

This update is produced by Dr. Dalphy Harteveld, 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.

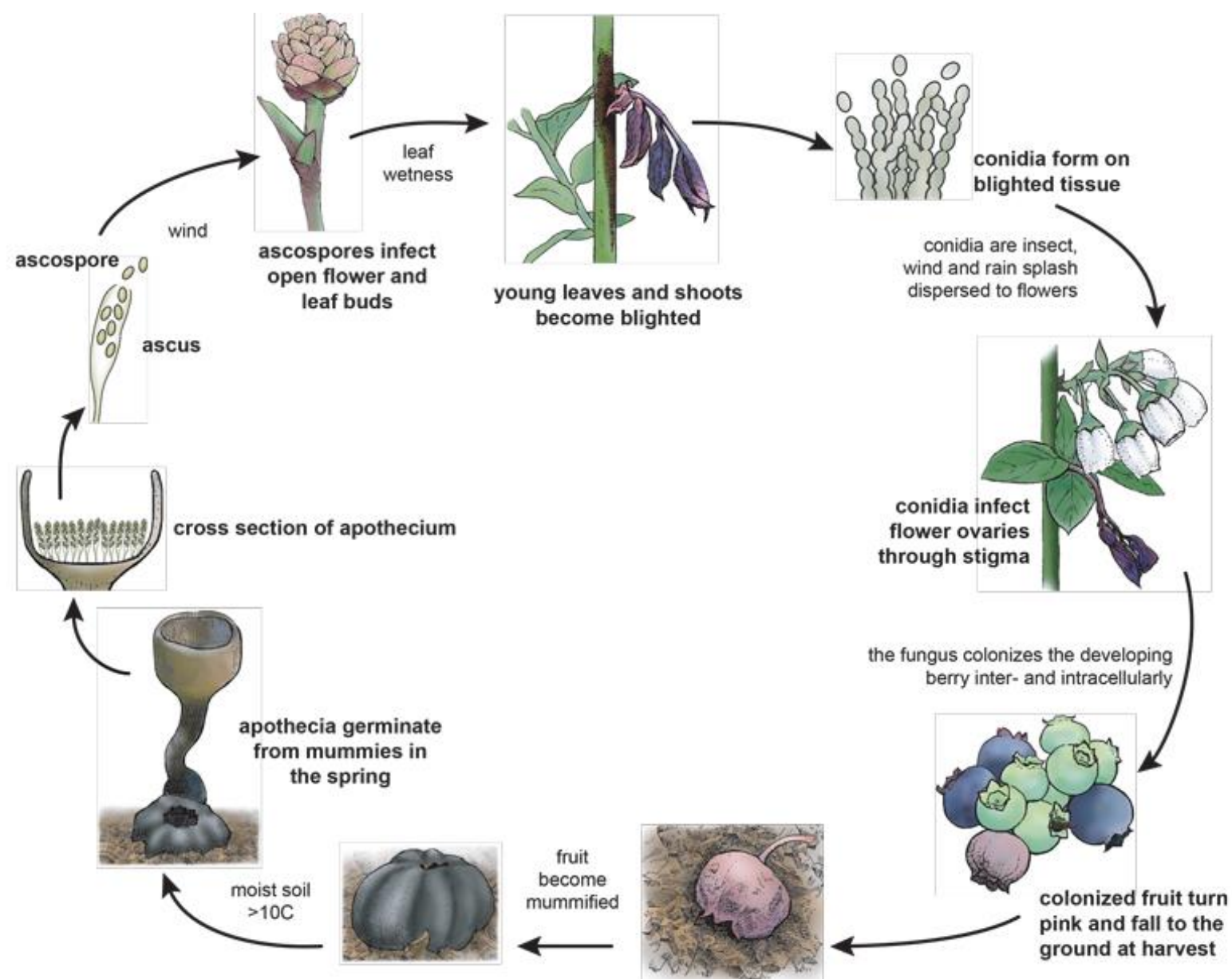





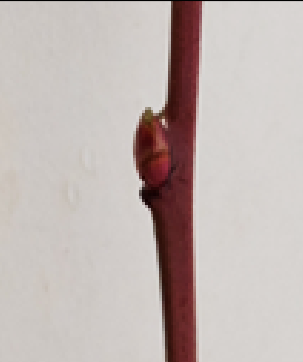
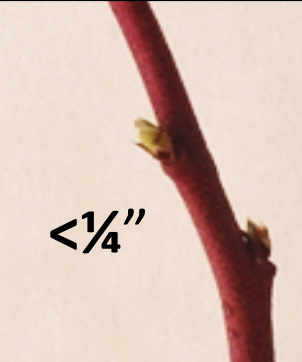








Figure 1: Disease cycle of mummy berry of blueberry. Annemiek Schilder, Michigan State University

NW WA – February Week 3 (2/13-2/17)

Floral Buds					
		Tight bud	Bud swell	Bud burst	Tight cluster
Whatcom	Duke	100%	0%	0%	0%
	Draper	100%	0%	0%	0%
	Bluecrop	100%	0%	0%	0%
	Liberty	100%	0%	0%	0%
Skagit	Duke	95%	5%	0%	0%
	Draper	98%	2%	0%	0%
	Bluecrop	100%	0%	0%	0%
	Liberty	97%	3%	0%	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	100%	0%	0%	0%
	Draper	100%	0%	0%	0%
	Bluecrop	100%	0%	0%	0%
	Liberty	100%	0%	0%	0%
Skagit	Duke	100%	0%	0%	0%
	Draper	100%	0%	0%	0%
	Bluecrop	100%	0%	0%	0%
	Liberty	100%	0%	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	60%	20%	20%	0%	0%
Skagit	52%	20%	28%	0%	0%
Percentages of mummies at each stage out of 50 mummies per field location. Red indicates release of ascospores.					

Contact: Dalphy Harteveld WSU Mount Vernon Research and Extension Center
Phone: 360 848 6157 Email: doc.harteveld@wsu.edu