | 0.5     | No more than 2 sequential applications.                                                                  |
|                                 | 3 + 7 + 11                   | <b>Revytek</b><br>(mefentrifluconazole + fluxapyroxad + pyraclostrobin)                                                                     | 15 fl oz      | 30 fl oz            | 21           | 0.5     | See label for details.                                                                                   |
|                                 | 3 + 7 + 11                   | <b>Trivapro</b><br>(propiconazole + benzovindiflupyr + azoxystrobin)                                                                        | 13.7 fl oz    | 54.8 fl oz          | 14           | 0.5     | No more than 2 sequential applications before alternating with a fungicide of dissimilar mode of action. |
|                                 | 3 + 11                       | <b>Delaro</b><br>(prothioconazole + trifloxystrobin)                                                                                        | 8 fl oz       | 32 fl oz            | 0            | 0.5     | No more than 2 sequential applications.                                                                  |

| Pertinent Diseases or Pathogens | Fungicide Group <sup>1</sup> | Chemical (Active Ingredients)                            | Max Rate/Acre |                     | Min. Days to |         | Remarks <sup>3</sup>                                                                                                                 |
|---------------------------------|------------------------------|----------------------------------------------------------|---------------|---------------------|--------------|---------|--------------------------------------------------------------------------------------------------------------------------------------|
|                                 |                              |                                                          | Appl.         | Season <sup>2</sup> | Harvest      | Reentry |                                                                                                                                      |
|                                 | 3 +11                        | <b>Veltyma</b><br>(mefentrifluconazole + pyraclostrobin) | 10 fl oz      | 30 fl oz            | 21           | 0.5     | No more than 3 applications of 10 fl oz/A or 4 applications of 7 fl oz/A.                                                            |
|                                 | 3 + 33                       | <b>Viathon</b><br>(tebuconazole + potassium phosphite)   | 3.0 pt        | 16.5 pt             | 7            | 0.5     | See label for details and rotational restrictions.                                                                                   |
|                                 | 7                            | <b>Vertisan</b><br>(penthioopyrad)                       | 24 fl oz      | 48 fl oz            | 7            | 0.5     | Soil and foliar treatments.                                                                                                          |
|                                 | 7 + 11                       | <b>Elatus</b><br>(benzovindiflupyr + azoxystrobin)       | 7.3 oz        | 14.6 fl oz          | 7            | 0.5     | Alternate with fungicides of dissimilar modes of action.                                                                             |
|                                 | 11                           | <b>Aftershock</b><br>(fluoxastrobin)                     | 3.8 fl oz     | 15.27 fl oz         | 7            | 0.5     | Foliar treatments.                                                                                                                   |
|                                 | 11                           | <b>Approach</b><br>(picoxystrobin)                       | 12 fl oz      | 36 fl oz            | 7            | 0.5     | See label for details.                                                                                                               |
|                                 | 11                           | <b>Evito 480SC</b><br>(fluoxastrobin)                    | 3.8 fl oz     | 15.2 fl oz          | 7            | 0.5     | No more than 2 sequential applications and 4 total applications.                                                                     |
|                                 | 11                           | <b>Headline</b><br>(pyraclostrobin)                      | 12 fl oz      | 72 fl oz            | 7            | 0.5     | No more than 2 sequential applications and 6 total applications of Headline or other QoI fungicides.                                 |
|                                 | 11                           | <b>Headline SC</b><br>(pyraclostrobin)                   | 12 fl oz      | 72 fl oz            | 7            | 0.5     | No more than 2 sequential applications and 6 total applications of Headline or other QoI fungicides.                                 |
|                                 | 11                           | <b>Quadris</b><br>(azoxystrobin)                         | 15.5 fl oz    | 120 fl oz           | 7            | 4 hr    | No more than 2 sequential applications and 4 total applications of Quadris or other QoI fungicides. See label for soil applications. |
|                                 | 11                           | <b>Willowood Azoxy 2 SC</b><br>(azoxystrobin)            | 15.5 fl oz    | 62 fl oz            | 7            | 4 hr    | No more than 2 sequential applications.                                                                                              |
|                                 | 11 + 3                       | <b>Avaris</b><br>(azoxystrobin + propiconazole)          | 14 fl oz      | 56 fl oz            | 14           | 0.5     | See label for details.                                                                                                               |
|                                 | 11 + 3                       | <b>Custodia</b><br>(azoxystrobin + tebuconazole)         | 12.9 fl oz    | 51.7 fl oz          | 21           | 0.5     | See label for details.                                                                                                               |

