BLUEBERRY (*Vaccinium corymbosum* 'Berkeley')
Mummy berry; *Monilinia vaccinii-corymbosi*

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Evaluation of fungicides for management of mummy berry, 2024.

Fungicide treatments were arranged in a randomized complete block design in a block of 'Berkeley' blueberries planted in 1999 on 5 x 10 ft spacing. Each treatment consisted of 12 single-bush replicates. Fungicide treatments were applied using a hydraulic handgun sprayer at approximately 100 psi such that 2 to 2.5 gal of a spray suspension was applied per 12 bushes (290 to 363 gal water/A). Treatments were applied on 20 Mar (floral bud break), 2 Apr (pre-bloom), 16 Apr (early bloom), 1 May (late bloom) and 17 May (petal fall). Each fungicide-treated bush was flanked on each side by non-treated bushes. Kocide 3000 (2.5 lb/A) was applied on 8 Nov 2023 for management of bacterial canker. GlyStar Plus was spot sprayed on 29 Jan and 5 Mar for management of perennial weeds. No insecticides were used during the trial. Fertilizer (20-0-0 ammonium sulfate at 142 lb/A) was applied on 5 Mar. Bushes were pruned 14 to 19 Feb by thinning out small, dead and spindly shoots and removing older non-productive stems. Overhead irrigation was started on 14 Jun and continued twice per week for 3 hour sets during the growing season. The number of floral clusters and vegetative shoots per bush with symptoms of primary mummy berry was evaluated on 8 April. On 25 Jun, approximately 350 to 400 green berries were arbitrarily harvested from each bush and placed in a refrigerator. Over the next 8 days 300 berries were arbitrarily selected, cut in half and evaluated for symptoms of secondary mummy berry (white mycelial mats within the carpels of the berry).

Rainfall during the dormant season 2023-24 was 4.1 inches above normal. Due to past low disease pressure there were few pseudosclerotia (mummies) to be found this year. The few found were at emergence on 11 Mar. Although no open apothecia were found this year, primary mummy berry symptoms were first observed on widely scattered 'Bluetta' flower clusters on 22 Apr and then on 'Berkeley' flower clusters on 29 Apr. Symptoms of secondary mummy berry were first found by cutting open green fruit on 17 Jun while classic symptoms were first observed on 25 Jun. Although low when compared to prior years, the number of primary strikes on non-treated bushes was significantly higher than strikes found on bushes treated with Proline or Indar. The lowest number of primary strikes was found on bushes treated with Proline but the number found on bushes treated with Indar was not significantly different. Non-treated bushes had significantly more secondary mummy berry than fungicide treated bushes. The lowest percentage of secondary mummy berry was found on bushes treated with Proline or Indar but they were not significantly different from each other. No phytotoxicity was observed in bushes treated with any of the various materials used.

Treatment & rate/A or /100 gal as indicated below	Time of application [X]	Mummy Berry	
		Primary strikes per bush [Y]	Secondary (% Fruit) [Z]
Non-treated ……	None……	4.3 a	3.5 a
Proline 480 SC at 5.7 fl oz plus OVS 90 NIS at 6 fl oz/100 gal…..	All ……	0.1 b	0.5 b
Indar 2F at 6 fl oz plus OVS 90 NIS at 6 fl oz/100 gal then Fontelis at 24 fl oz plus OVS 90 NIS at 6 fl oz/100 gal then Switch 62.5 WG at 14 oz/A plus OVS 90 NIS at 6 fl oz/100 gal …….	A and B C and D E…….	0.4 b	0.5 b

[X] Treatments were applied on A = 20 Mar (floral bud break), B = 2 Apr (pre-bloom), C = 16 Apr (early bloom), D = 1 May (late bloom) and E = 17 May (petal fall).

[Y] Analysis of variance was based on log (x+1) transformation. Means followed by the same letter do not differ significantly based on Fisher's protected LSD (*P=0.05*).

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