Herbicide resistant weeds found

Kansas State University scientists say there is evidence to show that some Palmer amaranth weeds in Kansas are resistant to the widely-used herbicide, glyphosate.

"Glyphosate-resistant weeds continue to be an increasing problem in Kansas," said K-State agronomist Dallas Peterson. "Glyphosate-resistant marestail, common waterhemp, common ragweed, giant ragweed, and kochia have been previously confirmed in Kansas and have become very problematic in certain areas. Palmer amaranth is a serious weed problem in Kansas but until now, glyphosate-resistant Palmer amaranth had not been confirmed in the state."

Glyphosate-resistant Palmer amaranth is a serious problem in the Southeast U.S., said Peterson, who is a weed specialist with K-State Research and Extension, adding that it has dramatically impacted weed control programs and even cropping systems.

Hot, dry weather over the past two years has made it difficult to assess herbicide performance and resistance problems, but poor control of Palmer amaranth with glyphosate has raised questions about whether glyphosate-resistant Palmer amaranth populations are now showing up in Kansas.

To determine if that is the case, K-State graduate student Josh Putman, working under Peterson's direction, collected waterhemp and Palmer amaranth seed in the fall of 2011 from various soybean and cotton fields in eastern and south central Kansas. Waterhemp and Palmer amaranth plants from these different populations were grown in a K-State greenhouse and treated with glyphosate at one, two, and four times the typical field use rate of 0.75 pounds acid equivalence per acre to evaluate for resistance. The response of the different populations was compared to susceptible populations of both species collected from the Ashland Bottoms experiment field south of Manhattan. The susceptible check populations of both species were completely controlled by all rates of glyphosate.

"As expected, a number of the waterhemp populations from across eastern Kansas survived

glyphosate treatment up to the four-times rate, and appeared to be resistant," Peterson said. "Two

populations of Palmer amaranth from Cowley County in south central Kansas also had a high percentage of plants that survived the one-time and two-times rates of glyphosate, and had some plants that survived the four-times rate. These Palmer amaranth populations did not appear to be as resistant to glyphosate as some of the Palmer amaranth from the Southeast U.S., but weren't being controlled by typical field rates in the greenhouse or with multiple applications of glyphosate in the field.

So, it appears that glyphosate-resistant Palmer amaranth may now be present in Kansas, he said.

Palmer amaranth seed was collected from additional fields this past fall and is now being evaluated in a K-State greenhouse.

"Preliminary observations suggest that we are seeing similar survival after glyphosate treatments from Palmer amaranth collected from fields south of Great Bend, along with additional populations collected south of Wichita," Peterson said. "Research on inheritance and the mechanism of resistance will need to be conducted to further characterize and confirm glyphosate resistance in these populations."

Confirming herbicide resistance is a long and detailed process, he added.

"Regardless of whether glyphosate-resistant Palmer amaranth is now present in any given area in Kansas, there is a good chance it will develop at some point based upon what has happened in the Southeast U.S., especially if growers rely heavily on glyphosate for weed control," Peterson said.

"Palmer amaranth is an extremely competitive weed, and the development of glyphosate resistance means it will require an effective integrated weed management program to achieve acceptable control," he said. "Continuing to rely only on glyphosate for weed control will only speed up the development of glyphosate-resistant weeds and diminish its effectiveness."

He said that the use of residual herbicides with different modes of action throughout the cropping system will help to manage existing glyphosateresistant weeds and slow the development of new glyphosate-resistant weed populations.

College Notes

More than 4,450 undergraduate students at the University of Kansas earned honor roll distinction for the fall 2012 semester. The students, from KU's Lawrence campus and the schools of Allied Health and Nursing in Kansas City, Kan., represent 97 of 105 Kansas counties, 41 other states and 39 other countries.

The honor roll comprises undergraduates who meet requirements in the College of Liberal Arts and Sciences and in the schools of allied health; architecture, design and planning; business; education; engineering; journalism; music; nursing;

pharmacy; and social welfare.

of Liberal Arts and Sciences. Darci Goddard, of Logan. She is the daughter of Jerry Goddard of Logan. She attended Logan High School. Goddard is a senior at KU and was named to the honor roll for the School of Business.

Kayleigh Brooks, of Norton. She is the daughter of Dennis Brooks and Debbie Graham, both of Norton. She attended Norton Community High School. Brooks is a Prof 1 at KU and was named to the honor roll for the School of Pharmacy. Rhees Carlson, of Norton.

She is the daughter of Dale and Glenda Carlson of Norton. She attended Norton Community High School. Carlson is a freshman at KU and was named to the honor roll for the College of Liberal Arts and Sciences. Liberal Arts and Sciences.

Matthew Miller, of Norton. He is the son of Allan and Connie Miller of Norton. He attended Norton Community High School. Miller is a senior at KU and was named to the honor roll for the College of Liberal Arts and Sciences.

Ashley Smith-Maybon, of Norton. She is the daughter of Dennis Maybon and the late Nan Smith, both of Norton. She attended Norton Community High School. Smith-Maybon is a senior at KU and was named to the honor roll for the School of Education.

Honor roll criteria vary among the university's academic units. Some schools honor the top 10 percent of students enrolled, some establish a minimum grade-point average, and others raise the minimum GPA for each year students are in school. Students must complete a minimum number of credit hours to be considered for the honor roll.

