### Kansas Soybean Commission March 19, 2013 Report to the Kansas Senate

Chairman Love and members of the Kansas Senate agriculture committee:

I am Jerry Jeschke, a crop farmer from Robinson and chairman of the Kansas Soybean Commission.

The soybean checkoff continues to provide soybean farmers with an effective, efficient, selfdirected program for research and development on both the state and national levels. Nine soybean farmers – elected by our peers – volunteer our time to serve on the state soybean commission to oversee the investment of checkoff funds in projects to benefit our industry.

The handouts include our latest marketing plan, which summarizes this fiscal year's program. A summary of our funded research also is in the handouts. Those priorities include best management practices, crop protection and pest management. We also invest in a limited number of research projects to explore new uses for soybeans and their derivatives.

Our international marketing efforts primarily are enacted through the International Grains Program at Kansas State University. We also work with export-marketing representatives within state government and the U.S. Soybean Export Council. Further, our international humanitarian projects, such as our collaborations with the World Initiative for Soy in Human Health, aim to improve people's nutrition and access to much-needed protein.

Our consumer-education program not only includes educating school children and the general public about convenient, healthful soyfoods, but it also promotes industrial soybean products like biodiesel and soy-based inks, adhesives, paints, stains, sealers and insulation.

Initially developed by the soybean checkoff and providing more than five times the energy used to produce it, biodiesel helps drive demand for U.S. soybeans and plays an important role in the nation's overall energy strategy. We welcome an Environmental Protection Agency proposal under the Renewable Fuel Standard to establish 2013's biomass-based–diesel requirement at 1.28 billion gallons. We also applaud the year-end fiscal package for reinstating the biodiesel tax incentive for 2012 and 2013.

Another domestic market priority is our serious commitment to protecting animal agriculture, which consumes about 97 percent of all soybean meal produced in the United States. We are working closely with Kansas animal, commodity and general farm organizations to educate

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Kansans about the social and economic importance of animal agriculture in our state and nationwide. In concert with the Kansas Soybean Association, the Kansas Animal Agriculture Coalition and the national Center for Food Integrity, we will take every step necessary to safeguard animal agriculture.

Consumers are more disconnected from farm life than ever, and that has led to misconceptions about modern agriculture and today's farmers. In response, a national movement of farm women is answering questions, sharing facts and telling their personal stories. Several Kansas farm women have joined the CommonGround network over the last year. We now have seven volunteers statewide, helping to dispel the myths and building trust in America's farm families and food system, thanks to funding from the national soy checkoff and administrative support from our staff and our partners at the Kansas Corn Commission.

A copy of our *Soy Notes* newsletter, which is in the handouts, is but one example of our efforts to get the latest, most relevant information to our farmers. We also utilize a website and social media, such as Facebook, Twitter and YouTube.

Our administrative budget includes the cost of collections, audits, elections and other commission expenses. An outside, accredited accounting firm audits KSC's financial records each year, ensuring checkoff dollars are spent according to acceptable, efficient business practices. Our complete FY '12 audit is available at your request, and the handouts include several financial statements from the last two audits. In addition, we are audited for compliance with U.S. Department of Agriculture regulations every three years by the United Soybean Board – the national checkoff organization overseen by 69 farmer-directors, including three Kansans.

It is a pleasure to share this brief synopsis with you. More specifics are available at your request. Our state's soybean farmers – despite lowered yields due to the drought – generated another 1.2 billion dollars in farm receipts from the 2012 crop. Please accept our gratitude for your continued support of our soybean checkoff. It truly is progress powered by Kansas farmers.

Jerry Jeschke Robinson, Kansas Kansas Soybean Commission 1000 SW Red Oaks Place Topeka, KS 66615-1207

### Kansas Soybean Commission FY2013 Marketing Plan

The mission of the Kansas Soybean Commission is improving the profitability of Kansas's soybean producers. The Commissioners have identified the following priorities to work toward that mission:

1. Breeding/Production/Environmental Programs focusing on the most economical/efficient cropping systems with minimal impact on the environment including best management practices and crop protection/pest management; replacement of existing controls/seed treatments.

2. Animal/Human Nutrition studies that will increase the utilization of soybeans in the livestock feeding industry and new and innovative uses of soybeans as vital components in human nutrition.

3. Value-Added Projects developing and commercializing competitive industrial uses for soybeans including private entity cooperation.

4. Marketing Extension Program including extensive educational training of soybean pricing, crop disappearance/market share, crop insurance options, yield protection, farm program considerations and options in marketing available to Kansas soybean producers.

5. International market development with a focus on utilizing Kansas's soybeans.

In addition the Soybean Commission through its own work and through a contract with the Kansas Soybean Association promotes the nutritional benefits of using soybean products to consumers and, because of its benefits to the environment, energy security, and the farm economy, promotes the use of soy biodiesel as an alternative to diesel fuel. It also informs Kansas soybean producers of its activities through producer communications efforts and participates in Industry Relations programs both state and nationally.