| Pertinent Diseases or Pathogens                       | Fungicide Group <sup>1</sup> | Chemical (Active Ingredients)                                                                                              | Max Rate/Acre         |                      | Min. Days to |         | Remarks <sup>3</sup>                                                                      |
|-------------------------------------------------------|------------------------------|----------------------------------------------------------------------------------------------------------------------------|-----------------------|----------------------|--------------|---------|-------------------------------------------------------------------------------------------|
|                                                       |                              |                                                                                                                            | Appl.                 | Season <sup>2</sup>  | Harvest      | Reentry |                                                                                           |
|                                                       | 11 + 3                       | <b>Evito T</b><br>(fluoxastrobin + tebuconazole)                                                                           | 9 fl oz               | 36 fl oz             | 7            | 19      | No more than 2 sequential applications and 4 total applications.                          |
|                                                       | 11 + 3                       | <b>Headline AMP</b><br>(pyraclostrobin + metconazole)                                                                      | 14.4 fl oz            | 57.6 fl oz           | 7            | 0.5     | No more than 2 sequential applications and 4 total applications.                          |
|                                                       | 11 + 3                       | <b>Quilt XCEL</b><br>(azoxystrobin + propiconazole)                                                                        | 14 fl oz              | 56 fl oz             | 14           | 0.5     | Alternate every other application with a fungicide of dissimilar mode of action.          |
|                                                       | 11 + 3                       | <b>Stratego</b><br>(trifloxystrobin + propiconazole)                                                                       | 12 fl oz              | 24 fl oz             | 0            | 0.5     | No more than 2 sequential applications.                                                   |
|                                                       | 11 + 3                       | <b>Stratego YLD</b><br>(trifloxystrobin + propiconazole)                                                                   | 5 fl oz               | 20 fl oz             | 0            | 0.5     | No more than 2 sequential applications.                                                   |
|                                                       | 11 + 3                       | <b>Topguard EQ</b><br>(flutriafol + azoxystrobin)                                                                          | 7 fl oz               | 14 fl oz             | 7            | 3       | No more than 2 applications per season.                                                   |
|                                                       | 11 + 7                       | <b>Priaxor</b><br>(pyraclostrobin + fluxapyroxad)                                                                          | 8 fl oz               | 16 fl oz             | 7            | 0.5     | See label for details.                                                                    |
| <b>Powdery mildew, rusts</b>                          | M2                           | (sulfur)<br><b>Many brands available:</b> Microfine Sulfur, Sulfur 90W, Top Cop with Sulfur, Yellow Jacket Wettable Sulfur | See individual label  | See individual label | 1            | 1       | Do not apply during periods of warm weather. Do not apply within 2 weeks of an oil spray. |
| <b>Pythium seedling blight, systemic downy mildew</b> | 4                            | (metalaxyl)<br><b>Various brands available:</b> Acceleron, Acquire, Allegiance, Sebring 2.65ST                             | 3 fl oz/100 lb seed   | –                    | –            | 1       | Seed treatment only.                                                                      |
|                                                       | 4                            | <b>Apron XL</b><br>(mefenoxam)                                                                                             | 2.2 fl oz/100 lb seed | –                    | –            | 2       | Seed treatment only.                                                                      |
|                                                       | 33                           | (mono- and dipotassium salts of phosphorous acid)<br><b>Various brands available:</b> Confine Extra, K-phite               | 3 qt                  | –                    | 0            | 4 hr    | See label for details.                                                                    |

