

# 2025 PEST MANAGEMENT GUIDE: DISEASE

## Cultural Disease Management

CULTURAL DISEASE MANAGEMENT FOR WILD BLUEBERRY		
DISEASES MANAGED	METHOD	COMMENT
Mummy Berry, <i>Monilinia vaccinii-corymbosi</i>	Fire Pruning, use efficient harvesting techniques.  Mulching with material to a depth of 2" to 3" before crop emergence to prevent mummy berries from germinating.  Reducing the number of infected fruits on the ground by composting or disposing of winnower refuse away from the field can reduce mummy berries in the field.	Burn pruning can decrease approximately 50% of mummy berries (pseudosclerotia). If litter is too wet, then sanitation will be incomplete.  Mulching under clones with lots of mummy berries visible at harvest can decrease inoculum for following years.
Blossom and Twig Blight, <i>Botrytis cinerea</i>	None.	Fungus can attack hundreds of plants; scouting of early blooming clones is important.
Valdensia leaf spot, <i>Valdensia heterodoxa</i> (formerly <i>Valdensinia</i> )	Intensive Fire Pruning, destroying ALL leaf litter of infected area and within 10' of infection. Clean equipment, shoes & clothing; avoid entering infected areas when wet. Clean equipment between fields.	All leaf litter must be burned to ensure eradication of fungus.  The spores are not carried by wind or water, but can be transported on leaf contaminated equipment, clothing or shoes.
"False Valdensia" (fungus not yet identified")	Fire pruning to decrease infected plant material.	
Red-Leaf, <i>Exobasidium vaccinii</i>	Avoid spreading spores (white patches on the underside of infected leaves) by not walking through diseased areas from approximately middle of June through August.	Spores may further spread by disturbing infected tissue when it is producing spores.
Exobasidium leaf and fruit spot, <i>Exobasidium maculosum</i>	Fire pruning to decrease infected plant material. Avoid spreading spores (white patches on underside of lesions on leaves by not walking through diseased areas from approximately middle of July through August.	
Sphaerulina Leaf-Spot, <i>Sphaerulina</i> (old name <i>Septoria</i> )	Fire pruning to decrease infected plant material.	
Powdery Mildew, <i>Erysiphe</i> (formerly <i>Microsphaera</i> )	Fire pruning to decrease infected plant material.	
Leaf Rust, <i>Thekopsora</i>	Fire pruning to decrease infected plant material.	
Stem Blight, <i>Phomopsis</i> or <i>Godronia</i>	None at this time.	

## Chemical Disease Management

**NOTE: THIS CHART IS NOT A SUBSTITUTE FOR READING AND FOLLOWING THE LABEL.** It is unlawful to use any pesticide for other than the registered use. Read and follow the label on the product container. The user assumes all responsibility for use inconsistent with the label. Trade names are used for identification. No product endorsement is implied, nor is discrimination intended against similar materials. Cooperative Extension makes no warranty or guarantee of any kind concerning the use of these products. **Check with your processor regarding PHI restrictions or MRL restrictions for export sales.**

Extremely toxic to fish    
 Extremely toxic to bees    
 Extremely toxic to birds    
 Extremely toxic to people    
 Can be aerially applied  
 Moderately toxic to fish    
 Moderately toxic to bees    
 Moderately toxic to birds    
 Moderately toxic to people