The Commission directly funds the following programs to reach their mission:

1. Kansas State University research and outreach:

Extension and Applied Research Programs for Kansas Soybean Production
Development of Genetic and Chemical Tactics for Management of the *Dectes* Stem Borer in Soybean
Trait and Production Efficiency Enhancement in Soybean
Phosphorus, Secondary and Micronutrient Fertilization of Soybeans in Kansas
Evaluation of Commonly Grown Soybean Varieties in Southeast and Western KS
Enhancement of Soybean through Genetic Engineering
Optimization of Dihydroxylized Soybean Oil (DSO) Derivatives for Pressure Sensitive Adhesives
Development of Improved Systems for Machinery Data Management and Analysis Data Delivery for Kansas
Farmers
Improving Yields of Double Crop Soybean with Starter and Foliar Fertilization
Evaluation of Soybean Inoculant Products and Techniques to Address Soybean Nodulation Problems in Kansas
Managing Glyphosate-Resistant Kochia in Soybeans
Soybean Response to Fungicide and Insecticides

2. Pittsburg State University research on:

Soy-Based Polyester Polyols for Flexible Polyurethane Foams and Elastomers Polymerization of Soybean Oil Fatty Acids and Fatty Acid Methyl Esters 3. The University of Kansas research on:

Biodiesel Glycerin Based Hydrogen Rich Fuel Gas Production for Electrical Generation from an Internal Combustion Engine Determining the Impact of Biodiesel Age on Physical Properties and Engine Performance

- 4. Wichita State University The Role of *GH3* Genes in Plant Resistance Against Charcoal Rot Disease
- 5. FAM Enterprises Inc. Evaluating Whole Plant Health and Intensive Production Systems in Soybean
- 6. Ohio Soybean Council Industrial Uses of High Oleic Soybean Oil
- 7. North Central Soybean Research Program
- 8. Ag in the Classroom, School Education Programs and state and county fairs
- 9. Youth Education Program
- 10. FFA program support
- 11. FACS education program
- 12. Biodiesel Industrial Uses Advertising Kansas State University Football Network WIBW – Kansas University Sports Others as approved by the commission
- 13. National Biodiesel Board/ Biodiesel NBB Membership State Regulatory Project Address Pipeliner Biodiesel Steering Committee Technical Needs Advanced Biofuel Initiative Biodiesel Fuel Quality Compliance and Enforcement National Energy Initiative: Technical & Economic Bioheat Technical Steering Committee MEG Regional Petroleum Outreach
- 14. Producer Radio, TV and Print Outreach

WIBW radio, Topeka KRVN radio, Lexington, NE KKOW radio, Pittsburg, KS KFEQ radio, St. Joseph, MO KFRM radio, Clay Center, KS KBUF radio, Garden City, KS AG am in Kansas on three TV stations in Kansas

Possible spot ads and other sponsorships: Kansas Agricultural Network Mid-America Ag Network Agri-Talk Program at NBB Conference

Print Ads for specific promotions. Advertise to educate producers of soybean checkoff program sponsored by the KSC, *Straight Rows*. Work on earned media with *Kansas Farmer, High Plains Journal, Farm Talk, Midwest Producer* and *Grass and Grain*.

#### 15. Soynotes Newsletter

- 16. Kansas Soybean Expo
- 17. No-till education including No-till On the Plains organization
- 18. Field Days, Farm/ Trade Shows, Crop Tours

19. International Market Development work Kansas State University International Grains Program
WISHH Program
USSEC Latin American, Chinese, and Aquaculture Program work AGP, Inc., Gray's Harbor Export Program
USAPEEC Mexico and Egypt Projects
US Meat Export Federation Japan Pork Project

- 20. Collection, meeting, administration and audit procedures
- 21. Program and administrative work by the Kansas Soybean Association (Attached projects including budgets for contracted and direct spending)
- 22. Leadership development and program management
- 23. First Purchaser Relations Grain Grading Workshops KGFA Annual meeting and trade show KGFA meetings and golf outings
- 24. Soybean Production Yield Contest
- 25. USB Funded Cooperative Projects
- 26. Consumer Awareness Media Program
- 27. Soymeal Information Center

### FY2013 Kansas Soybean Commissioners

Districts I-II-III	Kurt Maurath (Secretary) 2704 US Hwy 83 Oakley, KS 67748 (785) 672-3750	District IV	Ron Ohlde (Vice Chairman) 1579 4 <sup>th</sup> Road Palmer, KS 66962 (785) 692-4322
District V	Kent Romine 674 SW 10 Road Great Bend, KS 67530-9319 (620) 793-7829	District VI	Dennis Gruenbacher 24600 W Hedgecreek Circle Andale, KS 67001 (316) 755-6785
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At-Large	Lance Rezac 24500 Aiken Switch Road Onaga, KS 66521 (785) 889-4309	United Soybean Craig C Bob Ha Ron Oh	Board Representatives: igstad, Valley Falls selwood, Berryton lde, Palmer

Kenlon Johannes, Administrator Kansas Soybean Commission 1000 SW Red Oaks Place Topeka, KS 66615-1207 Phone: 785-271-1040 Fax: 785-271-1302 Email: johannes@kansassoybeans.org

