

This update is produced by Dr. Dalphy Hartevel, postdoctoral research associate at WSU Mount Vernon Research and Extension Center. Her research focuses on the epidemiology and control of fungal diseases of highbush blueberry in the Pacific Northwest. This weekly "Mummy Berry Update" provides information on the timing of apothecia (mushrooms) development from mummified overwintering berries (mummies) in Washington's Skagit and Whatcom counties. The apothecia produce infectious ascospores that infect emerging flower and leaf buds (Figure 1). The first two tables show the average percentages of floral and vegetative buds at different developmental stages of four different cultivars and indicates when susceptible tissue is available on the plants. The third table shows the different developmental stages of apothecial development from mummies and when ascospores are produced (when cups of the mushrooms are more than 2 mm open). This information is provided to help the timing of disease management practices to control mummy berry. Development of mummies and host reflect conditions occurring in the two fields we are currently monitoring and may be different from stages of development in other blueberry fields in these same counties, in different counties, or for different blueberry cultivars.

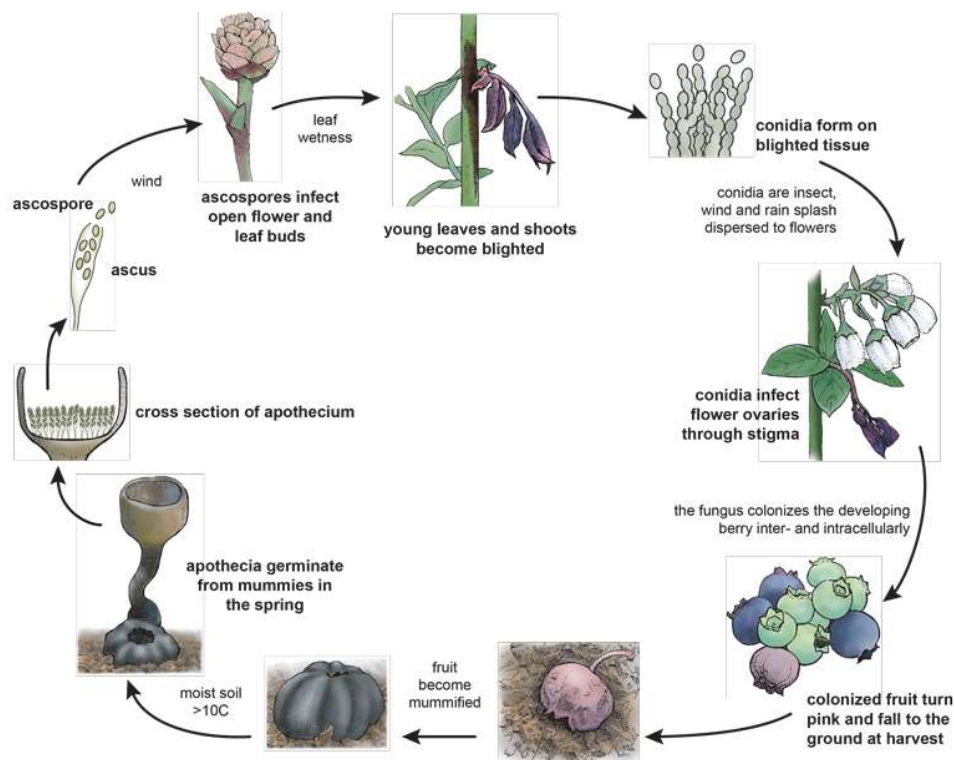




Figure 1: Disease cycle of mummy berry of blueberry. Annemiek Schilder, Michigan State University

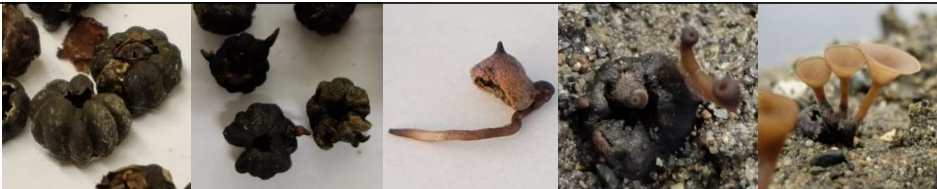
## NW WA – February/March Week 1 (2/27-3/3)

Floral Buds					
		Tight bud	Bud swell	Bud burst	Tight cluster
Whatcom	Duke	12%	82%	6%	0%
	Draper	6%	93%	1%	0%
	Bluecrop	8%	86%	6%	0%
	Liberty	42%	58%	0%	0%
Skagit	Duke	46%	44%	11%	0%
	Draper	29%	50%	21%	1%
	Bluecrop	38%	53%	9%	0%
	Liberty	63%	26%	11%	0%

Percentages represent averages of 3 fields per cultivar per county. Red indicates a susceptible stage for infections.

Vegetative Buds					
		Tight bud	Bud swell	Early green	Late green
Whatcom	Duke	63%	37%	0%	0%
	Draper	57%	43%	0%	0%
	Bluecrop	47%	53%	0%	0%
	Liberty	94%	6%	0%	0%
Skagit	Duke	80%	20%	0%	0%
	Draper	37%	63%	0%	0%
	Bluecrop	50%	50%	0%	0%
	Liberty	86%	14%	0%	0%

Percentages represent averages of 3 fields per cultivar per county. Red indicates a susceptible stage for infections.

Apothecia					
	Dormant	Germination	Emergence	Differentiation	Sporulation
Whatcom	66%	12%	22%	0%	0%
Skagit	44%	16%	40%	0%	0%
Percentages of mummies at each stage out of 50 mummies per field location. Red indicates release of ascospores.					

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