### FUNGICIDES

GROUP <sup>a</sup> Use <sup>b</sup> & TOXICITY	AERIAL APPLICATION	FUNGICIDE & SIGNAL	ACTIVE INGREDIENT	TIMING: CROP CYCLE	RATE: PER/ACRE & MAX/ACRE/YR	PHI DAYS	REI HOURS	NOTES <sup>c</sup>
								(LOCALLY SYSTEMIC, LOS; NON-SYSTEMIC, NS; SYSTEMIC, S), DIMETHYL INHIBITION = DMI
3	MB LS		Indar 2F (WARNING)	fenbuconazole	CROP 6 oz Max: 4 app; 24 oz (0.38 lb ai)	30	12	Apply with 1% v/v COC. Apply at green tip/when >30% stems have blossoms at crown stage for mummy berry. Follow the mummy berry forecast method to time applications or apply every 8 to 14 days following the calendar method. For control of leaf spot diseases, begin application prior to or at onset of disease development and apply every 8 to 14 days. <b>DMI, LOS</b>
	MB LS BBB		Quash (CAUTION)	metaconazole	CROP 2.5 oz Max: 3 app, 7.5 oz (0.234 lb ai); 2 sequential app	7	12	For MB, apply when >30% stems have blossoms at crown stage. Follow the mummy berry forecast method to time applications or apply every 7-14 days following the calendar method. <b>DMI, LOS</b>
	MB LS		Bumper,Tilt (WARNING)	propiconazole	CROP 6 oz Max: 30 oz (0.84 lb ai all propiconazole products); 2 seq. app	30	24	For MB, apply when >30% stems have blossoms at crown stage. Follow the mummy berry forecast method to time applications or apply every 7 to 10 days following the calendar method. For Sphaerulina leaf spot, make first application prior to bloom and again after petal fall. If needed, repeat application just after harvest. <b>DMI, LOS</b>
	MB LS VLS BBB	NO	Proline 480 SC (CAUTION)	prothioconazole	PRUNE OR CROP 5.7 oz Max: 2 app; 11.4 oz (0.356 lb ai)	7	12	For MB, apply at green tip when >30% stems have blossoms at crown stage. Follow the mummy berry forecast method to time applications or apply every 7 to 10 days following the calendar method. For LS, apply before disease onset and then every 7 to 10 days. <b>DMI, LOS</b>
3 & 9	MB LS		Inspire Super (CAUTION)	cyprodinil (9) & difenoconazole (3)	PRUNE OR CROP 16 to 20 oz Max: 80 oz (1.3 lb ai of cyprodinil); 0.46 lb of difenoconazole	7	12	For MB, apply at green tip/when >30% stems have blossoms at crown stage. Follow the mummy berry forecast method to time applications or apply before disease onset. Apply on a 7 to 14-day schedule with no more than 2 sequential applications before alternating to another fungicide with a different mode of action. <b>DMI, LOS</b>
3 & 11	MB LS		Quilt Xcel (WARNING)	Azoxystrobin (11) & propiconazole (3)	CROP 14 to 21 oz Max: 3 app; 21 oz per app; 63 oz per yr (0.84 lb ai propiconazole and 0.75 lb ai azoxystrobin); 2 seq. app	30	12	For MB, apply at green tip/when >30% stems have blossoms at crown stage. Follow the mummy berry forecast method to time applications or apply every 7-10 days following the calendar method. For leaf spot diseases, apply prior to disease development and throughout the season on a 7 to 14 day interval. Avoid adjuvants with silicone. <b>DMI, LOS</b>
7	LS		Aprovia (DANGER)	benzovindiflupyr	PRUNE OR CROP 10.5 oz Max: 2 app; 21 oz (0.136 lb ai all benzovindiflupyr)	1	12	For LS, apply at first sign of disease. NIS or vegetable-based COC recommended and second application can be made 10 to 14 days later. Do not mix with oxidizing agents. <b>LOS</b>
	LS		Kenja 400SC (WARNING)	Isofetamid	PRUNE 13.5 to 15.5 fl oz Max: 3 app at high rate, 4 app at low rate; 54 fl oz; (1.4 lb ai); 2 seq. app	0	12	Start applications prior to disease development and continue on a 14-day interval if necessary. <b>LOS</b>
	MB		Fontelis (WARNING)	penthiopyrad	CROP 16 to 24 oz Max: 72 oz per year; 24 oz per app; 2 seq. app	0	12	For MB, apply at green tip/when >30% stems have blossoms at crown stage. Follow the mummy berry forecast method to time applications or apply every 7 to 14 days following the calendar method. <b>LOS</b>