## Kansas Soybean Commission Projects Funded as of October 1, 2012

Trait and Production Efficiency Enhancement in Soybean; Bill Schapaugh, Tim Todd, Harold Trick, Kelly Kusel, (Agronomy Department, Plant Pathology Department, Southeast Agricultural Research Center, Kansas State University); (\$290,062) The objectives are to: 1. Improve the genetic potential and enhance the genetic diversity of soybean germplasm for the following traits: A. Seed yield: under dryland and irrigated production; B. Seed composition: high oil and protein and oleic acid; low phytate, linolenic, and saturated fats; C. Disease and insect resistance: Soybean Cyst Nematode (SCN), Soybean Sudden Death Syndrome (SDS), Soybean Aphid, and Dectes stem borer; 2. Incorporate transgenic events into elite breeding lines; 3. Develop populations for studying the inheritance and mapping resistance genes to Dectes stem borer; 4. Develop methods to better characterize the stress tolerance of a genotype; 5. Characterize the virulence diversity in Kansas populations of soybean cyst nematode; 6. Develop best management practices in Southeast KS for disease control in soybean, with special consideration for season-long charcoal rot control, early and mid season leaf disease control, and late foliar, pod, and stern disease control. Justification: This program will develop new soybean germplasm with superior traits or unique combinations of traits useful to the soybean industry.

**Development of Genetic and Chemical Tactics for Management of the** *Dectes* **Stem Borer in Soybean;** *C. Michael Smith, Brian McCornack, William Schapaugh, Jeff Whitworth,* 

(Entomology Department, Agronomy Department, Kansas State University); (\$58,854). The objectives are to: 1. Refine methods necessary to determine the genetics of *Dectes* resistance in soybean PI 165673; 2. Evaluate the efficacy of insecticides and the yield response of soybean to *Dectes* stem borer feeding to support Section 18 registration; 3. Evaluate the impact of alternate hosts and other environmental factors on *Dectes* stem borer infestations in soybean; 4. Expand web pages and other educational materials associated with soybean insect pests.

Justification: The occurrence of the Dectes stem borer, *Dectes texanus*, is increasing in parts of Kansas. However, the reason for this expansion is not known but may be attributed to the availability of alternate hosts, winter survival and other environmental factors.

## **Phosphorus, Secondary and Micronutrient Fertilization of Soybeans in Kansas;** *David B. Mengel, Dorivar Ruiz Diaz, (Agronomy Department, Kansas State University); (\$23,431).* The objectives are to: 1. Quantify the response of soybeans and common crops grown in rotation with soybeans to phosphorus (P) at varying soil test levels in Kansas. This process is commonly referred to as soil test correlation and calibration, and defines the soil test level above which no economic response to fertilizer would be expected, and the rate of fertilizer needed to

optimize yield at ST levels below the critical level; 2. Determine at what soil test levels soybeans respond to direct fertilization as opposed to residual fertility or multi-year/rotational fertilization; 3. Determine if the use of starter fertilizer, particularly surface band applied starter fertilizer, will enhance soybean yield when used alone or in combination with broadcast applications of phosphorus fertilizer; 4. Examine the potential for response of Kansas soybeans to Sulfur, Zinc, Manganese, iron and boron.

Justification: Kansas is a naturally P deficient region. The soils of Kansas contain significant quantities of P, but it is generally present in relatively unavailable or slowly available forms.

### **Evaluation of Soybean Inoculant Products and Techniques to Address Soybean Nodulation Problems in Kansas;** *Charles Rice, Kraig Roozeboom, Brian Olson, Kim Larson, (Agronomy*

Department, Northwest Area Extension, Kansas State University); (\$29, 624).

The objectives are to: 1. Improve consistency of soybean production, especially on "new" soybean ground by addressing nodulation problems observed in recent years; 2. Educate soybean producers and agronomy professionals about proper inoculation techniques and inoculation product effectiveness.

Justification: In recent years, an increasing number of questions have come to the Department of Agronomy dealing with nodulation problems in soybeans.

### Extension and Applied Research Programs for Kansas Soybean Production; Kraig

# Roozeboom, Eric Adee, J. Randall Nelson, (Agronomy Department, Kansas State University); (\$12,739).

The objectives are to: Effectively educate producers, crop advisors, and other agri-business professionals about soybean production issues in Kansas cropping systems. 1. Maintain and expand personal soybean production and educational expertise; 2. Facilitate participation in a regional effort to identify, study, and make comprehensive recommendations to growers regarding state-of-the-art management practices across a broad range of geographies to maximize yield and increase grower profitability.

Justification: An effective extension program in soybean production and cropping systems is necessary for crop advisors and producers to stay abreast of rapidly changing soybean production technology and increasing amounts of information.

## Improving Yields of Double Crop Soybean with Starter and Foliar Fertilization; Dorivar

*Ruiz Diaz, Doug Shoup, Stu Duncan, (Agronomy Department, Kansas State University);* (\$32,624).

The objectives are to: 1. Determine fertilization requirements for soybean growth under double crop systems after wheat as compared to full season soybean including nutrient uptake and yield; 2. Assessment of soybean grain yield and early growth response to starter application of NPK, Sulfur, and micronutrients (Zn, Mn, Fe), and compare responses with and without additional foliar fertilizer application.; 3. Verify potential soil parameters that could be related to responses

to starter and foliar applied macro and micronutrients; 4. Determine if foliar applied fertilizers can maximize yields and increase nutrient use efficiency when combined with starter applied fertilizers.

Justification: Nutrient availability is highest when fertilizer is applied just prior to soybean needs. However, particularly under double crop system, fertilizer is usually applied before wheat for both crops.

