Approved:	February 10, 2000
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MINUTES OF THE HOUSE COMMITTEE ON AGRICULTURE.

The meeting was called to order by Chairman Dan Johnson at 3:30 p.m. on February 2, 2000, in Room 423-S of the Capitol.

All members were present except:

Representative Showalter - excused

Committee staff present:

Raney Gilliland, Research Department Gordon Self, Revisor of Statutes Office Kay Scarlett, Committee Secretary

Conferees appearing before the committee:

Tom Tunnell, Kansas Grain and Feed Association

Dr. Marc Johnson, Dean and Director, Kansas State University Agricultural Experiment Station and Cooperative Extension Service

Dr. Walter H. Fick, Associate Professor, Department of Agronomy, Kansas State University

Harry E. Huff, Huff's Gardens, Inc., Burlington, Kansas

Larry Seivley, Seivley's Garden Center, El Dorado, Kansas

Ben Miller, Stutzman Greenhouse, Hutchinson, Kansas

Loren Bloomgren, Grigsby Greenhouse, Salina, Kansas (written only)

Alan Stevens, Executive Secretary, Kansas Greenhouse Growers Association

Others attending:

See attached list

Minutes of the January 24 and 26 meetings were distributed. Chairman Johnson asked members to notify the committee secretary of any corrections or additions prior to 5:00 p.m., February 3, or they will be considered approved as presented.

Chairman Johnson gave an update on his testimony before the House Appropriations Subcommittee on the Department of Commerce and Housing Budget to request additional EDIF funding for enhancement of the programs of the Agriculture Products Development Division. The Chairman reported that the Governor supports this proposal.

Tom Tunnell, Kansas Grain and Feed Association, requested introduction of a committee bill concerning an amendment to the Kansas warehouse act to make it consistent with federal law. He said this proposal was also introduced as a Senate bill. Representative Schwartz moved to introduce this request as a committee bill. Seconded by Representative Mollenkamp, the motion carried.

Dr. Marc Johnson, Dean and Director, Kansas State University Agricultural Experiment Station and Cooperative Extension Service, discussed the proposed site development plan for the new Grain Science and Industry Complex at Kansas State University. He explained that the complex will have five buildings, the first four to be built with private funds, including support from the grain commodity commissions on the International Grains Program Building. (Attachment 1)

Dean Johnson discussed proposed changes in the Kansas County Extension Council Law to change procedures for electing County Extension Council members that was introduced in the Senate. The proposal is to elect a 7-member County Extension Council in regular, nonpartisan spring elections held during odd-numbered years; four members would be selected in one election and three in the next, with four-year terms. He said the current two-year term is considered too short for effective leadership, and it is hoped that this proposal will increase voter participation. No changes in the county extension budgeting process are proposed. (Attachment 2)

CONTINUATION SHEET

Dr. Walter H. Fick, Associate Professor, Department of Agronomy, Kansas State University, reported on the objectives and progress of sericea lespedeza research being conducted by the University. Their goal is to develop a research and extension program to limit the spread and enhance the management of sericea lespedeza in Kansas. Sericea lespedeza will become a statewide noxious weed July 1, 2000. Dr. Fink provided a copy of their new color brochure on the history, characteristics, and identification of sericea lespedeza. (Attachment 3)

Hearing on HB 2702 - Sales and property tax exemption for greenhouse machinery and equipment.

Chairman Johnson opened the hearing on <u>HB 2702</u> and asked Raney Gilliland to explain the bill. As this was a tax bill, April Holman, Legislative Research Department, was in attendance to answer questions. Mr. Gilliland explained that <u>HB 2702</u> would exempt farm machinery and equipment used in the operation of a greenhouse from all property or ad valorem taxes levied under the laws of the State of Kansas. The bill would, also, exempt sales tax on the sale, repair, parts, and service of machinery and equipment used in the operation of a greenhouse. Current law exempts nurseries, the confusion is whether or not this includes greenhouses. The fiscal note for this bill had not been prepared; however, Shirley Sicilian, Kansas Department of Revenue, said that the fiscal impact would be minimal.

