

BLUEBERRY (*Vaccinium corymbosum* ‘Bluecrop’)  
 Stem blight; *Colletotrichum acutatum* sensu lato  
 Stem blight; *Diaporthe* spp.

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### Evaluating fungicides for control of stem blight in blueberries, 2022.

The experiment was conducted in a mature blueberry planting at the Southwest Michigan Research and Extension Center (SWMREC) in Benton Harbor, MI. Bushes were spaced at 5 x 10 ft. Treatments were applied to 3-bush plots and were replicated four times in a randomized complete block design. Sprays were applied with a RYOBI ONE+ 18v Cordless Battery 4 Gallon Backpack Chemical Sprayer with the adjustable nozzle. Spray volume was 40 gpa. Spray dates and phenological stages were as follows: 1 April (dormant), 4 May (late green tip), 11 May (late green tip), 19 May (pink bud), 26 May (bloom), 1 June (petal fall), 6 June (green fruit), 13 June (green fruit), 20 June (green fruit), 27 June (green fruit), and 5 July (blue fruit). Total rainfall between sprays was 0.1, 0.24, 0.74, 0.06, 0.14, 1.86, 0.03, 0.0, and 2.03 in, respectively. The number of stem blighted shoots were assessed on June 20. All bushes were scouted for phytotoxicity throughout the season.

Stem blight pressure was very high in this trial as the number of blighted shoots in the untreated control was 114. Interestingly, one dormant application of Sulforix resulted in statistically equivalent blighted shoots as season long applications of Quash, Omega, and Indar. However, Abound, a rotation of Echo and Captan + Elevate, and the industry standard program of Echo, Indar, Captan + Elevate plus a dormant application of Sulforix resulted in lower disease.

| Treatment, rate/A                | Application timing <sup>z</sup> | Number of stem blighted shoots per bush, 20 June | Control [%] <sup>x</sup> |
|----------------------------------|---------------------------------|--|--------------------------|
| Untreated                        |                                 | 114.0 a  |                          |
| Kenja 15.5 floz                  | 1, 3, 5, 7                      | 32.8 b   | [71]                     |
| Cevya 5 oz                       | 1, 2, 3, 4, 5, 6, 7             | 32.5 b   | [71]                     |
| Luna Tranquility 18 floz         | 1, 2, 3, 4, 5, 6, 7             | 25.5 c   | [77]                     |
| Sulforix 1 gal                   | dormant                         | 23.5 cd  | [79]                     |
| Quash 2.5 oz                     | 1, 2, 3, 4, 5, 6, 7             | 22.8 cd  | [80]                     |
| Omega 20 floz                    | 1, 2, 3, 4, 5, 6, 7             | 22.3 cd  | [80]                     |
| Indar 6 floz                     | 1, 2, 3, 4, 5, 6, 7             | 21.5 cd  | [81]                     |
| Pristine 23 oz                   | 1, 2, 3, 4, 5, 6, 7             | 18.3 de  | [84]                     |
| Abound 15.5 floz                 | 1, 2, 3, 4, 5, 6, 7             | 12.8 e   | [88]                     |
| Sulforix 1 gal                   | dormant                         |  |                          |
| Echo 720 4pt                     | 1, 2,                           |  |                          |
| Indar 6 floz                     | 3,                              |  |                          |
| Captan 2.5qt + Elevate 1.5lb     | 4, 5, 6, 7                      | 1.0 f  | [99]                     |
| Echo 720 4 pt                    | 1, 2, 3,                        |  |                          |
| Captan 4L 2.5qt + Elevate 1.5 lb | 4, 5, 6, 7                      | 1.0 f  | [99]                     |

<sup>z</sup>Spray dates: dormant = 1 April (dormant), 1 = 4 May (late green tip), 2 = 11 May (late green tip), 3 = 19 May (pink bud), 4 = 26 May (bloom), 5 = 1 June (petal fall), 6 = 6 June (green fruit), 7 = 13 June (green fruit), 8 = 20 June (green fruit), 9 = 27 July (blue fruit), and 10 = 5 July (blue fruit). Note only sprays 1 - 4 were applied before the blossom blight rating on 30 May.

<sup>x</sup>Bracketed values denote percent control relative to the untreated check.