**Managing Glyphosate-Resistant Kochia in Soybeans;** *Phillip Stahlman, Dallas Peterson, Dan O'Brien, Curtis Thompson, (Agricultural Research Center, Agronomy Department, Northwest Area Extension Office, Kansas State University); (\$22,425).* 

The objectives are to: 1. Compare the season-long weed control effectiveness of several alternative herbicide treatments versus standard in-crop applications of glyphosate plus non-ionic surfactant and ammonium sulfate or Ignite plus Cadet and ammonium sulfate; 2. Contingent on cooperator agreement, compare the season-long effectiveness of weed management tactics implemented by cooperating growers versus three to five management practices of the investigator's choosing; 3. Compare the economics of the alternative herbicide treatments with the standard treatment in objective 1, and of the grower implemented tactics versus tactics recommended by K-State weed scientists in objective 2.

Justification: Glyphosate-resistant species in an area can have dramatic negative economic and environmental consequences, especially if the resistant species is easily dispersed. Growers affected by resistant weeds may be forced to switch to more costly herbicide programs compared to the cost of glyphosate or to less profitable crops or implement more tillage at the expense of soil and water conservation.

# **Soybean Response to Fungicide and Insecticides;** *Doug Shoup, Stu Duncan, (Southeast Area Extension, Northeast Area Extension, Kansas State University); (\$10,000).*

The objectives are to: 1. Evaluate control of soybean insect and disease pests and its impact on soybean yield with combinations of seed and foliar applications of fungicides and insecticides; 2. Educate producers on potential value of soybean fungicides and insecticides and their best management practices.

Justification: Increasing commodity prices are causing producers to consider including seed or foliar fungicide and insecticides into their soybean production system. There is a limited amount of data generated throughout southeast Kansas on the impacts of seed and foliar fungicides and insecticides, particularly when in combination with each other.

**Evaluation of Commonly Grown Soybean Varieties in Southeast and Western Kansas;** Jane Lingenfelser, (Agronomy Department, Kansas State University); (\$1,949).

The objectives are to: 1. Evaluate yield and agronomic traits of commonly grown soybean varieties in southeast and western Kansas; 2. Provide information on these varieties through publications and extension education meetings.

Justification: In the last several years of the soybean variety performance tests conducted in southeast and western Kansas, there have been a decreasing number of varieties entered that are grown by a large number of producers in those regions. The entries in the southeast and western Kansas tests have been from a handful of seed companies that often do not represent the companies holding the majority of the soybean market shares. As a result, several soybean producers and soybean growers groups in those regions have expressed interest in nominating additional popular soybean varieties to enter in the performance tests to help with their selection decisions.

### Enhancement of Soybean through Genetic Engineering; Harold N. Trick, William T.

Schapaugh, Tim C. Todd, (Plant Pathology Department, Agronomy Department, Kansas State University); (\$75,914).

The objectives are to: 1. Field test transgenic lines with increase Soybean Cyst Nematode (SCN) resistance; 2. Enhance SCN resistance in transgenic soybean by modifying current RNAi strategies; 3. Test the effectiveness of RNAi for root knot nematode resistance using RKN genes homologous to effective SCN genes; 4. Continue to produce and evaluate genetically engineered soybean for increased fungal resistance.

Justification: Decreasing yield loss and increasing the value of soybeans is part of KSU's mission to improve Kansas agriculture. This project takes a genetic engineering approach to this mission allowing the utilization of traits outside the scope of conventional breeding.

# Development of Improved Systems for Machinery Data Management and Analysis Data

**Delivery for Kansas Farmers;** Bryan Schurle, Kevin Herbel, Michael Langemeier, (Agricultural Economics Department, Kansas State University); (\$13,500).

The objectives are to: Develop a new database system for machinery and equipment data along with developing a web portal for improved collection and delivery of farm management analysis data for Kansas farmers.

Justification: This project will develop new database systems for analyzing farm machinery management data for farmers in Kansas and improve the collection and delivery of all information through the use of a web portal. The purpose of the project is to continue and to improve a system that has been helping farmers for many years.

### **Optimization of Dihydroxylized Soybean Oil (DSO) Derivatives for Pressure Sensitive**

Adhesives; Xiuzhi Susan Sun, Donghai Wang, (Grain Science and Industry Department, Biological and Agricultural Engineering Department, Kansas State University); (\$63,872). The objectives are to: 1. Optimize the procedures for dihydroxylized soybean oil (DSO) for pressure sensitive adhesives; 2. Characterize the DSO for rheological and thermal behaviors, shelf-life, and PSA performance; 3. Simplify the processing procedures of DSO for scale-up processing; 4. Conduct cost analysis and provide needed information for potential commercialization.

Justification: Limited petroleum resources and environment pollution are two major global sustainable development issues. It is our responsibility to research and engineer suitable alternatives to those petroleum based or synthetic chemicals.

### Soy-based Polyester Polyols for Flexible Polyurethane Foams and Elastomers; *Mihail*

Ionescu, Henry Emadipour, (Kansas Polymer Research Center, Plastics Engineering Department, College of Technology, Pittsburg State University); (\$50,000).

The objectives are to: develop new types of polyols for flexible polyurethane foams, elastomers and sealants. To achieve this, we will form high molecular weight polyesters, having the soy polyol chemically inserted in the structure, representing practically a new family of renewable polyols for flexible polyurethane foams and elastomers.

