

# 2026–2027 Florida Citrus Production Guide: Soft-Bodied Insects Attacking Foliage and Fruit<sup>1</sup>

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## Recommended Chemical Controls for Soft-Bodied Insects

**READ THE LABEL.** Some product labels specify rates per acre, while others specify rates per volume delivered (e.g., per 100 gal). Refer to label for details on how product should be mixed for desired targets.

See Table 1.

Rates for pesticides are given as the maximum amount required to treat mature citrus trees unless otherwise noted. To treat smaller trees with commercial application equipment including handguns, mix the per-acre rate for mature trees in 250 gal of water. Calibrate and arrange nozzles to deliver thorough distribution, and treat as many acres as this volume of spray allows.

Table 1. Recommended chemical controls for scales, mealybugs, whiteflies, and aphids.

| IRAC MOA <sup>1</sup> | Pesticide Trade Name               | Rate/Acre <sup>2</sup> | Comments                                                                                                                                                                                                                                                                                     | Pests Controlled                                                              |
|-----------------------|------------------------------------|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| 1B                    | Dimethoate                         |                        |                                                                                                                                                                                                                                                                                              |                                                                               |
|                       | Various products                   | See label              |                                                                                                                                                                                                                                                                                              | Aphids, scales, psyllids                                                      |
| 4A                    | Clothianidin (soil drench)         |                        |                                                                                                                                                                                                                                                                                              |                                                                               |
|                       | Belay 50 WDG                       | 3.2–6.4 oz             | For use on nonbearing trees only; do not apply within 1 year of fruit harvest. Do not exceed 12.8 oz/acre (0.4 lb a.i./acre) per year. Do not apply this product to blooming, pollen-shedding, or nectar-producing parts of plants if bees may forage on the plants during this time period. | Aphids, psyllids, citrus leafminer                                            |
| 4A                    | Imidacloprid                       |                        |                                                                                                                                                                                                                                                                                              |                                                                               |
|                       | Various products, 2F, 4F, and 4.6F | See label              | Limit of 0.5 lb a.i./acre per growing season regardless of application type (soil and/or foliar) and trade name of imidacloprid product used.                                                                                                                                                | Aphids, mealybugs, scales, whiteflies, psyllids, citrus leafminer (soil only) |
|                       | Foliar application                 | Half to full rate      | Do not apply during bloom or within 10 days of bloom or when bees are actively foraging.                                                                                                                                                                                                     |                                                                               |
|                       | Soil application                   | Half to full rate      | 8 fl oz of Admire Pro 4.6F per acre per 12 months when applied to soil. Do not exceed 0.5 lb a.i./acre per application. See SLN for additional information.                                                                                                                                  |                                                                               |
| 4A                    | Thiamethoxam                       |                        |                                                                                                                                                                                                                                                                                              |                                                                               |
|                       | Actara (foliar application)        | 4.0–5.5 oz             | Do not exceed a total of 11.0 oz/acre (0.172 lb a.i./acre) per growing season. Do not apply during prebloom or during bloom when bees are actively foraging.                                                                                                                                 | Aphids, mealybugs, scales, whiteflies, psyllids                               |
|                       | Platinum 75 SG (soil drench)       | 1.83–3.67 oz           | Do not exceed a total of 3.67 oz/acre (0.172 lb a.i./acre) per growing season. Do not apply during prebloom or during bloom when bees are actively foraging.                                                                                                                                 | Aphids, mealybugs, scales, whiteflies, psyllids, citrus leafminer             |
| 23                    | Spirotetramat                      |                        |                                                                                                                                                                                                                                                                                              |                                                                               |
|                       | Movento 240                        | 10 fl oz + 3% v/v      | Do not make more than one application during primary citrus bloom period. Recommended to be applied in 2% horticultural mineral oil. Limit of 0.32 lb a.i./acre per 12 months. Minimum interval of 21 days between applications.                                                             | Aphids, mealybugs, scales, whiteflies, citrus rust mites, psyllids            |
|                       | Movento MPC                        | 16 fl oz + 3% v/v      | Do not apply within 10 days prior to bloom, during bloom, or until petal fall is complete. Recommended to be applied in 2% horticultural mineral oil. Limit of 0.32 lb a.i./acre per 12 months. Minimum interval of 21 days between applications.                                            |                                                                               |
| 29                    | Flonicamid                         |                        |                                                                                                                                                                                                                                                                                              |                                                                               |
|                       | Beleaf 50SG                        | 2.8 oz                 | Apply when populations begin to build.                                                                                                                                                                                                                                                       | Aphids                                                                        |

| IRAC MOA <sup>1</sup>                                                                                                                                                                                                                                                                                        | Pesticide Trade Name                    | Rate/Acre <sup>2</sup> | Comments                                                                                                                                                                                    | Pests Controlled                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| UN <sup>3</sup>                                                                                                                                                                                                                                                                                              | <b>Horticultural Mineral Oil</b>        |                        |                                                                                                                                                                                             |                                                    |
|                                                                                                                                                                                                                                                                                                              | 97+% (FC 435-66, FC 455-88, or 470 oil) | 5 gal                  | Do not apply when temperatures exceed 94°F. 470 weight oil has not been evaluated for effects on fruit coloring or ripening. These oils are more likely to be phytotoxic than lighter oils. | <b>Aphid, scales</b> , leafminer, citrus rust mite |
| <sup>1</sup> Mode of action class for citrus pesticides from the Insecticide Resistance Action Committee (IRAC) Mode of Action Classification v. 11.4 (2025).<br><sup>2</sup> Lower rates may be used on smaller trees. Do not use less than the minimum label rate.<br><sup>3</sup> Mode of action unknown. |                                         |                        |                                                                                                                                                                                             |                                                    |

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

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