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

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Fungicide control of mummyberry, 2003.

A planting of Bluetta and Berkley blueberries was established in 1999 to test fungicides or other tactics for disease control. Mummyberry mummies were collected on 3 Sept 02 and distributed throughout the Berkley block. 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 12 single bush replicates. Fungicide treatments were applied using a pump-style backpack sprayer at a rate of 55 to 110 gal water/A, depending on the amount of foliage present on bushes. Approximately 0.75 to 1.5 gal of a spray suspension was applied per 12 bushes. Treatments were applied on 18 Mar (early floral bud break), 31 Mar (vegetative bud break), 16 Apr (early bloom), 30 Apr (full bloom), 14 May (late bloom), 29 May, 11 and 25 Jun. Treatments of Funginex or Bravo were not applied past 14 May as they are not registered for use past bloom. Weeds were controlled using Surflan AS (4 qt/A) plus Glyfos X-TRA (3 qt/A) applied on 27 Feb 03. Bushes were pruned from 10 to 14 Feb 03 by thinning out small and spindly shoots but leaving dead floral trusses. Plots were fertilized with approximately 62 lb/A of a 46-0-0 fertilizer on 28 Apr and 21 May. Supplemental irrigation was used beginning 16 May and applied 1 or 2 times per week during the growing season. Kocide DF (6 lb/A) was applied on 5 Nov 02 to help prevent bacterial blight. The number of floral clusters and vegetative shoots with symptoms of primary mummyberry was evaluated on 13 May. On 30 Jun, an average of 255 (176 to 332) green, healthy appearing berries were harvested from each Berkley plant and placed in the refrigerator. Over the next four weeks berries were split in half and evaluated for symptoms of mummyberry (white mycelial mats within the carpels of the berry).

Apothecia were first observed in the Berkley block on 26 Mar and continued to develop through 14 Apr but could not be found by 18 Apr (Fig 1). Although, primary mummyberry strikes were observed on flower clusters and on vegetative shoots on 5 May, an adjacent planting of Bluetta had primary strikes on clusters 18 Apr. There were no significant differences among the various treatments in the number of flower clusters with mummyberry. Bushes treated with Funginex, Indar (alone or in rotation), Orbit or TM-45002 had significantly fewer shoots with primary mummyberry than nontreated bushes. All fungicide treated bushes had significantly fewer secondary mummyberry (green fruit with mummyberry) than nontreated bushes. Bushes treated with Funginex had the fewest green fruit with mummyberry but bushes treated with Indar (alone or in rotation) or Orbit were not significantly different.

Treatment & Rate/100 gal	Number of applications[x]	Primary Mummyberry Floral Clusters/plant[y]	Primary Mummyberry Shoots/plant[y]	Green Fruit with Mummyberry[y] (%)
Nontreated …….	0	5.8	1.4 a	12.4 a
Funginex 24 fl oz ……	5	4.6	0.0 c	0.1 e
Bravo WeatherStik at 1 pt …….	5	3.7	1.4 a	8.0 b
Captan 50 WP at 2 lb plus				
Latron B1956 at 1 fl oz …….	8	4.2	1.3 a	5.7 bc
Ziram 76 DF at 3 lb ……..	8	3.9	0.9 ab	8.0 b
Indar 75 WSP at 2 oz plus				
Latron B1956 at 1 fl oz ……	8	3.8	0.0 c	0.9 e
Orbit at 4 fl oz ……	8	3.9	0.0 c	1.7 de
Abound at 6.2 fl oz …….	8	6.3	1.3 a	8.3 b
Elevate 50 WDG at 1.5 lb……	8	2.2	0.9 ab	7.5 b
TM-45002 at 5.25 lb……..	8	2.7	0.3 bc	4.2 cd
Bravo WeatherStik at 1 pt then	2			
Indar 75 WSP at 2 oz plus				
Latron B1956 at 1 fl oz then	3			
Abound at 6.2 fl oz alternate with	2			
Captan 50 WP at 2 lb…….	1	2.5	0.0 c	0.9 e
Bravo WeatherStik at 1 pt then	2			
Indar 75 WSP at 2 oz plus				
Latron B1956 at 1 fl oz then	3			
Abound at 6.2 fl oz alternate with	2			
Ziram 76 DF at 3 lb ……..	1	2.8	0.1 c	0.7 e

[x] Treatments were applied on 18 Mar (early floral bud break), 31 Mar (vegetative bud break), 16 Apr (early bloom), 30 Apr (full bloom), 14 May (late bloom), 29 May, 11 and 25 Jun. Treatments of Funginex or Bravo were not applied past 14 May.

[y] Means followed by same letter do not differ significantly based on Fisher's protected LSD (P=0.05). Means without letters were not significantly different.