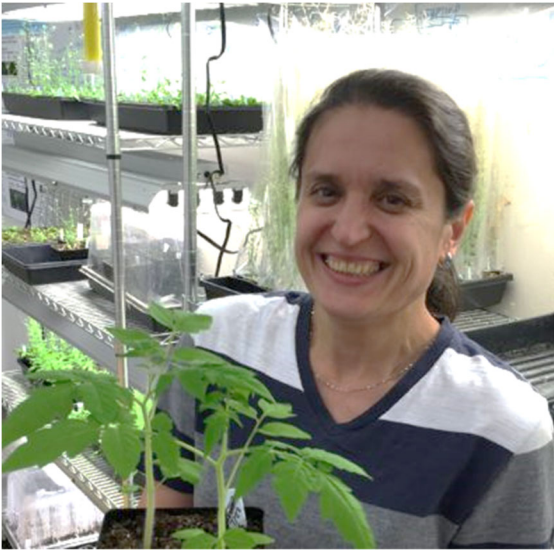


Plant Pathology Seminar Series



“Potato immunostimulants alleviate powdery scab disease”

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Abstract

The potato is the third most important food crop in the world. In Washington state, potato production has high economic output, therefore the prevention of potato diseases is important for potato industry. Powdery scab is a potato disease caused by the soilborne protist pathogen *Spongospora subterranea f.sp. subterranea*. Among symptoms are cosmetic damage on the skin of potato tubers and the formation of root galls, which reduce nutrient and water uptake.

There is no good control for powdery scab. The stimulation of the potato immunity is considered a promising strategy. We have been developing various detection methods for studying the effect of plant defense elicitors on early stress responses in potato. In addition, potato hairy root culture system was developed as a rapid sterile infection system. Using hairy root culture, i) an immunostimulant, StPep1, was shown to alleviate Sss infection; ii) *Bacillus*-based delivery system of the immunostimulants was shown to reduce Sss propagation. Identification of additional immunostimulants in potato is the future goal of the highest priority.

4:10 pm | October 11th 2021 | Plant Pathology 515, Fall 2021
Zoom Link: <https://wsu.zoom.us/j/94763621072>
Meeting ID: 947 6362 1072
Passcode: 3710
Call in number: 1 253 215 8782



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