Justification: The worldwide demand for polyurethanes is about 22 billion pounds in or about 5% of the total world consumption of plastics. New polyester polyols will satisfy additional market needs that are not served by bio-based products at this time.

### Polymerization of Soybean Oil Fatty Acids and Fatty Acid Methyl Esters; Madhusudhan

Srinivasan, Henry Emadipour, (Kansas Polymer Research Center, Plastics Engineering Department, College of Technology, Pittsburg State University); (\$40,000). The objectives are to: Synthesize new valuable products by cationic polymerization (oligomerization) of soybean oil and its fatty acid methyl esters(methyl soyate). Justification: There is a global effort to replace petrochemicals with compounds from renewable resources.

### The Role of GH3 Genes in Plant Resistance Against Charcoal Rot Disease; Bin Shuai,

(Biological Sciences Department, Wichita State University); (\$33,000).
The objectives are to: 1. Confirm the full length sequences of GH3 cDNAs by 5'-and 3'-RACE;
2. Identify GH3 genes that respond to auxin and *M. phaseolina* infection.
Justification: Charcoal rot is a plant disease caused by soil-borne fungus Macrophomina phaseolina. In Kansas, the crop most severely affected by charcoal rot is the soybean, especially in the southeast and east central regions of the state.

## **Biodiesel Glycerin Based Hydrogen Rich Fuel Gas Production for Electrical Generation from Internal Combustion Engine;** *Christopher Depcik, (Mechanical Engineering*

Department, University of Kansas); (\$50,205).

The objectives are to: Offset the increased cost of biodiesel over conventional petroleum diesel while providing a new market for the glycerin.

Justification: Biodiesel production in the United States, European Union, and other countries reached 5.25 billion gallons in 2010. Since biodiesel plants produce one pound of glycerin for every ten pounds of biodiesel, this production generated over 3 billion pounds of excess glycerin by-product and is forecast to reach 4.4 billion pounds by 2015.

### **Determining the Impact of Biodiesel Age on Physical Properties and Engine Performance;**

Susan M. Stagg-Williams, Ilya Tabakh, (Chemical and Petroleum Engineering Department, Transportation Research Institute, Civil, Environmental, and Architectural Engineering Department, University of Kansas); (\$49,170).

The objectives are to: 1. Prepare soybean based biodiesel and biodiesel/diesel blends up to B20; 2. Complete ASTM physical property and high pressure viscosity testing of biodiesel and biodiesel blends every two weeks for the first two months, followed by monthly testing for the remainder of the first year of the proposal; 3. Determine the feasibility of using quick assessment tests to predict fuel age.

Justification: This project looks to understand how the properties of soybean based biodiesel and biodiesel blends change as a function of time, and ultimately how these changes in the biodiesel physical properties impact engine performance.



# Kansas Soybean Expo demonstrates 'Fueling Innovations'



Brent Hajek, a soybean farmer and land-speed record-holder from Ames, Okla., presented the keynote address at Expo.

Nearly 250 soybean enthusiasts gathered Jan. 9 in Topeka for the Kansas Soybean Expo, themed "Kansas Soybeans: Fueling Innovations." The Kansas Soybean Association (KSA) organized the annual event, with funding from the Kansas Soybean Commission (KSC), to coincide with the Topeka Farm Show at the Kansas Expocentre.

"It was a fantastic program, and we drew an enthusiastic crowd," said KSA Second Vice President and District 2 Director Raylen Phelon, Melvern, who chaired the Expo planning committee. "It was a great time for farmers and our industry partners to get together for education, information and some innovative ideas."

The opening session featured an update moderated by Gary Kilgore, Chanute, a Kansas State University (K-State) emeritus professor of agronomy. The presenters were Bill Schapaugh, Ph.D., K-State professor of soybean breeding; Chuck Rice, Ph.D., K-State distinguished professor of soil microbiology; and Doug Shoup, Ph.D., K-State southeast area agronomist. Schapaugh discussed phenotyping using spectral analysis, Rice addressed soybean inoculation, and Shoup shared the latest information about soybean fungicides and insecticides.

The audience also heard organizational updates from Bob Henry, Robinson, an American Soybean Association vice president; Cargill's Sandy Scripter, Wichita, representing the National Oilseed Processors Association; Tom Verry, director of outreach and development for the National Biodiesel Board, headquartered in Jefferson City, Mo.; and Teresa Brandenburg, Osborne, and LaVell Winsor, Grantville, who are volunteers for the CommonGround Kansas agricultural advocacy program.

Brent Hajek, a soybean farmer from Ames, Okla., presented the keynote address. He shared amusing and inspiring details of his quest to set a 182-mph land-speed record at the Bonneville Salt Flats in August 2011 with a Ford F-250 Super Duty pickup running on B20 biodiesel.

"It's the kind of crazy thing you dream up when you spend too much time on the tractor," Hajek said.

Greg Akagi, a farm broadcaster for WIBW-AM 580 in Topeka and the Kansas Agriculture Network, was the master of ceremonies at the luncheon. Mark Taddiken, Clifton, former chairman of the Kansas Senate's agriculture committee, shared a few comments about Kansas agricultural policy.

The featured speaker during the luncheon was U.S. Sen. Pat Roberts, who focused mainly on the overdue farm bill.

During the awards and recognitions, KSA President Charles Atkinson, Great Bend, presented Vern Schaffer, a K-State agronomist, and Taddiken with Kansas Soybean Meritorious Service awards. He followed by giving Roberts the Friend of Soy award for his dedication to all Kansans and to U.S. agriculture.

