Kansas SUNFLOWER Commission

Report to the Senate Agriculture Committee
February 9, 2016

Chairman Love and members of the Committee please find a written overview of activities and research concerning the sunflower industry in Kansas and the Commission's use of check-off dollars authorized by the Legislature.

In fiscal year 2015 (10/1/2014 to 09/30/2015) the Kansas Sunflower Commission collected $53,571.48 in check-off dollars from Kansas sunflower growers. As of February 1, 2016 the Commission has assets totaling $86.045.45. In accordance with KSA 2-3005(k), attached to this report is the annual financial audit report. Again this year there were no irregularities found in KSC financial statements.

There was a slight increase in check-off dollars this year. The increase in check-off dollars is a result of a slight increase in acres planted and a better than average yield per acre. International and domestic demand for sunflower seed, oil and meal is overall on the increase, but the demand still lags behind other commodities. Lower market prices, lack of resistant varieties and high demand for other commodities make it difficult for sunflowers to compete for acres in the rich soils of Kansas. Producers making the choice to grow sunflowers are getting premiums, but even with those premiums prices are still below the higher value crops.

Under the agreement the KSC has used since its inception in 2002, one-half of the check-off dollars collected in Kansas are sent to the National Sunflower Association in Mandan, North Dakota for funding of promotion and research specific to sunflowers. This year KSC sent $26,785.74 to NSA for research. Money contributed by Kansas sunflower growers is leveraged many times to produce critical, weed, insect, genetic and agronomic research through NSA. A great deal of that research takes place in Kansas at K-State research stations. Many of the research projects will have a direct benefit to Kansas' growers. For your information I have attached a list of projects partially funded with Kansas check-off dollars.

We all understand how critical wise-use of Kansas' water resources is now and in the future. We feel Sunflower can be a key crop in water preservation yet still provide economic resources for the State and our agriculture producers. We urge you, the Governor and the Kansas Department of Agriculture to encourage growers to look at Sunflower as a transitional crop for water conservation.

Sunflower uses less water than many of our major crops and can be part of the solution for our future water conservation efforts.

Mr. Chairman the Kansas Sunflower Commission continues to look for opportunities to promote the sunflower, increase acres planted in our State and provide valuable crop research. We want to thank the Legislature for its continued support of our efforts. If you have any questions please feel free to contact us. Thank you.

List of Commissioners

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3	Vacant		
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6	Cameron Peirce Vice-Chair	210 N Ridge Rd. Hutchinson, KS 67501	(H) 620-663-2990 peircefarms@gmail.com
7,8,9	Brett Skillman	256 North 5th Street New Strawn, KS 66839	(H) 620-490-0520 brettskillman@gmail.com
AL	Gary Schellhorn Secretary	6485 Skiddy West Rd. Junction City, KS 66441	(H) 785-349-2926 (C) 785-466-1235 gschellhorn@tctelco.net
AL	Karl Esping Chairman	888 Sioux Rd. Lindsborg, KS 67456	785-227-2802 Karlesping@msn.com

Kansas Research Projects

Inheritance and mapping of sunflower insect resistance traits

Description: Sunflower moth is the most damaging sunflower insect across the central and southern Great Plains. Sunflower moth larvae cannot survive winters in the northern Great Plains, but adult moths emerge early in the south and (while completing several generations) are carried northward by prevailing winds. While migrating moths may sometimes cause damage as far north as Manitoba, they are a more consistent threat in southern states like Texas and Kansas. Female moths are attracted to lay eggs on sunflower in early-bloom stage. Newly-hatched larvae feed on pollen, but later consume florets and seeds. The goal of this project is to use elite germplasm and germplasm with documented value for host plant resistance to determine the mode of inheritance or map the location of genes responsible for resistance to target insects. The products from research will be released germplasm along with information (i.e., genetic markers) that permits commercial seed companies to develop inbreds or hybrids without the need to directly screen for insect resistance. In the long-term, this and related projects should permit development of germplasm with resistance to multiple pests or multiple types of resistance. If germplasm with enhanced resistance is successfully incorporated into commercial hybrids, positive impacts should include more consistent yields or decreased costs of insect management.

Funded Amount: $16,720

Timing of Irrigation for Tall and Short Stature Sunflower Hybrids to Help Improve Land Allocation Decisions

Description: Little information exists differentiating the timing or irrigation for tall and short stature sunflower hybrids. In the US Great Plains region there is expressed interest in the newer short stature hybrids in that they canopy sooner helping with weed control and they can be more resistant to lodging. Many irrigators in the Central Great Plains have marginal capacity irrigation systems and there will be more producers facing this in the future. Many producers are coping with marginal capacity wells by planting only a portion of their irrigated area to higher water use crops and are planting stress tolerant sunflower to the remaining area that will be deficit irrigated. For this to work effectively the timing of irrigation for the sunflower and the alternative crop must be carefully balanced. In the proposed study, the timing of irrigation for three various length periods centered on the R5 (flowering) sunflower growth stage will be compared for both tall and short stature sunflowers under three different irrigation capacities (inches/day). This can help producers better decide on land allocation, particularly in cases where center pivot sprinklers are split into multiple crops.