Harry E. Huff, Huff's Gardens, Inc., Burlington, testified in support of <u>HB 2702</u> to include the wording greenhouses and greenhouse ornamental crops within the definition of agriculture in the Kansas Statutes. He reported being denied agriculture status because greenhouses are not specifically exempted in the statutes. After hiring an attorney and applying for a hearing before the State Board of Tax Appeals, he said his business was designated agriculture. (Attachment 4)

Larry Seivley, Seivley's Garden Center, El Dorado, appeared in support of <u>HB 2702</u>. He said clarification of the statutes is needed so that taxation will be uniform in all counties in the state in regard to greenhouse growing operations. (<u>Attachment 5</u>)

Ben Miller, Stutzman Greenhouse, Inc., Hutchinson, testified in support of **HB 2702.** He related their experiences to prove their agriculture status and asked for clarifying language to include the terms *greenhouse* and greenhouse ornamental crops in the statutes. (Attachment 6)

Mr. Miller read the written testimony submitted by Loren Bloomgren, owner and operator of Grigsby Greenhouse in Salina, in support of <u>HB 2702</u>. His testimony asked that the words *greenhouses and greenhouse ornamental crops* be included in the definition of agriculture in the Kansas Statutes to eliminate confusion and make the tax laws consistent statewide. (<u>Attachment 7</u>)

Alan Stevens, Executive Secretary, Kansas Greenhouse Growers Association, spoke in support of **HB 2702** to amend Kansas Statutes wherein agriculture is defined to include the wording *greenhouses and greenhouse ornamental crops*. He said the exclusion of such specific wording has caused Kansas greenhouse companies undo harm in the form of legal fees, wasted managerial time, and unfair disadvantage in the market place. He said that various local and county governing entities are interpreting Kansas Statutes differently as they relate to the wholesale greenhouse industry. (Attachment 8)

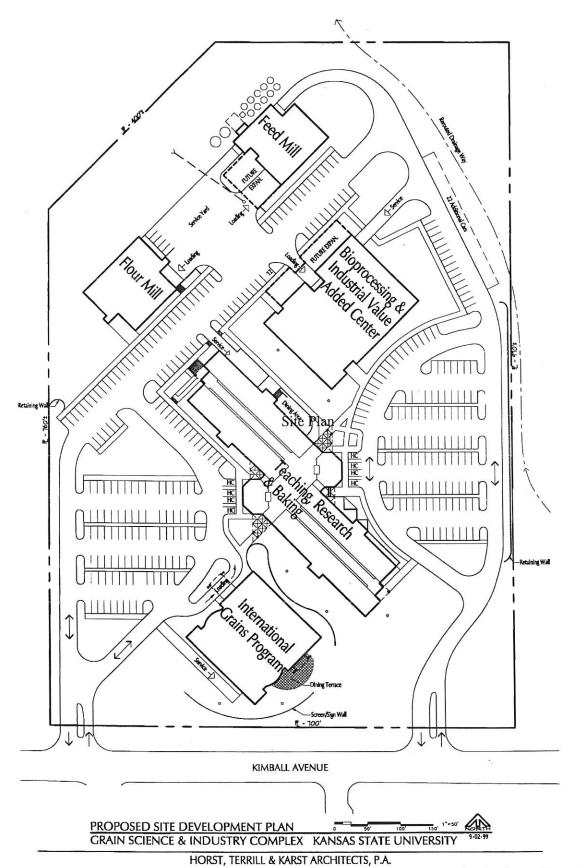
The committee expressed concern about how to differentiate between a production wholesale greenhouse and a retail greenhouse for tax purposes. Mr. Huff suggested using the definition *production greenhouses and greenhouse ornamental crops*. It was suggested that possibly these tax exemptions could be handled through rules and regulations. Stating that the confusion is at the county level, the conferees would like a state definition in the Kansas Statutes.