Kilgore then announced the district and overall winners in the Kansas Soybean Yield and Quality Contests. See page 2 for details.

The afternoon session focused on planning for the future as Mike Smith, Wichita, senior vice president and chief innovation executive at AccuWeather Enterprise Solutions, talked about personal safety and enhanced economics. With the tremendous increase in storm-warning predictions in the last 10 years, the meteorologist said, farmers can keep a better eye on the weather.

One smartphone app that is making a big difference comes with GPS-powered warnings that will alert farmers to the possibility of lightening in their areas. Smith cautioned his audience members to follow the best personal safety practices they can while working in the fields. His handout is posted on the KSC website's "Producer Information" tab.

Expo photos are available at http://www.facebook .com/KansasSoybean and http://flic.kr/kansas-soybean on the Web.

# USDA highlights FEEDing Pakistan project



KSC Administrator Kenlon Johannes (front row, center) attends the first Pakistani Aquaculture Short Course graduation ceremony at K-State.

The World Initiative for Soy in Human Health (WISHH) recently was featured on the U.S. Department of Agriculture (USDA) blog for its work in Pakistan. The article highlighted WISHH's three-year, USDA-funded aquaculture project called "FEEDing Pakistan."

Under the project, WISHH is collaborating with the Pakistan Fisheries Development Board and Kansas State University, with support from the Kansas Soybean Commission, to enhance the country's growing aquaculture sector through feeding trials. They use high-protein, floating fish feed produced from U.S. soybean meal.

Visit http://j.mp/FEEDingPakistan for the story on USDA's blog and http://j.mp/wishh-pakistan to learn more about the project from the WISHH website.

# Contest winners exceed expectations in drought year

Despite the drought that plagued most of the state, carefully planned growing practices and wisely selected seedstock varieties helped some Kansas farmers achieve high soybean yields and quality in 2012. Entrants in the annual Kansas Soybean Yield and Quality Contests far surpassed the year's state average yield, tripling it in many instances, or qualified for well above the cash price.

The yield contest included 57 entries, up 17 from 2011. The quality contest had 36 entries, 10 more than in the previous year.

"These contests recognize outstanding Kansas soybean farmers and provide fun incentives for them to increase soybean yields and protein and oil contents," said Gary Kilgore, Chanute, a Kansas State University emeritus professor of agronomy who coordinates the contests. "They also allow the Kansas Soybean Association, with financial support from the Kansas Soybean Commission, to share the information participants learned to help all Kansas soybean farmers raise higher yielding and more profitable soybeans."

The 32 winners in 13 categories had verified yields averaging 67.68 bushels per acre, compared to the reported state average of 22 bushels per acre in 2012. While the state average declined 5 bushels per acre from 2011, the contest winners' average increased by 0.35 bushel per acre.

The top three entries in the quality contest averaged a \$1.0983 premium over the \$15.05 cash price for their protein and oil contents. In 2011, that average was 55.25¢ above the \$11.34 cash price.

Howard Taylor, White Cloud, was the yield contest's overall dryland winner with 88.95 bushels per acre. Bob Wietharn, Clay Center, topped the irrigated entries with 84.81 bushels per acre. Bob Henry, Robinson, won the quality contest with a protein and oil premium of \$1.1256 per bushel.

The Kansas Soybean Association presented the state and district winners with plaques or certificates and monetary prizes from the Kansas Soybean Commission at the Kansas Soybean Expo, Jan. 9 in Topeka. The highest dryland and irrigated yields in the state each received a \$1,000 award. In each district, first place won \$300, second earned \$200, and third received \$100. No-Till on the Plains supplied additional prizes for the no-till categories.

Complete results, award photos and contest rules are available via the "Producer Information" tab on the commission's website (*http://www.KansasSoybeans.org*). *(\** 



Left: Howard Taylor (left), White Cloud, receives a plaque from KSA President Charles Atkinson, Great Bend, for being the Kansas Soybean Yield Contest's overall dryland winner at 88.95 bushels per acre. Middle: Brett Pfizenmaier, Clay Center, receives a plaque on behalf of Bob Wietharn, Clay Center, who was the Kansas Soybean Yield Contest's overall irrigated winner at 84.81 bushels per acre. Right: Bob Henry, Robinson, receives a plaque for winning the Kansas Soybean Quality Contest with a protein and oil premium of \$1.1256 per bushel.

# Home of the blues hosts 13th annual Soybean Leadership College

emphis, Tenn., is famous for Mits music, but a great lineup of speakers made sure no one was singing the blues when the Soybean Leadership College was there Jan. 8–10.

Trent Loos, the "Voice of Rural America," told about connecting rural and urban Americans with production agriculture. Bruce Scherr, chairman and CEO of Informa Economics, discussed "The Economic Climate for Agriculture and Issues Affecting Producers." Author Larry Johnson presented "Mastering the Storm: How to Stay Up, Stay Positive and

Thrive When Times Are Turbulent." Fifth-generation ranchers and noted advocates Troy and Stacy Hadrick shared their passion and tips for telling agriculture's story.

The State Leaders Summit, preceding the Soybean Leadership College, featured futurist Bob Treadway. He presented an agricultural outlook to United Soybean Board (USB), state soybean and American Soybean Association leaders, then he facilitated some strategic thinking about how the organizations can work together to address key industry issues.

