

BLUEBERRY (*Vaccinium corymbosum* 'Berkley')
Mummyberry; *Monilinia vaccinii-corymbosi*

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Fungicide control of mummyberry, 2004.

Fungicide treatments were arranged in a randomized complete block design in a block of 'Berkley' blueberries planted in 1999 on 5 x 10 ft spacing. Each treatment consisted of 6 single bush replicates. Fungicide treatments were applied using a pump-style backpack sprayer at a rate of 55 to 127 gal water/A, depending on the amount of foliage present on bushes at time of application. Approximately 0.38 to 0.88 gal of a spray suspension was applied per 6 bushes. Treatments were applied on 13 Mar (50% floral bud break), 28 Mar (late vegetative bud break), 10 Apr (full bloom), 25-26 Apr (late bloom), and 10 May (post bloom). Funginex was not applied past 26 Apr as it was not registered for use past bloom. The first application of Indar plus Latron B1956 did not include the Latron material; however, all subsequent applications included both materials. Each fungicide treated bush was flanked on each side by nontreated bushes. Weeds were controlled using Glystar Plus (4 qt/A) applied in the plant row on 12 Sep 03 and as a spot spray on 16 Mar 04. Also, Scythe (3.25 qts/A) was used in the plant row on 13 May 04 for weed control. Bushes were pruned from 9 to 19 Feb by thinning out small and spindly shoots. Plots were fertilized with approximately 165 lb/A (based on in the bush row area) of 20-0-0 ammonium sulfate on 5 Apr and 5 May (a recommended third application was not applied). Supplemental irrigation was used beginning 16 Mar and applied 1 or 2 times per week during the growing season. Cuprofix Disperss (8 lb/A) was applied on 14 Nov 03 to help prevent bacterial blight. The number of floral clusters and vegetative shoots with symptoms of primary mummyberry was evaluated on 30 Apr. On 23 Jun, 200 green, healthy appearing berries were harvested from each Berkley plant and placed in the refrigerator. Over the next few weeks berries were split in half and evaluated for symptoms of secondary mummyberry (white mycelial mats within the carpels of the berry).

The spring season was characterized as extremely dry with below average rainfall. Disease pressure was considered low. Apothecia were first observed on 1 Apr and may have been present for a few days prior to observation. Apothecia did not continue to develop and began drying up by 5 Apr. A few primary mummyberry strikes were observed on flower clusters starting on 15 Apr while strikes on shoots were first observed 22 Apr. All fungicide treated bushes had significantly fewer infected floral clusters than nontreated bushes, except for Captan treated bushes. All fungicide treated bushes had significantly fewer infected shoots than nontreated bushes. Bushes treated with the Bravo/Indar combination, Pristine, Funginex or the low rate of V10116 did not have infected shoots, however the number of infected shoots found on bushes treated with Elevate, Indar plus Latron, Abound, Switch or Omega were not significantly different. Symptoms of secondary mummyberry were first observed on 18 Jun. All fungicide treated bushes had significantly fewer mummyberries than nontreated bushes, except for bushes treated with the low rate of Captivate or Switch. Bushes treated with the experimental V10116 did not develop any mummyberries (in the samples collected), however the amount found on bushes treated with the Bravo/Indar/Abound combination, Pristine, Indar plus Latron, or Funginex was not significantly different. Fruit russetting was only observed on Funginex treated bushes.

Treatment & Rate/100 gal	Number of applications ^x	Primary Mummyberry Floral Clusters/plant ^y	Primary Mummyberry Shoots/plant ^y	Green Fruit with Mummyberry (%)
Nontreated	0	4.3 a	12.0 a	10.4 a
Bravo WeatherStik at 1 pt then Indar 75 WSP at 2 oz plus Latron B1956 at 1 fl oz then Abound at 6.2 fl oz	1 3 1	 0.3 c	 0.0 e	 2.5 def
Elevate 50 WDG at 1.5 lb.....	5	1.5 bc	2.3 cde	4.1 cde
Captan 80 WDG at 3.15 lb.....	5	3.2 ab	7.0 b	6.1 bc
Captivate 68 WDG at 4.7 lb.....	5	0.7 c	5.0 bcd	8.5 ab
Captivate 68 WDG at 5.25 lb.....	5	1.7 bc	6.2 bc	6.4 bc
Pristine 38 WG at 18.5 oz plus Superior Spray Oil at 1 gal.....	5 5	0.0 c	0.0 e	0.1 f
Indar 75 WSP at 2 oz plus Latron B1956 at 1 fl oz	5 5	1.0 c	1.3 de	1.0 ef
Orbit at 4 fl oz	5	0.2 c	0.2 e	3.7 cde
Abound at 6.2 fl oz	5	1.3 bc	2.7 cde	4.6 cd
Switch 62.5 WG at 11 oz.....	5	0.8 c	2.0 de	8.4 ab
Funginex 24 fl oz	5	0.2 c	0.0 e	0.2 f
V10116 at 5.7 fl oz plus Latron B1956 at 8 fl oz	5 5	0.0 c	0.0 e	0.0 f
V10116 at 7.6 fl oz plus Latron B1956 at 8 fl oz	5 5	0.3 c	0.2 e	0.0 f
Omega 500 at 10.2 fl oz.....	5	0.8 c	2.0 de	6.4 bc
Omega 500 at 20.1 fl oz.....	5	0.7 c	3.3 bcde	5.0 cd

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