The meeting adjourned at 4:47 p.m. The next meeting is scheduled for February 7, 2000.

HOUSE AGRICULTURE COMMITTEE GUEST LIST

DATE: February 2, 2000

NAME	REPRESENTING	
Jahr Jinni	Ks Lhain - Feed Asso.	
Dorg Wareham	KUFA / KFCA	
Tom Tunnell	11 4	
Walter Fick	KSU - Agronomy	
Mare Johnson	KSU-Res. & Extr.	
Steven Grabon	K-State Research + Fixtensin	J
Tan Sin	Yours, Dept. of Agriculture	
Carole Jordan	KDA	
Bill Fuller	Kansas Farm Buray	
Harry Huff	KGGA	
Kerri Elert	KS Dairy association	
John Garlings	KDA	
JOHN KABUS	SHAWNEE COUNTY NOXIOUS WEETS	
DONNAC, COLEMAN	K66A	
Judy Henry	KGGA	
Ben Miller	K6.6.A	
Larry Sewley	KGGA	
Alan Stewers	KANSAS GREENHOUSE GROWERS AS	55N.
Vivier 01Set	A6 Resources & Comm	
Shriley Sillian	Ks. Dept. of Revenue	



K-State Grain Science and Industry Complex—PROSPECTUS

Functionality of Buildings

Feed Mill:

1999

Cost: \$5.5 million

Feed Science and Management: Teaching/ Research

Feed Milling Capacity (60 T/day)

Industry Service (Processing/Short Courses)

International Grains Program:

2000

Cost: \$4.0 million

Executive Conference Center

Commodity Marketing, Processing, Utilization and

Technical Training Center

Custom Designed Programs - Industry and Grain Trade

Flour Mill:

2001

Cost: \$5.2 million

Milling Science and Management: Teaching/Research

Wheat Milling Capacity (20 T/day)

Industry Service (Processing/Short Courses)

Bioprocessing and Value Added Center:

2004

Cost: \$5.9 million

Pilot Plant/Scale Up Processing

Flex Plant/Equipment Processing Evaluation

Value Added Product Development

Extrusion/Fermentation/Food and Non-Food

Applications

Teaching/Research/Baking:

2008

Cost: \$40.6 million

Baking Science and Management: Teaching/Research Undergraduate Teaching Classrooms/Laboratories

Faculty/Graduate Students Offices and Research

Laboratories

Baking/Dough Rheology Laboratories

Administrative Offices

Information Relating to Proposed Changes in the Kansas County Extension Council Law K.S.A. 2-608 through 2-622 to Change Procedures for Electing County Extension Councils

Purpose: Currently, Kansas citizens of voting age elect a 24-member County Extension Council, in each county, by one of three methods:

- a) at a meeting in each County Commissioner district,
- b) at a countywide meeting, or
- c) by mail ballot.

Most County Councils have chosen at large elections at a countywide meeting.

In more than 90 percent of counties, the County Extension Council is elected with less than one percent of voters participating.

The purpose of this change is to permit citizens to select a county extension governing body with a general election method with greater public access to voting.

Additionally, the current two-year term is considered too short for effective leadership.

Proposal: Elect a 7-member County Extension Council in regular, nonpartisan, spring elections held during odd-numbered years. Four members would be selected in one election and three in the next, with four year terms.

Procedures: The election procedure is to be designed by county election officials to resemble existing spring election procedures.

"Elections to choose members of the county extension council shall be conducted, the returns made, and the results ascertained in the manner provided by law for general county elections. Each person desiring to be a candidate for membership on the council, in any election, shall file a declaration of candidacy with the county election officer following county election procedures."

No changes in the county extension budgeting process are proposed.



