Global Impact Initiative
MICHIGAN STATE UNIVERSITY

MSU Plant Resilience Institute
Faculty Candidate

Thursday, March 23, 2017

2:00-4:00PM

Room 247 Plant Biology Building

Dr. Alison Bennett

James Hutton Institute
Dundee, Scotland

"The influence of soil microbes on plant responses to abiotic and biotic stresses"

Research

I am a plant stress evolutionary ecologist whose work spans both natural and managed systems and levels of biological organization in order to gain a greater understanding of plant interactions that promote stress tolerance. In particular my group aims to enhance the predictability of interactions crucial to plant stress (abiotic and biotic) tolerance. We focus on two types of plant stress: 1) biotic stress caused by insects and 2) abiotic stress primarily caused by environmental change. My research addresses important basic science questions such as: Can we use plant interactions to promote plant stress tolerance? If so, how predictable are plant interactions (and stress tolerance) across systems? How do abiotic factors (such as environmental change) alter plant interactions? Because my research spans both applied and basic research I can also address important applied questions: How can plant interactions contribute to sustainable food security? How will climate change alter the delivery of ecosystem services by plant interactions in both natural and managed systems? How can we utilize plant interactions to promote conservation and battle invasive species? We have also begun to apply social science strategies to value the impact of plant-microbe interactions in managed ecosystems.

2:00 p.m. *Seminar*

3:15-4:00 p.m. *Future Directions*

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