

BLUEBERRY (*Vaccinium corymbosum* 'Bluetta')  
 Ripe Rot (Anthracnose); *Colletotrichum* sp.  
 Alternaria Fruit Rot; *Alternaria* sp.

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**Fungicide control of blueberry fruit rots, 2007.**

Fungicide treatments were arranged in a randomized complete block design in a block of 'Bluetta' blueberries planted in 1999 on 5 x 10 ft spacing. Each treatment consisted of 10 single bush replicates. Fungicide treatments were applied using a Solo backpack pump style sprayer at a rate of 87 to 131 gal water/A, depending on the amount of foliage present on bushes at time of application. Approximately 1.0 to 1.5 gal of a spray suspension were applied per 10 bushes. Treatments were applied on 23 Mar (floral bud break), 6 Apr (early bloom), 20 Apr (full bloom), 4 May (late bloom), 18 May (post bloom), 25 May (green berry), 8 Jun (fruit coloring) and 25 Jun. Each fungicide treated bush was flanked on each side by nontreated bushes. Nu-Cop (6 lb/A) was applied on 26 Oct 06 (50% leaf drop) to help prevent bacterial blight. Bushes were pruned the first week of January by thinning out small and spindly shoots and removing older non-productive stems. Plots were fertilized on 20 Apr and again on 1 Jun with approximately 200 lb/A (based on in the bush row area) of 21-0-0-24. Due to dry spring weather, overhead irrigation was started on 11 May and continued 2 times per week during the growing season. Nets were placed over bushes on 18 Jun to reduce bird damage. On 9 Jul, 100 healthy appearing berries were arbitrarily harvested from each Bluetta plant. Berries were placed on wire racks within moist chambers located in Cordley Hall. Each moist chamber contained two arbitrarily selected treatments, (200 berries or 100 berries per treatment), separated by a wire mesh. Berries were incubated at room temperature (68 to 83°F) for 14 days. The number of berries with symptoms of ripe rot or *Alternaria* fruit rot were evaluated and removed each day. Berries rotting from other causes were noted and also removed from the moist chambers daily.

Fruit from Topsin treated bushes did not have significantly different levels of any fruit rot when compared to fruit from nontreated bushes. Lowest amount of fruit rot was found from bushes treated with Evito, however, the amount of fruit rot from bushes treated with Pristine alternated with CaptEstate were not significantly different. No phytotoxicity was observed on any fungicide treated bushes, however, some summer heat stress was noted on many bushes.

Treatment & Rate/A	Time of Application <sup>x</sup>	Ripe Rot (Anthracnose) <sup>y</sup> (%)	Alternaria Fruit Rot <sup>y</sup> (%)	All Fruit Rots <sup>y</sup> (%)
Nontreated .....	None.....	17.2 a	8.6 a	27.0 a
Pristine 38 WDG at 18.5 oz plus Break-Thru at 4 fl oz/100 gal alternate with	A, C, E, G			
CaptEstate 68 WDG at 3.5 lb .....	B, D, F, H....	3.0 b	5.8 ab	10.9 bc
Topsin 4.5 FL at 20 fl oz .....	All.....	9.7 ab	8.5 a	19.3 ab
Evito 480 SC at 5.7 fl oz .....	All.....	2.2 b	2.9 b	6.3 c

<sup>x</sup> A= 23 Mar (floral bud break), B = 6 Apr (early bloom), C = 20 Apr (full bloom), D = 4 May (late bloom), E = 18 May (post bloom), F= 25 May (green berry), G = 8 Jun (fruit coloring) and H = 25 Jun.

<sup>y</sup> Means followed by same letter do not differ significantly based on Fisher's protected LSD (P=0.05).