

# Public- and Private-Sector Policy Implications of Research on the Economics of Herbicide Resistance Management – Introduction\*

Mike Livingston

Economic Research Service – November 8, 2013



\*The views expressed in this presentation are the authors and not necessarily those of ERS or USDA.  
United States Department of Agriculture, Economic Research Service

# Glyphosate resistance

- Due to the benefits of planting glyphosate-tolerant (GT) crops and using glyphosate, the herbicide has been the most widely used pesticide in the United States since 2001.
- An overreliance on glyphosate and a reduction in the diversity of weed management practices has been associated with an increased number of weed species and biotypes resistant to glyphosate.
- This has raised concerns about
  - managing glyphosate-resistant (GR) weeds and slowing their spread
  - promoting the adoption of weed best management practices (BMPs).



# Conversation initiatives

- Micheal Owen organized national glyphosate stewardship forums in 2004 and 2007.
- A National Research Council (NRC) committee wrote *The Impact of Genetically Engineered Crops on Farm Sustainability in the United States* (2010), which described many of the issues related to glyphosate resistance.



# Conversation initiatives

- Micheal Owen, David Shaw and David Ervin initiated the formation of an NRC committee to organize **A National Summit on Strategies to Manage Herbicide-Resistant Weeds.**
- The conversation focused on findings from the 2010 NRC report and a Weed Science Society of America white paper on BMPs.
- See <http://nas-sites.org/hr-weeds-summit/>.



# Conversation initiatives

- David Shaw, Micheal Owen, and others organized a related symposium at the annual meetings of the Weed Science Society of America, **Herbicide Resistance Management – The Path Forward**, February 2013.



# Conversation initiatives

- David Shaw, Jill Schroeder, Harold Coble, John Soteres, and Micheal Owen also organized a **Herbicide Resistance Workshop – Next Steps** to discuss actionable items, many of which are informed by research being presented today.
  - Understanding incentives and disincentives to use BMPs
  - Economic impacts
  - Education, outreach, and training
  - Community-based approaches to management



# Conference purpose

- The purpose of this conference is to add to this ongoing conversation a discussion about the tradeoffs associated with alternative programs that might help stakeholders manage herbicide resistance.



# Conference logistics

- There are morning and afternoon drinks and snacks and brief morning and afternoon breaks.
- There is also a one-hour lunch break.
- You have to get your own lunch.
- Be sure to bring your government-issued ID so you can get back into the building.
- Thanks again for being here!