| Pertinent Diseases or Pathogens                | Fungicide Group <sup>1</sup> | Chemical (Active Ingredients)                                                    | Max Rate/Acre                    |                     | Min. Days to                     |         | Remarks <sup>3</sup>                                                                                     |
|------------------------------------------------|------------------------------|----------------------------------------------------------------------------------|----------------------------------|---------------------|----------------------------------|---------|----------------------------------------------------------------------------------------------------------|
|                                                |                              |                                                                                  | Appl.                            | Season <sup>2</sup> | Harvest                          | Reentry |                                                                                                          |
| <b>Rhizoctonia root and stalk rot diseases</b> | 11                           | <b>Aftershock</b><br>(fluoxastrobin)                                             | Soil: 0.24 fl oz/<br>1000 row ft | 15.2 fl oz          | 7                                | 0.5     | Soil and foliar treatments. See label for details.                                                       |
| <b>Tar spot</b>                                | 3 + 7                        | <b>Revylot</b><br>(mefentrifluconazole + fluxapyroxad)                           | 15 fl oz                         | 30 fl oz            | 21                               | 0.5     | No more than 2 applications per season.                                                                  |
|                                                | 3 + 7 + 11                   | <b>Delaro Complete</b><br>(prothioconazole + fluopyram + trifloxystrobin)        | 8 fl oz                          | 32 fl oz            | Forage and ears: 0<br>Fodder: 14 | 0.5     | No more than 2 sequential applications.                                                                  |
|                                                | 3 + 7 + 11                   | <b>Miravis Neo</b><br>(propiconazole + pydiflumetofen + azoxystrobin)            | 13.7 fl oz                       | 44.5 fl oz          | 14                               | 0.5     | No more than 2 sequential applications.                                                                  |
|                                                | 3 + 7 + 11                   | <b>Revytek</b><br>(mefentrifluconazole + fluxapyroxad + pyraclostrobin)          | 15 fl oz                         | 30 fl oz            | 21                               | 0.5     | See label for details.                                                                                   |
|                                                | 3 + 7 + 11                   | <b>Trivapro</b><br>(propiconazole + benzovindiflupyr + azoxystrobin)             | 13.7 fl oz                       | 54.8 fl oz          | 14                               | 0.5     | No more than 2 sequential applications before alternating with a fungicide of dissimilar mode of action. |
|                                                | 3 + 11                       | <b>Delaro</b><br>(prothioconazole + trifloxystrobin)                             | 8 fl oz                          | 32 fl oz            | Forage and ears: 0<br>Fodder: 14 | 0.5     | No more than 2 sequential applications                                                                   |
|                                                | 3 + 11                       | <b>Veltyma</b><br>(mefentrifluconazole + pyraclostrobin)                         | 10 fl oz                         | 30 fl oz            | 21                               | 0.5     | No more than 3 applications of 10 fl oz/A or 4 applications of 7 fl oz/A.                                |
| <b>Various seedling diseases</b>               | 1                            | <b>Thiabendazole 4L ST</b><br>(thiabendazole)                                    | 0.41 fl oz/80,000 kernel count   | –                   | –                                | 0.5     | –                                                                                                        |
|                                                | 1 + 4 + 11 + 12              | <b>Maxim Quattro</b><br>(thiabendazole + mefenoxam + azoxystrobin + fludioxonil) | –                                | –                   | –                                | 0.5     | Seed treatment only.                                                                                     |
|                                                | 3                            | <b>Difenoconazole 3L ST</b><br>(difenoconazole)                                  | 1.25 fl oz/100 lb of seed        | –                   | –                                | 0.5     | Seed treatment only.                                                                                     |
|                                                | 3 + 4                        | <b>EverGol Energy</b><br>(metalaxyl + prothioconazole)                           | 2 fl oz/100 lb of seed           | –                   | –                                | 0.5     | Seed treatment only.                                                                                     |
|                                                | 4 + 14 + NC                  | <b>System 3</b><br>(mefenoxam + PCNB + <i>Bacillus subtilis</i> GB03)            | 3 oz/bu of seed                  | –                   | –                                | 1       | Seed treatment only.                                                                                     |

