These updates were originally conceived by Dr. Dalphy Harteveld and will be updated during 2019 by Dr. Maria Fairbank, Associate in Research at WSU Mount Vernon Research and Extension Center. The 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 four Washington counties (Skagit, Whatcom, Snohomish, and Island). 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 cultivars in each county and indicate when susceptible tissue is available on the plants. The third table shows the different developmental stages of apothecial development from mummies and the emergence of ascospores (when cups of the mushrooms are more than 2 mm open). This information is provided to help the timing of disease management practices and to control mummy berry. Development of mummies and host reflect conditions occurring in the four fields that 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.

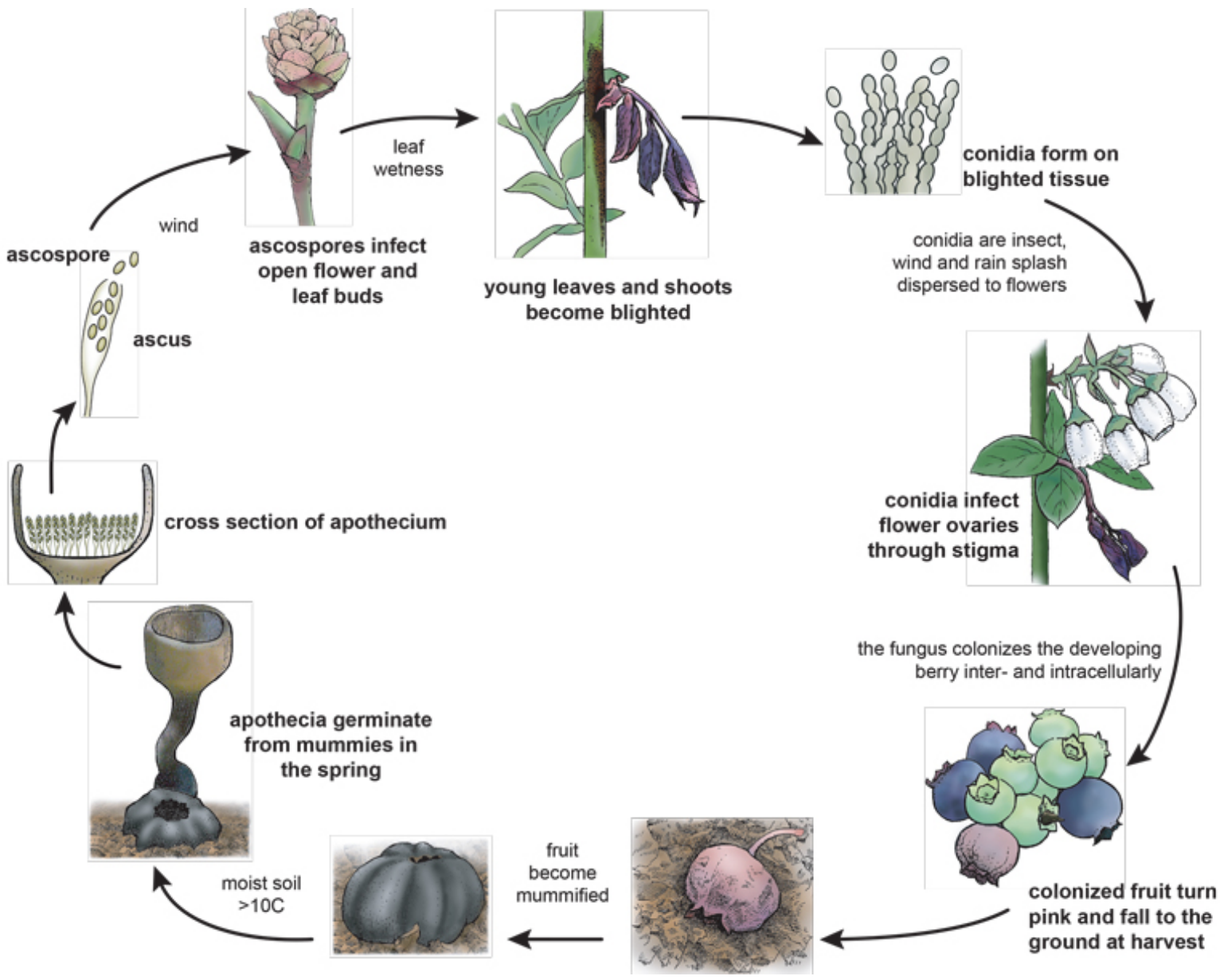


Figure 1: Disease cycle of mummy berry of blueberry. Annemiek Schilder, Michigan State University

