

**Table 12 – Activity Spectrum of Apple Fungicides\***

Fungicide <sup>1</sup>			Cedar-	Sooty Blotch		
	Apple Scab	Powdery Mildew	Apple Rust	Black Rot	& Flyspeck	Bitter Rot
Bayleton (triadimefon)	+	++++	++++	0	0	0
Captan	++++	0	+	+++	++ <sup>4</sup>	++ <sup>4</sup>
Dithane (mancozeb)	++++	0	++++	++++	++++	++++
Ferbam	++	0	++	+	++	+
Flint (trifloxystrobin)	++++	+++	++	+++	++++	++
Manzate, Penncozeb (mancozeb)	++++	0	++++	+++	++++	++++
Nova (myclobutanil) <sup>5</sup>	++++	++++	++++	0	0	0
Polyram (metiram)	++++	0	++++	+++	++++	++++
Procure (triflumizole) <sup>5</sup>	++++	++++	++++	0	0	0
Rubigan (fenarimol) <sup>5</sup>	++++	++++	++++	0	0	0
Sovran (kresoxim-methyl)	++++	+++	++	+++	++++	++
sulfur	++	++	0	+	+	—
Syllit (dodine)	++++ <sup>2</sup>	0	+	+	+	0
Thiram	++	0	++	+	++	+
Topsin M (thiophanate-methyl)	++++ <sup>2</sup>	++ <sup>3</sup>	0	++++	++++	+
Vanguard (cypridonil)	++	+	+	0	0	0
Ziram	+	0	++	+	+++	+

— = Unknown or does not apply; 0 = None; + = Slight; ++ = Fair; +++ = Good; ++++ = Excellent

1. Ratings assume that the fungicide is used at the recommended rate and applied correctly.
2. Except in orchards where resistance is present.
3. Resistance or tolerance is suspected in some orchards but has not been proven.
4. Limited residual activity. Rating assumes regular reapplication during periods of heavy disease pressure.
- 5 Activity of these materials is highly rate-dependent. Stated efficacies assume a rate of 9 fl. ozs./A for Rubigan 1E, 5 ozs./A for Nova 40WP, and 6 ozs./A for Procure 50WS on MM 106-size trees.

\* **Adapted from:** 2002 *Pest Management Guidelines for Commercial Tree-Fruit Production*. A.M. Agnello, A.J. Landis, W.W. Turckek, D.A. Rosenberger, T.L. Robinson, J.R. Schupp, L. Cheng, P.D. Curtis, D. Breth, and S.A. Hoying. Cornell Cooperative Extension.

blossoms open when weather conditions favorable for the disease are present or predicted within 24 hours. Must be absorbed by the blossoms to be effective, should not be applied just before or during rain. The frequency of repeat applications depends on weather, blossom opening and disease pressure. Routine use of streptomycin to control shoot blight is not recommended. However, application within 24 hours after the beginning of a hail storm is recommended for fire blight-threatened orchards. Thorough coverage is essential for control. Application of streptomycin at concentration greater than 6X is not recommended.

**Restricted entry interval 4 hours. Preharvest interval 50 days.**

**sulfur:** Formulated as wettable powder, flowable, or dust, at 30–98% sulfur. Flowable formulations are effective at lower rates than wettable powder and have better retention. Sulfur is effective against powdery mildew, but has short residual activity and must be used at 7 day interval for good results. Not as effective as captan or EBDCs. Certain sulfur labels prohibit use within 30 days of an oil application, or restrict use within two weeks of a spray containing an emulsifiable concentrate or other petroleum solvent based product. Do not apply with liquid captan on sulfur sensitive cultivars. May cause fruit russeting and/or yield reduction when sprayed postbloom at above 80°F. **Restricted entry interval 24 hours. Preharvest interval 0 days.**