| Pertinent Diseases or Pathogens | Fungicide Group <sup>1</sup> | Chemical (Active Ingredients)                                                            | Max Rate/Acre             |                     | Min. Days to |         | Remarks <sup>3</sup> |
|---------------------------------|------------------------------|------------------------------------------------------------------------------------------|---------------------------|---------------------|--------------|---------|----------------------|
|                                 |                              |                                                                                          | Appl.                     | Season <sup>2</sup> | Harvest      | Reentry |                      |
|                                 | 7                            | <b>Kernel Guard Supreme</b><br>(carboxin + permethrin)                                   | –                         | –                   | –            | 0.5     | Seed treatment only. |
|                                 | 11                           | <b>Stamina</b><br>(pyraclostrobin)                                                       | 1.6 fl oz/100 lb of seed  | –                   | –            | –       | Seed treatment only. |
|                                 | 12                           | (fludioxonil)<br><b>Various brands available:</b> Dyna-Shield, Maxim 4FS, Spirato 480 FS | 0.16 fl oz/100 lb of seed | –                   | –            | 0.5     | Seed treatment only. |
|                                 | 14                           | <b>Rizolex</b><br>(tolclofos-methyl)                                                     | 0.3 fl oz/100 lb of seed  | –                   | –            | 0.5     | Seed treatment only. |

<sup>1</sup> FRAC code (fungicide group): Numbers and letters are used to distinguish the fungicide mode of action groups. All fungicides within the same group (with same number or letter) indicate the same active ingredient or similar mode of action. This information must be considered for the fungicide resistance management decisions. Source: FRAC Code List; <https://www.frac.info/> (FRAC = Fungicide Resistance Action Committee).

<sup>2</sup> Always double-check labels regarding maximum application limits. Many labels are changing from a maximum rate per season (or crop cycle) to a maximum rate per year.

<sup>3</sup> Information provided in this table applies only to Florida. Be sure to read a current product label before applying any chemical. The use of brand names and any mention or listing of commercial products or services in the publication does not imply endorsement by UF/IFAS Extension nor discrimination against similar products or services not mentioned.

Table 8. Nonfumigant nematicides for sweet corn in Florida. Contact: Johan Desaeger, UF/IFAS Gulf Coast Research and Education Center.

| Product                   | Broadcast or Overall Rates                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                | Row Rates                 |                                  |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------------------|----------------------------------|
|                           | Per Acre                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Per 1000 sq ft | Per Acre, 36" Row Spacing | Per 1000 Row ft, Any Row Spacing |
| Counter 15G (terbufos)*   | –                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | –              | 5.4–7.3 lb                | 6.0–8.0 oz                       |
| Mocap 15G (ethoprophos)** | 40 lb                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 0.9 lb         | 10.8–14.8 lb              | 0.75–1.0 lb                      |
| Velum (fluopyram)         | Apply 6.5–6.8 fl oz/A either by in-furrow spray during planting directed on or below seed, or by chemigation into root zone through low-pressure drip or trickle irrigation. No more than 6.84 fl oz/A of Velum (0.446 lb/A of fluopyram) per year, regardless of formulation or method of application (soil or foliar). Do not apply Velum within 14 days of harvest. Do not allow livestock to graze treated area for 14 days, and do not harvest for food or feed within 14 days of application. |                |                           |                                  |
| Biological nematicides    | See chapter 19.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                |                           |                                  |

\*Apply banded or in the row not to exceed 8.7 lb/A. \*\*Do not allow Mocap to come in contact with seed. Apply as a 12 to 15 in. band treatment, incorporating Mocap product according to label instructions. **These products are not as consistently effective against root-knot nematodes as the fumigants but are registered as indicated.**

Table 9. Fumigant nematicides for sweet corn in Florida.

| Nematicide                             | Broadcast Application <sup>1</sup> |                                       | In-the-Row Applications                                                                                                                                                                             |
|----------------------------------------|------------------------------------|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                        | Gallons per Acre                   | fl oz/1000 ft/chisel spaced 12" apart |                                                                                                                                                                                                     |
| Telone II <sup>2, 3</sup>              | 9–12                               | 26–35                                 | For any row spacing, application rates given may be concentrated in the row but shall never exceed the labeled maximum for broadcast applications. Consult the product label for additional detail. |
| Telone C-17 <sup>2, 3</sup>            | 10.8–17.1                          | 31.8–50.2                             | For any row spacing, application rates given may be concentrated in the row but shall never exceed the labeled maximum for broadcast applications. Consult the product label for additional detail. |
| Telone C-35 <sup>2, 3</sup>            | 13–20.5                            | 38–60                                 | For any row spacing, application rates given may be concentrated in the row but shall never exceed labeled maximum for broadcast applications. Consult the product label for additional detail.     |
| Pic-Clor 60                            | 19–31.5                            | 57–90                                 | For any row spacing, application rates should never exceed the labeled maximum for broadcast applications. Consult the product label for additional detail.                                         |
| Vapam HL                               | 75                                 | –                                     | For drip or in-row chisel fumigation, consult product label for proportionately reduced overall rates, drip concentration, and flow-modifying directions and procedures.                            |
| KPam HL                                | 60                                 | –                                     | For drip or in-row chisel fumigation, consult product label for proportionately reduced overall rates, drip concentration, and flow-modifying directions.                                           |
| Allyl isothiocyanate (AITC)<br>Dominus | 40                                 | –                                     | For drip or in-row fumigation and crop termination, consult product label for proportionately reduced overall rates, drip concentration, and flow-modifying directions                              |