Business in the spotlight



Each month a Norton County business is featured for their valuable contribution to our economy.

This month's article was submitted by economic development board member Bud Posson.

Business in the Spotlight March 2013

Gall Motor Company, Inc / New Look Body Shop Owner: Brad Harding

808 N State Street 785-877-2812 Auto body repair, used cars,

U-Haul Trailer Rental

Gall Motor Company/New Look Body Shop was originally founded in the 1950's by J.D. Gall. At one time, New Look Body Shop was located on east Highway 36 near the current location of the Mapes & Miller building. Gall Motor Co. was located at the corner of State Street and Highway 36, and the body shop was moved to that location at a later date.

In the 1970's, James Goins purchased the business from



Mrs. Gall. Mr. Goins built a new building at the present location in 1987. Upon Mr. Goins' retirement in 1991, Brad Harding, who was employed by Mr. Goins at the time, purchased the company. Brad incorporated the business in 1994, and later took on the U-Haul Trailer Rental business in addition to the auto body business.

Brad says his greatest success and challenge are one and the same. Keeping up with the industry as it changes types of paints, modifies the composition of body steels and plastics, as well as other component parts. EPA regulations have also been a challenge. The new hybrid cars have new characteristics that require special training for the employees, so they can safely repair these machines. Brad also states that mishandling of some of the components could result in fatal accidents, so keeping up with all the changes is critical.

in business, Brad wishes he had acquired more advanced formal education. He feels it would have helped him considerably in managing his business right from the start.

Brad is optimistic about the future of his business in Norton. He knows his business is one of many that are tied to the agricultural community and believes that Norton has a bright future. The most rewarding thing about being a business owner in Norton, Brad says, is that he knows most of his customers on a personal basis. He feels the personal relationships help keep the quality of work on a higher level than what a customer can expect in a bigger city.

To new business owners or those wanting to start a business, Brad says. a person has to work extremely hard to be successful, listen carefully to the customers and then address their needs.

Looking back on his time



Area honorees are as follows: Bryan Stephens, of Jennings. Stephens is a junior at KU and was named to the honor roll for the College of Liberal Arts and Sciences.

Eric Becker, of Lenora. He is the son of John Becker of Lenora. He attended Norton Community High School. Becker is a freshman at KU and was named to the honor roll for the College Dakota Dreher, of Norton. He is the son of Ray and Jamie Dreher of Norton. He attended Norton Community High School. Dreher is a sophomore at KU and was named to the honor roll for the College of

Fort Scott Community College is pleased to announce the area honor roll students for Fall 2012. The

with your advertising needs please give Dana a call 877-3361 email: dpaxton@ nwkansas.com

COULTRAD

McMullen & Wyatt Auctions Farm Consignment Auction

McMullen & Wyatt Auctions is now taking consignments for our Annual Spring Auction. Any farm related items, livestock equipment, tools, machinery, tractors, or trucks accepted for the April 20 auction. To consign or for more information, please contact Donald or Robert

> 785-877-3299 OFFICE 785-877-2731 ROBERT 785-877-2028 DONALD

PUBLIC RECORD

following student compiled a grade point average of at least 3.0:

Municipal Court

Robert Ellis of Norton, Kansas.

These transactions were taken from the records of filings in the offices of the Norton Municipal Court. These cases were given to the paper with the date of the hearings.

Jan. 24

Dec. 17-Jason Ulmer, Norton; Charge: No driver's license; Plea: Guilty; Found: Guilty; Sentence: Fine \$200, costs \$76, total \$276.

Jan. 14-Lane Archer, Logan; Charge: Speeding 40 in 30; Plea: No contest; Found: Guilty; Sentence: Fine \$30, costs \$76, total \$106.

Jan. 3-George Frederick, Grosse Pointe, Mich.; Charge: Speeding 48 in 35; Plea: No contest; Found: Guilty; Sentence: Fine \$28, costs \$76, total \$124.

Jan. 15-Regina Hall, Long Island; Charge: No proof of insurance; Other action: Dismissed/ proof.

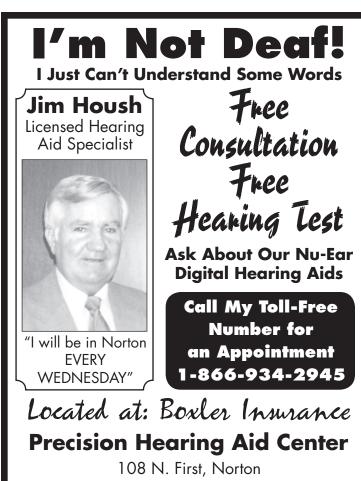
Jan. 31

Sept. 10-John Krauss, Cartes By The Sea,; Charge: DUI; Other action: Diversion; Sentence: Assessment \$500, \$200 diversion fee, \$76 costs, total \$776.

Jan. 14-Travis Hatfield, Colby; Charge: Speeding 45 in 35;

Plea: No contest; Found: Guilty;
Sentence: \$30, costs \$76, total
\$106.ton; Charge: No proof of insur-
ance; Other action: Dismissed/
proof provided.

Jan. 30-Kollean Stewart, Nor-





* DiscoverNorton.com
* Norton Area Chamber of Commerce
* Norton Telegram
* Almona State Bank

★ Almena State Bank - Almena & Norton

Deadline for Applications - March 15th