

# Apricot

## Brown Rot Blossom and Twig Blight

**Pathogens:** *Monilinia laxa* and *Monilinia fructicola*

(Reviewed 11/07, updated 11/07)



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### SYMPTOMS

The blossom and twig blight phase begins with the death of [young blossoms](#) and their associated spurs and leaves. Infection moves from flowers into twigs to form [small cankers](#). Gum exudes at the base of infected flowers. Cankers on blighted twigs have tan centers with dark margins. In high humidity gray brown [spore masses](#) form on diseased flower parts and twig cankers.

### COMMENTS ON THE DISEASE

The fungus survives on [diseased twigs](#) and [mummified fruits](#), either on the tree or on the ground. Brown rot fungus spores are airborne and are also spread by rain splash and insects. Moderate temperatures and moist weather during bloom favor blossom blight.

### MANAGEMENT

Two to three bloom applications are necessary to control brown rot blossom and twig blight, depending on the weather. Because apricot sepals, in addition to other flower parts, are susceptible, the application at [red bud](#), is most important. To provide adequate continuing protection, spray every 14 days. When continued heavy rainfall is occurring or other conditions are occurring that result in high susceptibility to infection, shorten this interval to 7 to 10 days. Aerial applications are generally not as effective as properly applied ground sprays but may be necessary when the orchard floor is too wet.

Common name (trade name)	Amount/Acre	R.E.I.+ (hours)	P.H.I.+ (days)
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*The following materials are listed in order of usefulness in an IPM program, taking into account efficacy. Also consider the [general properties of the fungicide](#) as well as information relating to environmental impact.*

**Caution:** Never apply sulfur to apricot trees or captan to apricot fruit.

#### A. FENBUCONAZOLE

(Indar) 75WSP	2 oz	12	0
MODE OF ACTION GROUP NAME (NUMBER <sup>1</sup> ): Demethylation inhibitor (3)			
COMMENTS: Apply a minimum of 50 gal water/acre. A protectant fungicide. Begin applications before infections occur if conditions are conducive to disease development. Do not apply more than 1 lb of formulated product/acre/season.			

#### B. PROPICONAZOLE

(Bumper, Orbit)	4 fl oz	24	0
MODE OF ACTION GROUP NAME (NUMBER <sup>1</sup> ): Demethylation inhibitor (3)			
COMMENTS: Apply at red bud.			

<b>C. PYRACLOSTROBIN/BOSCALID</b>	(Pristine)	10.5–14.5 oz	12	0
MODE OF ACTION GROUP NAME (NUMBER <sup>1</sup> ): Quinone outside inhibitor (11) and Carboxamide (7)				
COMMENTS: To reduce the potential for the development of resistance, do not make more than five applications/season of Pristine or other strobilurin or carboxyanilide fungicides.				
<b>D. IPRODIONE</b>	(Rovral) 4	1–2 pt	24	0
MODE OF ACTION GROUP NAME (NUMBER <sup>1</sup> ): Dicarboximide (2)				
COMMENTS: Addition of a narrow range oil (superior, supreme) at 1–2% increases the effectiveness of this material. Do not use after petal fall.				
<b>E. PYRIMETHANIL</b>	(Scala) SC	18 fl oz	12	2
MODE OF ACTION GROUP NAME (NUMBER <sup>1</sup> ): Anilinopyrimidine (9)				
<b>F. THIOPHANATE METHYL</b>	(Topsin-M) 70WP	0.5 lb/100 gal water up to 1.5 lb/acre	12	1
MODE OF ACTION GROUP NAME (NUMBER <sup>1</sup> ): Methyl benzimidazole (1)				
COMMENTS: Only 1 application per year. If this material is used during bloom, do not use later for control of powdery mildew or ripe fruit rot. Check with your processor before using this material. Because strains of <i>M. fructicola</i> that are resistant to thiophanate methyl have been found in California, only one of the three bloom applications (preferably the one at red bud) should be thiophanate methyl. If resistance has occurred in your orchard, do not use this fungicide.				
<b>G. CYPRODINIL</b>	(Vanguard) 75WG	5 oz	12	2
MODE OF ACTION GROUP NAME (NUMBER <sup>1</sup> ): Anilinopyrimidine (9)				
<b>H. MYCLOBUTANIL</b>	(Rally) 40 WP	4–6 oz	24	0
MODE OF ACTION GROUP NAME (NUMBER <sup>1</sup> ): Demethylation inhibitor (3)				
COMMENTS: Do not apply more than 2.75 lb/acre/season.				
<b>I. FENHEXAMID</b>	(Elevate) 50WDG	1–1.5 lb	12	0
MODE OF ACTION GROUP NAME (NUMBER <sup>1</sup> ): Hydroxyanilide (17)				
COMMENTS: Do not apply more than 6 lb/acre/season and avoid making more than 2 consecutive applications with this material.				
<b>J. AZOXYSTROBIN</b>	(Abound)	12.3–15.4 fl oz	4	0
MODE OF ACTION GROUP NAME (NUMBER <sup>1</sup> ): Quinone outside inhibitor (11)				
COMMENTS: Do not apply more than two sequential sprays before alternating with a fungicide that has a different mode of action. Do not apply more than 1 lb a.i./acre/season.				
<b>K. CAPTAN 50WP</b>	(Various)	5 lb	4 days	0
MODE OF ACTION GROUP NAME (NUMBER <sup>1</sup> ): Multi-site contact (M4)				
COMMENTS: Do not use captan with or closely following oil sprays. Check with your processor before using this material. Do not apply after 75% petal fall.				

**L. CHLOROTHALONIL**

(Echo 720)	3.125–4.125 pt	12	0
(Bravo Ultrex)	2.8–3.8 lb	12	0
(Bravo Weather Stik)	3.125–4.125 pt	12	0

MODE OF ACTION GROUP NAME (NUMBER<sup>1</sup>): Multi-site contact (M5)

COMMENTS: May cause an allergic skin reaction in some people. Do not use with or closely following oil sprays. Do not apply after jacket (shuck) split. Do not apply more than 20.5 pt Bravo Weather Stik/acre/season. Do not apply more than 18.8 lb Bravo Ultrex/acre/season.

**M. TRIFLOXYSTROBIN**

(Gem) 500SC	1.9–3.8 fl oz	12	1
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MODE OF ACTION GROUP NAME (NUMBER<sup>1</sup>): Quinone outside inhibitor (11)

+ Restricted entry interval (R.E.I.) is the number of hours (unless otherwise noted) from treatment until the treated area can be safely entered without protective clothing. Preharvest interval (P.H.I.) is the number of days from treatment to harvest. In some cases the REI exceeds the PHI. The longer of two intervals is the minimum time that must elapse before harvest.

<sup>1</sup> Group numbers are assigned by the Fungicide Resistance Action Committee (FRAC) according to different modes of actions (for more information, see <http://www.frac.info/>). Fungicides with a different group number are suitable to alternate in a resistance management program. For fungicides with mode of action Group numbers 1, 4, 9, 11, or 17, make no more than one application before rotating to a fungicide with a different mode of action Group number; for fungicides with other Group numbers, make no more than two consecutive applications before rotating to fungicide with a different mode of action Group number.

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Diseases

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<http://www.ipm.ucdavis.edu/PMG/r5100111.html>