<sup>1</sup> Gallons/acre and fl oz/1000 ft provided only for mineral soils. Higher rates may be possible for heavier-textured (loam, silt, clay) or highly organic soils.

<sup>2</sup> All of the fumigants mentioned are for retail sale and use only by state certified applicators or persons under their direct supervision. New supplemental labeling for the Telone products must be in the hands of the user at the time of application. See new label details for additional use restrictions based on soil characteristics, buffer zones, Fumigant Management Plans (FMP), requirements for Personal Protective Equipment (PPE), mandatory good agricultural practices (GAPs), product and applicator training certification, and other rate-modifying recommendations.

<sup>3</sup> Higher application rates are possible in the presence of cyst-forming nematodes.

Rates are believed to be correct for products named and similar products of other brand names when applied to mineral soils. Higher rates are required for muck (organic) soils. However, the **grower** has the final responsibility to see that each product is used legally; **read the label** of the product to be sure that you are using it properly.

<sup>1</sup> This document is HS737, one of a series of the Department of Horticultural Sciences, UF/IFAS Extension. Original publication date June 1995. Revised annually. Most recent revision August 2026. Visit the Ask IFAS website at <https://ask.ifas.ufl.edu> for the currently supported version of this publication. © 2026 UF/IFAS. This publication is licensed under [CC BY-NC-ND 4.0](#).

<sup>2</sup> Katia Viana Xavier, assistant professor, disease management, Department of Plant Pathology, UF/IFAS Everglades Research and Education Center, Belle Glade, FL; Ramdas Kanissery, associate professor, weed science, Department of Horticultural Sciences, UF/IFAS Southwest Florida Research and Education Center, Immokalee, FL; Craig J. Frey, county Extension director and Extension agent III, multi-county commercial vegetable production, M.S., UF/IFAS Extension Hendry County, Labelle, FL; Anna Mészáros, Extension agent II, M.S., commercial horticulture, vegetable crop production, UF/IFAS Extension Palm Beach County, Belle Grande, FL; Nicholas S. Dufault, professor, fungal plant disease management of field and vegetable crops, UF/IFAS Department of Plant Pathology, Gainesville, FL; Johan Desaegeer, associate professor, nematology, Department of Entomology and Nematology, UF/IFAS Gulf Coast Research and Education Center, Wimauma, FL; Jawwad Qureshi, professor, Department of Entomology and Nematology, UF/IFAS Southwest Florida Research and Education Center, Immokalee, FL; Julien M. Beuzelin, associate professor, integrated pest management, Department of Entomology and Nematology, UF/IFAS Everglades Research and Education Center, Belle Glade, FL; UF/IFAS Extension, Gainesville, FL 32611.

The use of trade names in this publication is solely for the purpose of providing specific information. UF/IFAS does not guarantee or warranty the products named, and references to them in this publication do not signify our approval to the exclusion of other products of suitable composition.

Use pesticides safely. Read and follow directions on the manufacturer's label.

The Institute of Food and Agricultural Sciences (IFAS) is an Equal Opportunity Institution authorized to provide research, educational information, and other services only to individuals and institutions that operate in compliance with applicable federal and state non-discrimination laws and policies. For more information on obtaining other UF/IFAS Extension publications, contact your county's UF/IFAS Extension office. U.S. Department of Agriculture, UF/IFAS Extension Service, University of Florida, IFAS, Florida A&M University Cooperative Extension Program, and Boards of County Commissioners Cooperating. Andra Johnson, Dean for UF/IFAS Extension.