7 & 11	LS		Luna Sensation (CAUTION)	fluopyram (7) & trifloxystrobin (11)	CROP 6 to 7.6 oz Max: 27.1 oz per year, 2 seq. app (0.445 lb ai all fluopyram products, 0.445lb ai trifloxystrobin products)	1	12	For leaf spot, apply at critical timings for disease control every 7 to 14 days. <b>LOS</b>
7 & 9	MB LS		Luna Tranquility (CAUTION)	fluopyram (7) & pyrimethanil (9)	CROP 16 to 27 oz Max: 54.7 oz per year, 2 seq. app; (0.446 lb ai all fluopyram products, 2.1 lb ai all pyrimethanil products) per year	1	12	For leaf spot, apply at critical timings for disease control every 7 to 14 days. For MB, apply at green tip/when >30% stems have blossoms at crown stage. Follow the mummy berry forecast method to time applications or apply every 7 to 14 days following the calendar method. <b>LOS</b>
7 & 11	MB BBB LS		Pristine (CAUTION)	pyraclostrobin (11) & boscalid (7)	CROP 18.5 to 23 oz Max: 80 oz per year; 92 oz per yr; 23 oz per app* (for all Group 7 or 11 products); 2 seq. app	0	12	For MB, apply at green tip/when >30% stems have blossoms at crown stage... Follow the mummy berry forecast method to time applications or apply every 7 to 14 days following the calendar method. Avoid applying during bloom when bees are present. May only be applied with water as the carrier and only be tank mixed with captan.
9 & 12	MB BBB		Switch 62.5 WG (CAUTION)	cyprodinil (9) & fludioxonil (12)	CROP 11 to 14 oz Max: 56 oz (1.3 lb ai cyprodinil, 0.9 lb ai fludioxonil); 2 consecutive app	0	12	For MB, apply at green tip/when >30% stems have blossoms at crown stage. Follow the mummy berry forecast method to time applications or apply every 7 to 10 days following the calendar method. Apply when Botrytis symptoms seen in early clones and at 7 to 10-day intervals when conditions favor disease development. <b>S</b>
17	BBB		Elevate 50 WDG (CAUTION)	fenhexamid	CROP 1.5 lb Max: 6 lb (3 lb ai all fenhexamid products)	0	12	Apply at 10% bloom for Botrytis when symptoms seen in early clones. Apply every 7-10 days when conditions favor disease development, but no more than 2 consecutive applications. <b>LOS</b>
M5	LS		Bravo WeatherStik; Equus 720 SST (DANGER)	chlorothalonil	PRUNE 3 to 4 pt Max: 12 pt (9 lb ai all chlorothalonil)	42	12	Apply in prune year for Septoria (Sphaerulina) leafspot or leaf rust at 10 to 14 day intervals. Do not add pesticides, fertilizers, or adjuvants unless tested, as phytotoxicity may result. Do not mix with Dipel, Foil, Triton or Latron. Do not apply after full bloom or may damage developing fruit. High runoff potential for several days to weeks. <b>NS</b>
BM 02	MB BBB		Serenade ASO (CAUTION)	<i>Bacillus subtilis</i>	CROP 2 to 4 qt Max: ---	0	4	For <i>Monilinia</i> suppression, begin application at bud break and repeat every 7-10 days as needed. For Septoria (Sphaerulina) leafspot or leaf rust, begin application prior to disease and repeat every 7-10 days, up to harvest. Spray solution should be pH 4.5-8.5. <b>NS</b>

Prepared by Seanna Annis, Professor of Mycology and Extension Professor, University of Maine, Orono, ME 04469. Revised January 2025.

\*Please note: This revised version replaces any previous charts. \*

\*To reduce the likelihood of fungicide resistance developing in target fungi, growers should rotate between fungicides with different group numbers, ideally using multiple group numbers. Products with the same group number should not be used in consecutive sprays.

<sup>a</sup>MB = Mummy Berry, BBB = Botrytis Blossom Blight, LS = Leaf Spots (powdery mildew and Sphaerulina leaf spot and leaf rust), VLS = Valdensia Leaf Spot

<sup>c</sup>Some fungicide products move locally through leaves and are therefore locally systemic. LOS = Locally Systemic, NS = Not Systemic, S= Systemic. The mode of action for Group 3 fungicides is Demethylation Inhibition = DMI.