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Climate](#)[Viticulture](#)[Pest  
management](#)[Scouting guide](#)[Publications](#)[Calendar of  
events](#)[Industry links](#)[Contacts](#)

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## Boron deficiency

Tom Zabadal , MSU Horticulture

[Home](#) > [Scouting guide](#)> boron deficiency

Boron deficiency dramatically influences yield. Leaves toward the end of the shoot show a spotty yellowing. Affected leaves tend to be undersized and cupped. Affected clusters may totally abort or develop a few small berries, often with many small, green "shot" berries. This condition results because ovules on affected flowers are poorly fertilized.

Petiole tests can confirm this deficiency. Soil or foliar boron applications may correct the deficiency. Excess boron fertilization may result in toxicity to vines.



An affected cluster with lack of fruit-set and green shot berries.  
Photos: T. Zabadal



A yellowing, cupped leaf.  
Photos: T. Zabadal

## Addition information

- Sampling information from [MSU Soil and Plant Nutrient Laboratory](#)

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