

2026–2027 Florida Citrus Production Guide: Citrus Black Spot¹

Megan M. Dewdney, Callie Walker, Pamela D. Roberts, and Natalia A. Peres²

Application Timing Recommendations

- Citrus black spot is a quarantine disease. See booklet 1 for a detailed outline of regulations for growers, caretakers, harvesters, and haulers.
- Applications from early May to mid-September are recommended.
 - Applications should be at least monthly.
 - If April is wetter than average, an application in mid-April is advised.
- Strobilurin (FRAC MOA 11) resistance has been reported in other countries, so follow careful rotations with other modes of action and never use more than 2 strobilurin-containing fungicides twice in a row.
 - Recommended to reserve strobilurin fungicides for the beginning of the season or when phytotoxicity from copper is likely.
 - Other countries have found that strobilurin fungicides work better with petroleum oil.
- All fungicides other than copper recommended in Table 1 have similar efficacy in Florida. Copper is less effective but a good choice for the end of the season.
 - Use the [Citrus Copper Application Scheduler](#) to time copper applications most efficiently.
- Use fungicides in conjunction with accelerated leaf litter decomposition.

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.

Web Addresses for Links

Citrus Copper Application

Scheduler: <http://agroclimate.org/tools/citrus-copper-application-scheduler/>

UF/IFAS publication PP289, “A Web-Based Tool for Timing Copper Applications in Florida Citrus”:
<https://doi.org/10.32473/edis-pp289-2012>

Recommended Chemical Controls

READ THE LABEL.

See Table 1.

Table 1. Recommended chemical controls for citrus black spot.

Pesticide	FRAC MOA ¹	Mature Trees Rate/Acre ²
Copper fungicide	M 01	Use label rate.
Amistar Top ⁴	11 + 3	15.4 fl oz. Do not apply more than 61.5 fl oz (0.8 lb azoxystrobin and 0.5 lb difenoconazole)/acre/year. Do not apply more than 0.5 lb a.i./acre/season of difenoconazole. Do not apply more than 1.5 lb a.i./acre/season of azoxystrobin. Do not apply more than 3 times at highest rate. Minimum retreatment interval is 7 days.
Enable 2F ⁴	3	8.0 fl oz. Do not apply more than 3 applications or 24 fl oz (0.38 lb a.i.)/acre/season. Minimum retreatment interval is 21 days.
Gem 500 SC ³	11	1.9–3.8 fl oz. Do not apply more than 15.2 fl oz/acre/season for all uses. Best applied with petroleum oil. Do not apply within 7 days of harvest.
Headline SC ³	11	12–15 fl oz. Do not apply more than 54 fl oz (0.88 lb a.i.)/acre/season for all uses. Best applied with petroleum oil.
Pristine ⁴	11 + 7	16–18.5 oz. No more than 74 oz/acre/season which is equivalent to 1.17 lb a.i./acre/season of boscalid and 0.592 lb a.i./acre/season of pyraclostrobin. Up to 0.88 lb a.i./acre/season of pyraclostrobin can be used. Minimum retreatment interval is 10 days.
Quadris ³	11	9.0–15.5 fl oz. Do not apply more than 90 fl oz (1.5 lb a.i.)/acre/season for all uses. Best applied with petroleum oil. Minimum retreatment interval is 7 days.

¹ Mode of action class for citrus pesticides from the Fungicide Resistance Action Committee (FRAC) 2025. Refer to chapter 4, “[Pesticide Resistance and Resistance Management](#),” for more details.

² Lower rates can be used on smaller trees. Do not use less than minimum label rate.

³ Do not use more than 4 applications of strobilurin fungicides/season. Do not make more than 2 sequential applications of strobilurin fungicides (FRAC MOA 11).

⁴ Do not make more than 4 applications of Pristine or Amistar Top/season. Do not make more than 2 sequential applications of Pristine or Amistar Top before alternating to a non-strobilurin, non-SDHI (FRAC MOA 7), non-DMI (FRAC MOA 3) fungicide.

¹ This document is CG115, one of a series of the Department of Plant Pathology, UF/IFAS Extension. Original publication date August 2026. Revised annually. 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](#).

² Megan M. Dewdney, professor and Extension specialist, Department of Plant Pathology, UF/IFAS Citrus Research and Education Center, Lake Alfred, FL; Callie Walker, chief of pest eradication and control, Citrus Health Response Program, FDACS-DPI, Winter Haven, FL; Pamela D. Roberts, professor, Department of Plant Pathology, UF/IFAS Southwest Florida Research and Education Center; Natalia A. Peres, professor, strawberry pathology, Department of Plant Pathology, UF/IFAS Gulf Coast Research and Education Center; 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.