Funded Amount: $20,000

Efficacy and Economics of Insecticide Seed Treatments for Management of Wireworms and Seed Corn Maggots in Sunflowers

Description: This project addresses the National Sunflower Association research priority in the pest management focus area: Insects - Controlling priority insects including

sunflower head moth, wireworms and seed maggots through conventional insecticide means, seed treatments or other innovative techniques. Wireworms and seed corn maggots are occasional pests of sunflowers, but when present they can significantly reduce stands and diminish crop production. In certain locations in Kansas, moreover, other seed-feeding beetles called false wireworms can have equally devastating consequences to sunflower stands, and the effectiveness of insecticide against false wireworms has not been established. The results of this research have the potential to improve management of wireworms and other sunflower insects in areas where they are especially problematic and cause significant losses. The outcomes will include improved knowledge of insecticide efficacy in controlling target pests and an analysis of the net economic benefits to sunflower producers.

Funded Amount: $34,867

Development of Confection Sunflower Effectively Resistant to Downy Mildew and Rust

Description: Downy mildew (DM) and rust are an important cause of yield loss in confection sunflower. Unfortunately, no resistant germplasm or commercial hybrids are available in confection sunflower. The objectives of this proposed project are to incorporate DM resistance into confection sunflower, and to pyramid DM and rust resistance genes in a single genetic background. The confection germplasms with DM resistance combined with rust resistance will be provided to the private seed industry for incorporation into finished hybrids.

Funded Amount: $96,380

Crop Protection:
NSA was able to get approval for IR-4 funds to be used for Pyroxasulfone for field trials, lab residue tests and assistance to accelerate the registration process at EPA. Pyroxasulfone herbicide has utility in conventional, Clearfield, or Express Sun sunflower production systems to achieve greater weed control than currently exists. Pyroxasulfone strengths are annual grass control with some broadleaf weed activity. Spartan strengths are annual broadleaf weeds control with slight annual grass suppression. Since both herbicides are soil-applied, combining and applying the two together may control many grass and broadleaf weeds that infest sunflower fields. Research in Kansas has shown annual grass weed control similar to or greater than acetanilide herbicides but was also very effective on many broadleaf weeds including pigweed species, lambsquarters, kochia, and many other weeds. Weeds that Pyroxasulfone does not control are common cocklebur, giant ragweed, and sunflower. Pyroxasulfone has a mode of action in which no major crop weeds have developed resistance. The field trials were conducted and the lab residue work was completed in 2015. This product is expected to be available to producers in 2017.

VARNEY
& ASSOCIATES, CPAs, LLC

January 29, 2016

Board of Directors
Kansas Sunflower Commission
Berryton, Kansas

Independent Auditor's Report

We have audited the accompanying financial statements of Kansas Sunflower Commission (the Commission), a quasi- municipal entity, which comprise the statements of assets, liabilities, and net assets — cash basis as of August 31, 2015 and 2014, and the related statements of revenues, expenses, and changes in net assets — cash basis for the years then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements
Management is responsible for the preparation and fair presentation of these financial statements in accordance with the cash basis of accounting as described in Note 1; this includes determining that the cash basis of accounting is an acceptable basis for the preparation of the financial statements in the circumstances. Management is also responsible for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility
Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Commission's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Commission's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion
In our opinion, the financial statements referred to above present fairly, in all material respects, the assets, liabilities, and net assets of Kansas Sunflower Commission as of August 31, 2015 and 2014, and its revenues, and expenses for the years then ended in accordance with the cash basis of accounting as described in Note 1.

Basis of Accounting
We draw attention to Note 1 of the financial statements, which describes the basis of accounting. The financial statements are prepared on the cash basis of accounting, which is a basis of accounting other than accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to that matter.

Varney & Associates CPAs, LLC

Certified Public Accountants
Manhattan, Kansas

Independent Auditor's Report

KANSAS SUNFLOWER COMMISSION
Berryton, Kansas
STATEMENTS OF ASSETS, LIABILITIES, AND NET ASSETS - CASH BASIS
August 31,

	2015	2014
ASSETS		
Current Assets		
Cash	$ 79,213	$ 78,967
TOTAL ASSETS	$ 79,213	$ 78,967
NET ASSETS		
Net Assets	$ 79,213	$ 78,967
TOTAL NET ASSETS	$ 79,213	$ 78,967

See Independent Auditor's Report.
The accompanying notes are an integral part of these financial statements