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AIM Symposium Offers In-Depth Look At Communication Beneath Soil

Producers will get an advanced look at how insects, plants and microbes communicate as crops grow at the Agriculture's Innovative Minds (AIM) Symposium Jan. 28 in Salina, Kan.

The AIM Symposium will immediately follow the 20th anniversary Winter Conference Jan. 26-27, also in Salina. The symposium theme, "Plants, Bugs, and Microbes: Do You Hear What I Hear?" will examine how plants, insects and the soil communicate by releasing chemicals to send messages. This communication can benefit plants in need of resources or protection.

"The AIM Symposium offers a detailed examination of communication channels and what these interactions mean for producers," said Steve Swaffar, executive director for No-till on the Plains. "It's a unique opportunity to really dig into a topic that is rarely considered, but is of significant importance in crop production cycles."

Speakers include Jill Clapperton, principal scientist and co-founder of Rhizoterra Inc.; Jonathan Lundgren, research entomologist; and Jack Schultz, director of the University of Missouri's Bond Life Sciences Center. The trio will offer an in-depth look at what communication means for soils, crop production and bottom lines.

Clapperton is an international lecturer and advocate for practices that promote soil health. Her research farm in eastern Washington is a proving ground for new dryland crops, rotations, technology and products that help create healthy, productive soils. She also is developing new technology to help farmers make real-time decisions about soil fertility, plant nutrition and soil microbial activity.

Lundgren is an ecologist studying beneficial insects in cropland that attack insect pests and weeds. He believes in using ecological principles that are agronomically sound to adjust farming production practices in ways that reduce reliance on costly chemical inputs for pest management. Increasing biodiversity and reducing disturbance on farms are central themes to his research program. He also writes a monthly column, "The Insect Spotlight", distributed to regional newspapers highlighting insect-human interactions and how insects shape culture.

Schultz works to explain patterns seen in nature by their underlying mechanisms using a multidisciplinary approach including ecology, biochemistry, and molecular biology. Current research has several major themes, including interactions between plant defensive chemistry and insect herbivores, dynamic "induced" responses by plants to attack by insects, how some insects mask their attack or even manipulate plant defenses and how plant responses to insect herbivores influences their responses to other stresses.

Registration for AIM is $250 through Dec. 18 and $300 thereafter. Registration for AIM may also be purchased with the Winter Conference for $450, saving $75 on the total package. The combination discount will expire on Dec. 18. Prices are per person. To register, visit notill.org.

No-till farming systems offer several advantages to producers willing to implement the system. Fewer trips across fields without tillage passes will reduce fuel costs. Increasing crops in rotations breaks weed and insect pest cycles. Increased crop residue and root systems will increase soil organic matter and microbiological activity, thereby increasing the productiveness and fertility of the soil. Implemented in a site-specific systems approach, no-till will, over time, outperform conventional tillage.

No-till on the Plains offers field events, networking opportunities and the annual Winter Conference to provide crop producers with valuable no-till information. For more information, visit notill.org.