# State, national checkoffs help tell ag's story to consumers

Dublic television's only show about American farms and farmers, *America's Heartland*, now is in its eighth season.



Episode 802 included Kentucky's unique bourbon soy sauce. Episode 810 took viewers to the Brunkow farm in Kansas for a dawn-to-dusk look at the challenges faced by a modern farm family.

New and returning features in Season 8 include "Agriculture 101," where consumers ask all kinds of questions about agriculture; "Off the Shelf," which examines food choices at the supermarket; and "Harvesting Knowledge," an exploration of the fascinating history of common foods.

The half-hour, weekly program is seen on more than 240 public-TV stations, including those in 21 of the top 25 U.S. markets. Additionally, the show has a YouTube channel that welcomes more than 90,000 visitors each month.

The United Soybean Board helps make presentation of America's Heartland possible. The Kansas Soybean Commission underwrites the program on KTWU-TV 11, Topeka; KPTS-TV 8, Wichita; and Smoky Hills Public Television, Bunker Hill. More information about the show, including local listings, is available at http://www.AmericasHeartland.org on the Web. 单



Peggy Bellar, Howard; Jerry Jeschke, Robinson; Kyle and Meredith Jeschke, Highland; Adam Phelon, Melvern; and Nicole Small, Neodesha, represented Kansas at the event. USB and the Kansas Soybean Commission were among the sponsors. 🚿



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# Smartphone apps cater to farmers, biodiesel users

Modern cellphones often can download applications – programs that run inside another service – to expand their functions. Numerous organizations now are turning to such "apps" to enhance how people interact with them and their products or services. The United Soybean Board (USB) and National Biodiesel Board (NBB) are among them.

**Extreme Beans.** USB's new app includes two calculators that help farmers plan for their next crop. One helps determine if the yield benefits of various input combinations justify the costs. The other uses the main maturity rates for a farmer's region, the cost of soybean seed and an estimated price of soybeans at sale time to determine an optimal seeding rate based on a percentage of return. The app also includes documents and vid-



eos that describe the research behind each tool.

"The checkoff is continually looking for ways to give farmers tools to improve production and increase the value of their soybeans," said Jim Schriver, an Indiana soybean farmer and USB director. "When we see opportunities to help add value to the product, not only in terms of production but also quality, we want to help it come to market."

**BiodieselNow.** Introduced at the 2013 National Biodiesel Conference, NBB's app lets users stay up-to-date with the latest biodiesel news, quickly find biodiesel stations across

the nation, track purchases and earn rewards. Every gallon of biodiesel purchased earns reward points that are redeemable toward merchandise from NBB's online store.

"This app puts America's advanced biofuel in the palm of your hand. We are very excited to be able to participate more actively in the mobilecommunication world and use the latest technology to get even more people tuned in to biodiesel," said Doug Whitehead, NBB director of operations. "As the biodiesel industry continues to advance and consumption grows, we feel it's important to help users find those retail locations and improve communication between NBB and the industry."

Find Extreme Beans and BiodieselNow in the Apple and Android app stores by searching for their titles. **•** 

# K-State's Jardine among honorees for work on soybean rust



Doug Jardine, Ph.D.

The 2012 Experiment Station Section Award of Excellence in Multistate Research went to a team of scientists from more than 30 land-grant universities, federal agencies and industry associations for identifying strategies to manage soybean rust, a fungal disease

that poses a serious threat to U.S. soybean production.

The team was honored at the Association of Public and Land-Grant Universities annual awards program in Denver, Colo., Nov. 11, 2012. Those recognized include Doug Jardine, Ph.D., a plant pathologist with K-State Research and Extension.

The project, "Response to Emerging Soybean Rust Threat," responded rapidly to soybean rust, which first was detected in the United States in 2004, causing serious concern due to high yield losses in South America. The disease has spread through the South and Midwest, with some states experiencing severe yield losses in isolated areas. Because disease-resistant soybean varieties are not yet available, the industry depends on fungicides to control it.

Beginning in 2005, soybean-rust sentinel plots were established across the state.

"Kansas soybean producers were major beneficiaries of this collaborative effort," Jardine said. "Because of these efforts, growers were confident in not applying fungicides to their crops in 2005 and 2006. In 2007, when soybean rust did appear in Kansas, fungicide applications were able to be targeted only to those areas of the state with established infections."

"Continued monitoring has indicated that no soybean rust has occurred in the state since 2007, saving producers \$25 to \$30 per acre for every acre not sprayed," he added.

The scientists have taken crucial steps toward minimizing the disease threat. They have tested and registered fungicides for use in the United States, giving soybean farmers more options for controlling the disease.

The project established an extensive disease-monitoring system that has helped farmers know more precisely when and what types of fungicide to use. Timely, accurate information has reduced the amount of fungicide farmers used, saving the soybean industry hundreds of millions of dollars and reducing the potential for human and environmental health effects.

The group also was recognized for innovative research on disease-resistant soybean varieties, which will provide more environmentally and economically sustainable longterm disease management.

