

**Dallas Peterson, Phillip Stahlman, Curtis Thompson, Anita Dille, Mithila Jugulam,
Randall Currie, Michael Barrett, Jill Schroeder, and Lee Van Wychen**

INTRODUCTION

The Weed Science Society of America (WSSA) has co-sponsored several educational tours for EPA staff in recent years. The tours have provided a firsthand learning experience on a wide range of weed management issues, including herbicide resistance, aquatic use permits, pollinator protection, and application technologies in crop and non-crop areas that impact herbicide registrations and use guidelines. A hallmark of these tours have been the opportunities for direct dialogue between EPA personnel and growers, applicators, crop consultants, land and water managers, food processors, equipment manufacturers, and university research and extension. Previous tours have included stops in FL, NM, MO, IL, AR, MD, DE, and IA. The arid High Plains region of the U.S. has unique cropping systems and weed management challenges that is threatened by the loss of effective herbicide options.

OBJECTIVES

1. To help EPA staff better understand dryland cropping systems and the difficulties of managing herbicide resistant weeds in rainfall limited environments.
2. Provide EPA staff an opportunity to visit with local farmers, crop advisors, and applicators about the regulatory process and the practicality of different application requirements.
3. Allow farmers and crop advisors to provide feedback on the tools they need to successfully manage herbicide resistant weeds.

PARTICIPANTS

Tour Organizers: Phil Stahlman and Michael Barrett

KSU Weed Scientists: Phil Stahlman, Curtis Thompson, Anita Dille, Randall Currie, Dallas Peterson

EPA staff from the Office of Pesticide Programs:

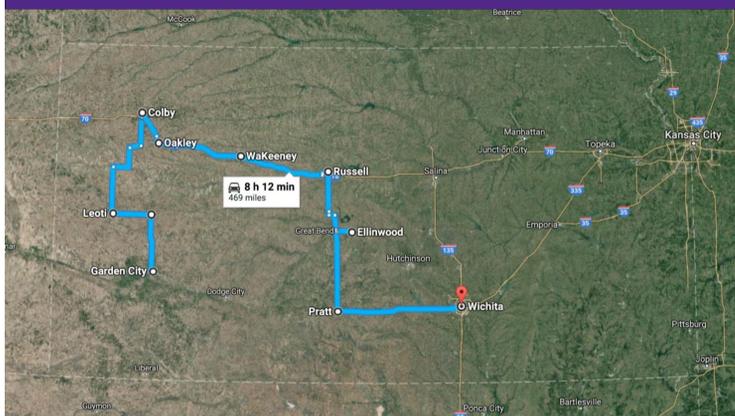
Dan Kenny, Kelly Tindall, Bill Chism, Jonathan Becker, Andrew Reighart, Faruque Khan, Kurt Pluntke, Bilin Basu, Julie Javier, Shannon Borges, Lata Venkateshwara, and Rachel Holloman from Washington DC

Jamie Green and Maren Taylor from the Kansas City Regional office

WSSA: Michael Barrett, Lee Van Wychen, Greg Kruger

USDA: Jill Schroeder

TOUR ROUTE



TOUR STOPS

1. Western Kansas Ag Research and Extension Center near Garden City
2. Vulgamore Family Farms near Scott City
3. Leoti Community Center Farmer Forum
4. Red River Commodities Processing Plant Tour near Colby
5. Sunflower Grower Meeting at Colby
6. Western Plains Ethanol Plant Tour near Oakley
7. Darold Zimmerman Cover Crop Field Visit near Grainfield
8. Quinter Community Center Farmer Forum
9. Shiloh Vineyard and Winery near Wakeoney
10. Russell Convention Center Farmer Panel and Economics Discussion
11. Great Bend Co-op Soybean Variety and Dicamba Injury Plot
12. Ellinwood Community Center Farmer and Agronomist Forum
13. Next Generation Cotton Gin and Local Cotton Fields near Pratt

TOUR HIGHLIGHTS



Michael Barrett and Phil Stahlman addressing participants at Garden City



Vulgamore Family Farms overview



“War Room” presentation on data and records at the Vulgamore Family Farms



Shielded sprayer at Vulgamore Family Farms



Grape vineyard surrounded by sorghum with a V-blade in the foreground at Shiloh Vineyards



Discussion on herbicide injury to grapes at Shiloh Vineyards



Marvin Rose describing dicamba injury to soybeans



Tour participants in an Xtend Cotton field treated with dicamba



Phil Stahlman holding a “Zombie” pigweed treated earlier in the season with dicamba



Tour participants checking out a cotton stripper/baler

KEY GROWER AND APPLICATOR POINTS

1. Primary weed concerns at most stops included problematic and herbicide resistant weeds, including Palmer amaranth (*Amaranthus palmeri*), kochia (*Kochia scoparia*), marestail (*Conyza canadensis*), and tumble windmillgrass (*Chloris verticillata*).
2. Herbicide resistant weeds are threatening the viability of no-till cropping systems, which are critical for soil and water conservation, soil structure, soil health, crop yields, yield stability, and profitability.
3. Continued availability of atrazine, dicamba, 2,4-D and dicamba are very important to help manage weeds in dryland no-till cropping systems.
4. Minimize barriers and streamline the process to develop and register new herbicide sites of action and active ingredients.
5. Avoid application requirements that are impractical and consider the differences between geographies and different production systems.
6. Solicit input from practitioners regarding critical registration and application requirement decisions.

OUTCOMES

- ❖ EPA personnel were able to observe various crops, cropping systems, and weed management challenges in rainfall limited environments.
- ❖ Farmer forums provided a beneficial exchange of information on key herbicide needs and practical application guidelines.
- ❖ All parties gained a better appreciation and respect for each other and their jobs.

PARTICIPANT PERCEPTIONS

- ❖ Dwight Koops, CropQuest President – “It was good to see individuals from EPA interact with growers, retailers, and consultants in our own backyard.”
- ❖ Phil Stahlman, KSU Professor Emeritus – “Several meetings with growers and agronomists in informal settings provided attendees an opportunity to question and learn about the regulatory process and to provide input on existing and future regulations.”

TOUR SPONSORS

- ❖ Weed Science Society of America
- ❖ KSU Weed Science Group
- ❖ Kansas Corn Commission
- ❖ Kansas Soybean Commission
- ❖ Kansas Wheat Alliance
- ❖ National Grain Sorghum Producers Association
- ❖ High Plains Committee, National Sunflower Association
- ❖ Great Bend Co-op
- ❖ CHS Agronomy Center, Quinter
- ❖ Crop Production Services, Colby
- ❖ T&T Chemical, Quinter