NW WA – March Week 5 (3/25-3/29)

Floral Buds

		Bud swell	Bud burst	Tight cluster	Early pink
Whatcom	Mixed	81%	15%	0%	0%
Skagit	Mixed	44%	39%	16%	0%
Snohomish	Reka	65%	13%	14%	7%
Island	Aurora / Liberty	51%	40%	8%	0%

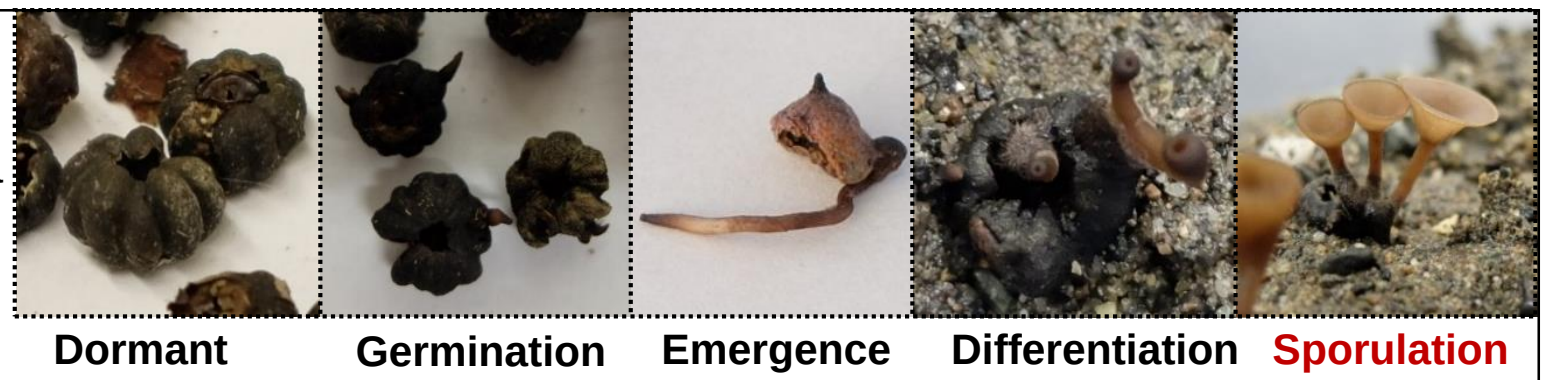
Percentages represent averages of 4 fields per cultivar per county. Red indicates a susceptible stage for infections.

Vegetative Buds

		Bud swell	Early green	Late green	Unfolding
Whatcom	Mixed	48%	44%	0%	0%
Skagit	Mixed	28%	51%	22%	0%
Snohomish	Reka	29%	71%	0%	0%
Island	Aurora / Liberty	36%	62%	1%	0%

Percentages represent averages of 4 fields per cultivar per county. Red indicates a susceptible stage for infections.

Apothecia



	Dormant	Germination	Emergence	Differentiation	Sporulation
Whatcom	54%	19%	16%	9%	3%
Skagit*	NA	NA	NA	NA	NA
Snohomish	75%	9%	8%	9%	0%
Island	62%	20%	18%	1%	0%

Percentages of mummies at each stage out of 67-150 mummies per field location. Red indicates release of ascospores.
* Site specific failure to develop

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