

Legume ipmPIPE: A new option for generating, summarizing and disseminating real-time pest data

September 8 2011

A new, open-access article in the *Journal of Integrated Pest Management* describes the background, usage, and value of the Legume Integrated Pest Management Pest Information Platform for Extension and Education (ipmPIPE). The goal of the Legume ipmPIPE is to identify causes of losses (yield, quality, economic) in legumes and assist producers in minimizing those losses by implementing integrated pest management of pathogens and insect pests.

Legume ipmPIPE leverages a variety of programs and resources based on data collected from legume sentinel or mobile plots in as many as 25 states and in Canada and Mexico through collaborations with in-country scientists. It identified priority fungal, bacterial, and [viral pathogens](#) or diseases and [insect pests](#) (including pathogen vectors) for monitoring based upon sampling and diagnostic protocols, and kit-based high output viral immunoassays for use by the National Plant Diagnostic Network (NPDN) labs.

Another key feature is its enhanced communication between scientists specializing in legumes and collated data reporting from across the United States. It capitalizes upon a Web-based platform for information access and display to extension educators, research scientists, industry, and other stakeholders with a portfolio of management and education tools.

Project specialists have distributed a set of 24 pocket sized cards (print and online versions) to legume stakeholders and [integrated pest management](#) personnel that improves the accuracy of plant growth stage descriptions, plant pathogen or disease and insect pest diagnostics for legume crops such as common bean, chickpea, lentil, field pea, lima bean, and cowpea.

The greatest asset of the Legume ipmPIPE is the outstanding extension specialists, researchers, coordinators, diagnosticians, stakeholders, field workers, and others who each year provide "the eyes and feet on the ground" to make this project happen. The Legume ipmPIPE has also provided real-time national interaction and a communication conduit for extension specialists, researchers, and diagnosticians, and has increased their coordination and cooperation. It has forged new connections with legume stakeholders and industry enabling the Legume ipmPIPE to be more responsive to the needs of growers and their industry.

Although funding remains a significant challenge for all of the ipmPIPE components in the future, the Legume ipmPIPE coordinators anticipate continued service to the legume industry and stakeholders. An additional set of four diagnostic cards will be produced on topics related to seedling emergence issues, other legume viruses, and pest resistance to pesticides. In addition, weather forecasts and a real-time price discovery tool (spot prices provided periodically by legume crop suppliers) will be added to the Website. This commodity component will enhance the overall utility and economic value of the ipmPIPE to legume crop growers and other stakeholders, and the sustainability of their production and [pest management](#) system throughout the United States.

More information: [DOI: 10.1603/IPM11003](https://doi.org/10.1603/IPM11003)

Provided by Entomological Society of America

Citation: Legume ipmPIPE: A new option for generating, summarizing and disseminating real-time pest data (2011, September 8) retrieved 9 April 2024 from

<https://phys.org/news/2011-09-legume-ipmpipe-option-disseminating-real-time.html>

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