

Products recommended in the *Florida Citrus Production Guide* and their effects on foliar fungal diseases.

Pesticide ^a	Target Disease									Maximum Rate per Acre per Season
	Mode of Action ^b (FRAC code)	REI ^c Hours	PHI ^d Days							
Amistar Top	11 + 3	12	0	+++ , R	+++ , R	+++ , R	+++ , R	++ , R	+++	61.5 fl oz (Amistar Top) 0.5 lb (difenoconazole) 1.5 lb (azoxystrobin)
Copper fungicide	M 01	See label	See label	++ , R, NR	++ , R, NR	+++ , R, NR	+++ , R, NR	-	++ , R, NR	See label
Copper fungicide + petroleum oil 97%	M 01, NC	See label	See label	++ , NR	NT	+++ , R , NR	+++ , NR	-	-	See label
Enable 2F	3	12	0	-	+++ , R	++ , R	-	-	++ , R	24 fl oz 0.38 lb a.i.
Ferbam Granuflo	M 03	24	0	++ , R, NR	NT	-	-	+ , NR	++ , R, NR	23.7 lb 18 lb a.i.
Gem 500 SC (HR)	11	12	7	+++ , R	++ , R,*	+++ , R,*	+++ , R	++ , R	+++ , R	15.2 fl oz
Headline SC (HR)	11	12	0	+++ , R	+++ , R,*	+++ , R,*	+++ , R	++ , R	+++ , R	54 fl oz 0.88 lb a.i.
Gem + Ferbam	11, M 03	24	7	+++	NT	-	-	++ , R	+++	15.2 fl oz (Gem) 23.7 lb (Ferbam) 18 lb a.i. (Ferbam)
Headline + Ferbam	11, M 03	24	0	+++	NT	-	-	++ , R	+++	54 fl oz (Headline) 0.88 lb a.i. (Headline) 23.7 lb (Ferbam) 18 lb a.i. (Ferbam)
Petroleum oil 97%	NC	12	0	-	NT	++ , R, NR	-	-	-	see label
Priaxor Xemium (HR)	11 + 7	12	0	NT	NT	++	++	++ , R	NT	44 fl oz (Priaxor) 0.956 lb a.i. (pyraclostrobin) 0.478 lb a.i. (fluxapyroxad)
Pristine (HR)	11 + 7	12	0	+++ , R	+++ , R	+++ , R	+++ , R	++ , R	+++	74 oz (Pristine) 0.592 lb a.i. (pyraclostrobin) 1.17 lb a.i. (boscalid)
Quadris Flowable (HR)	11	4	0	+++ , R	+++ , R,*	+++ , R,*	+++ , R	++ , R	+++ , R	90 fl oz 1.5 lb a.i.
Quadris + Ferbam	11, M 03	24	0	+++	NT	-	-	++ , R	+++	90 fl oz (Quadris) 1.5 lb a.i. (Quadris) 23.7 lb (Ferbam) 18 lb a.i. (Ferbam)

^a All listed pesticides are registered and trademarked products

^b Mode of action class for citrus pesticides from the Fungicide Resistance Action Committee (FRAC)

^c Restricted Entry Interval

^d Preharvest Interval

(R) = Product recommended for control of pathogen in *Florida Citrus Production Guide*

(NR) = Minimal resistance potential

(NT) = Not tested

(*) = Best applied with petroleum oil

(+++) = good control of pathogen (++) = moderate control of pathogen (+) = low levels of pathogen suppression (-) = no observed control of pathogen (HR) = High resistance potential

Fungicide Resistance Management

Fungicide resistance is now problematic in Florida citrus groves, with documented strobilurin resistance causing control failure of Alternaria brown spot. These guidelines apply to all fungicide applications within a season and all fungal diseases.

- Make no more than the recommended number of sequential applications of any fungicide without alternating to another fungicide with a different mode of action (FRAC codes). To conserve fungicide efficacy, it is recommended to rotate modes of action with each application.
- Do not make more than the maximum number of applications of any fungicide class combined in a year for all diseases, and never exceed maximum label rates per acre per year.
- Control measures should begin before disease development and continue as indicated by recommended disease management practices. For guidance, consult the *Florida Citrus Production Guide* (<https://crec.ifas.ufl.edu/resources/production-guide>).

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