Onion *ipmPIPE Network – Interactive Resource for Onion Stakeholders*

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Abstract:

The Onion *ipm*PIPE Project was initiated in 2011 with support provided by the USDA-NIFA Specialty Crop Research Initiative and matching funds from U. S. onion stakeholders and universities. Its goal is to incorporate existing pest management programs and pest risk assessment models into an internet platform for national implementation and validation. It is also expanding innovative diagnostic tools available for priority diseases caused by various pathogens and their disease complexes, including: *Iris yellow spot virus* (IYSV); *Thrips tabaci* (onion thrips) – as a vector and pest; and foliar and storage fungal and bacterial diseases. The Onion *ipm*PIPE currently consists of a network of annual sentinel plots and production surveys in 7 states. The Project Web site includes a series of menus, maps, reports, illustrations, and management links for topics that include: *Allium* Crops, Diseases, Insect Pests, Forecasts and Market Pricing Tools. It emphasizes IPM strategies including selection of disease resistant varieties, planting clean seed, suitable crop rotation, scouting and confirmation of economic threats from disease organisms and insect pests, and timely application of pesticides as needed.

Please visit Onion *ipm*PIPE at:
http://apps.planalytics.com/aginsights/pipehome.jsp & http://onion.coop/

If you wish to participate or need more information on this USDA-NIFA-SCRI Project No. 2010-01193 , please contact National Coordinators Howard Schwartz, howard.schwartz@colostate.edu, and Jim VanKirk, jim@sripmc.org

Objective 1: *ipmPIPE Network Infrastructure and Operations.*

Validate scouting protocols & risk models for priority pests of onion system.

Provide management tools (e.g., EDDMapS, Pest & Disease Risk Models ⟶) to stakeholders that relate descriptive stages of plant growth to weather, pest and disease thresholds with timely management strategies.

Enhance management resources to include an image gallery to aid in-field and laboratory identification of key diseases and pests which will be linked to a wiki-information tool.

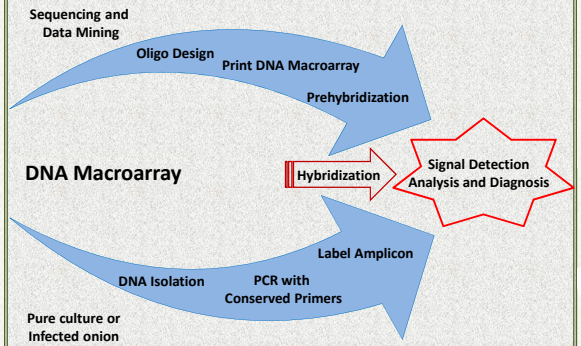
Add economic monitoring of onion crop markets to help stakeholders make more timely and informed decisions for crop production and pest management, including the judicious use of approved pesticides.

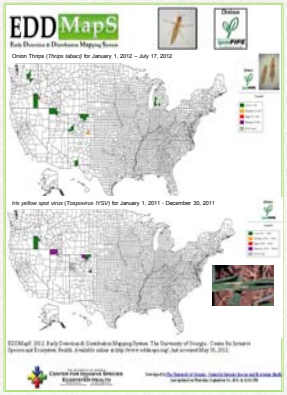
Assess the adoption level of these tools and resources used by growers, advisors and other key stakeholders.

Objective 2: *Innovative Diagnostics and Validation.*

Develop and enhance a DNA macroarray detection method for bacterial disease complexes, viruses, and fungal disease organisms affecting onions in the field and storage.

DNA Macroarray Design and Implementation





Objective 3: *Disease Risk Decisions and Economic Justification.*

Real-time price discovery tool for specialty crop commodities helps onion stakeholders make more timely decisions in relation to disease and pest management options and strategies. This scalable commodity component enhances the overall utility and economic value of the *ipm*PIPE to specialty crop stakeholders, and the sustainability of their production and pest management system throughout the U.S.

http://onion.coop/

Region		2010 Dealer Price (USD/cwt) Low	High	Average	2010 Grower Price (USD/cwt) Low	High	Average
Onion — Red Globe							
#1 Jbo	(Other)	40.00	40.00	40.00	30.00	30.00	30.00
#1 lge	(Other)	40.00	40.00	40.00	30.00	30.00	30.00

Stakeholder Engagement:

Producers and other onion industry stakeholders have been involved with the development of Regional and national Pest Management Strategic Plans (W2008); dialogue between specialists and commodity groups at the state and national levels and the *ipm*PIPE Steering Committee members contributed to the development of the project. The Advisory Committee (listed below) oversees the project and provides critical feedback throughout all phases of the dynamic project.

ADVISORY COMMITTEE Members:

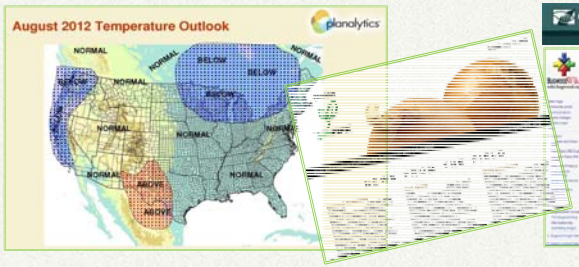
- Wayne Mininger, Executive Secretary of the National Onion Association
- Bill Dean, Board Member with Pacific Northwest Vegetable Association
- Paul Ruszkiewicz, Chairman, New York State Onion Industry Council
- Morgan Reeder, President, Utah Onion Association
- Robert Sakata, Onion Grower and President of the Colorado Onion Association

Objective 4: Outreach & Evaluation Plans and Resources

The outreach and evaluation plans for the Onion *ipm*PIPE component are multifaceted with a network of delivery systems extending through all participating states and online resources. They emphasize efficiency and avoid duplication across states and regions. As each portion of the plans are produced, they are reviewed for their relevance to each participating state, content, and ease of use and access via linked on-line sites.

http://apps.planalytics.com/aginsights/pipehome.jsp

http://onion.coop



Wiki.bugwood.org/HPIPM:onion

USDA United States Department of Agriculture National Institute of Food and Agriculture

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