The project has produced numerous multimedia materials that have been important for educating farmers, regulators and other industry members about soybean rust. *(\** 

### STATEMENTS OF NET ASSETS

### June 30, 2012 and 2011

	2012			2011	
ASSETS Current Assets		5.148.530	\$	5,094,424	
Accounts receivable		4,538		3,363	
Total Current Assets		5,153,068		5,097,787	
Noncurrent assets Capital assets, net of accumulated depreciation		1,727,860		1,569,483	
Total Assets		6,880,928	<u></u>	6,667,270	
LIABILITIES					
Accounts payable		642,459		436,703	
Accounts payable - KSA		16,855		16,130	
Total Current Liabilities		659,314		452,833	
Long-term Liabilities					
Payable to American Soybean Association	. <u> </u>	46,920	·	2,300	
Total Liabilities		706,234		455,133	
NET ASSETS				1 <sup>1</sup>	
Invested in capital assets, net of related debt		1,727,860		1,569,483	
Unrestricted:	•	715 507		720 777	
Designated Undesignated		3.731.327		3,912,382	
Total Net Assets	\$	6,174,694	\$	6,212,137	

See accompanying notes to financial statements

#### STATEMENTS OF ACTIVITIES

### For the years ended June 30, 2012 and 2011

		2012		2011
PROGRAM REVENUES				
Soybean assessments	\$	6,543,853	\$	8,159,345
Less:				
USB remittances		(3,183,160)		(3,972,747)
QSSB remittances		(170,377)		(207,205)
KDA collection fees		(3,057)		(3,261)
KDA first purchaser audits		(3,946)		(3,950)
Net assessments revenues		3,183,313		3,972,182
Program refunds		3,183		2,174
Interest income		35,798		27,643
Penalties		408		644
Grants	<u>.</u>	30,423	<u> </u>	42,363
Total Revenues		3,253,125		4,045,006
PROGRAM EXPENSES				
Projects:				
Research		1,082,664		1,009,229
Other		1,872,638		1,446,006
Supportive Services:				
Administration		336,732	·	297,932
Total Program Expenses	. <u> </u>	3,292,034	,	2,753,167
Program Income	-	(38,909)		1,291,839
NONPROGRAM INCOME AND EXPENSES				
Gain on sale of fixed assets		1,466		-
Change in Net Assets		(37,443)		1,291,839
NET ASSETS, beginning of year	· _ ·	6,212,137		4,920,298
NET ASSETS, end of year	\$	6,174,694	\$	6,212,137

See accompanying notes to financial statements

### STATEMENTS OF CASH FLOWS

# For the years ended June 30, 2012 and 2011

		2012	 2011
CASH FLOWS FROM OPERATING ACTIVITIES Cash received from checkoff Cash received from others Cash payments to suppliers for goods and services Interest received	\$	6,543,853 32,838 (6,324,602) 35,798	\$ 8,159,345 62,751 (6,554,686) 27,643
Net Cash Provided by Operating Activities		287,887	1,695,053
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES Payments for capital acquisitions Proceeds from sale of capital assets Change in long-term obligation		(332,151) 53,750 44,620	 (3,827) - (12,500)
Net Cash Used by Capital and Related Financing Activities		(233,781)	 (16,327)
NET CHANGE IN CASH		54,106	1,678,726
CASH, beginning of year		5,094,424	 3,415,698
CASH, end of year	\$	5,148,530	\$ 5,094,424
Reconciliation of Operating Income to Net Cash Provided by Op Change in Net Assets Adjustments to Reconcile Change in Net Assets to Net Cash Provided by Operating Activities: Depreciation Change in assets and liabilities:	perating A \$	Activities (38,909) 121,490	\$ 1,291,839 120,307
(Increase) decrease in accounts receivable		(1,175) 206.481	17,570 265.337
Net Cash Provided by Operating Activities	\$	287,887	\$ 1,695,053

See accompanying notes to financial statements

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### SCHEDULES OF PROGRAM EXPENSES

### For the years ended June 30, 2012 and 2011

	2012		2011	
			-	
Research Program Expenses:				
Kansas State University	\$	616,969	\$	725,125
Pittsburg State University		69,275		6,725
No Till on the Plains		15,000		15,000
Wichita State University		31,611		29,306
North Central Soybean Research Program		200,000		100,000
Kansas University		95,143		123,444
FAM Enterprises		11,000		3,000
Ohio Soybean Council		30,000		5,000
Bill Ayres project		10,500		-
Miscellaneous research expenses		1,996	•	1,629
Research and Consulting Fees	· .	1,170		-
Total Research Program Expenses	<u></u>	1,082,664	\$	1,009,229
Other Program Expenses				
International market development	\$	559,262	\$	443.896
Consumer information	-	180.334	-	120.369
Youth education program		47.804		44.388
Consumer awareness		35,000		30.000
Biodiese!		342,994		263.835
Industrial uses market development		67.559		26.219
Industry information & relations		230,301		150.510
Producer communications		409.384		366,789
	¢	1 872 638	¢	1 446 006
Total Other Program Expenses	_ب 	1,872,008	<u></u>	1,440,000
Administrative Support Services:				
Kansas Soybean Association administrative contract fees	\$	200,827	\$	165,045
Contracted administration		2,498		710
Meeting expenses		9,699		6,776.
Depreciation		111,279		111,215
Election costs		1,212		1,406
Professional services - audits		9,400	•	10,215
Postage		1,000	·	1,000
Office supplies		817		1,565
Total Administrative Support Services		336,732	\$	297,932