Department of Agronomy

BIOLOGY AND CONTROL OF SERICEA LESPEDEZA Walter H. Fick Associate Professor

I. Introduction

- ► Collaborators: Gary Kilgore, SE Area Agronomist, Chanute and Jeff Davidson, CEA-Ag, Greenwood County, Eureka
- Funding History: \$26,000 FY 1999 and \$24,260 FY 2000
- ▶ Problem in Kansas 335,000 acres

II. Research Objectives and Progress

a. Basic Research

• investigate factors influencing the translocation of a ¹⁴C-labeled herbicide to the bud zone

An undergraduate research assistant will conduct a study in 2000 to determine the absorption and translocation of four herbicides applied to serice alespedeza in the seedling stage.

 determine the size of the sericea lespedeza seed bank in the soil, level of seed dormancy, and germination percentage

Sericea Lespedeza Seed Bank and Germination Percentage					
Location	% Gerr Un-scarified	nination Scarified	Number of Seed Per Acre		
Blaine	16	82	47 million		
Maple Hill	4	83	31 million		
Eureka	2	72	15 million		

b. Applied Research

determine the appropriate spray volume to use to achieve optimum control

Aerial application of metsulfuron (Escort) at 0.5 oz/acre in 3 or 5 gpa spray volumes in September 1998 in Greenwood County resulted in equivalent control.

Another plot was established near Maple Hill, KS on October 11, 1999 to assess the influence of ground applying herbicides at 5, 10, and 20 gpa spray volumes.

 determine the efficacy of longer residual herbicides such as tebuthiuron for control of sericea lespedeza

Tebuthiuron (Spike 80W) was ineffective in controlling sericea lespedeza treated in a late vegetative or late bloom stage. Longer term residual control, up to 2 years after treatment, has been obtained using 0.5 oz/acre metsulfuron (Ally/Escort) or 1.5 pints/acre triclopyr (Remedy).

 compare repeated annual mowing with recommended herbicides and mowing + herbicides for sericea lespedeza control

Plots mowed in July 1998, were re-mowed in July 1999 and will be monitored for control in 2000. Mowing sericea lespedeza at a late vegetative stage (early July) combined with applications of triclopyr at 0.5 pints/acre or metsulfuron at 0.2 oz/acre 4 to 7 weeks after mowing have resulted in greater than 70% control of sericea lespedeza 1 to 2 years after treatment. Triclopyr at 1 to 1.5 pint/acre applied during the vegetative or early bloom stage has resulted in 70-99% control. Metsulfuron at 0.3 to 0.5 oz/acre applied during early bloom to early seed set has generally resulted in greater than 90% control.

• investigate ways of increasing grazing use of sericea lespedeza, e.g. enhancing palatability, grazing systems, kind and class of animal

Grazing goats at 3.5 head/acre at a site near Reading, KS in 1998 and 1999 resulted in 56-78% utilization of sericea lespedeza. The number of seeds produced per stem in 1998 was 979 and 3.5 on ungrazed and grazed plants, respectively. In addition, the size of the seed bank is decreasing on the grazed site. (Dr. James Mayo, Emporia State University)

c. Extension

 publication of a color brochure detailing identification and control of sericea lespedeza

Kilgore, G., J. Davidson, and W.H. Fick. 1998. Sericea lespedeza. Forage Facts Publication Series. Kansas State Univ. Agr. Exp. Sta. and Coop. Ext. Serv., Manhattan.

Davidson, J., W.H. Fick, G. Kilgore, and P.D. Ohlenbusch. 1999. Sericea lespedeza: history, characteristics, and identification. MF-2408. Kansas State Univ. Agr. Exp. Sta. and Coop. Ext. Ser., Manhattan.

 demonstration plots showing proper timing and application of herbicides for sericea lespedeza control

Fick and Kilgore establish a number of research plots each year that provide information used in regular extension meetings.

• conduct fiel ays and workshops to view and discus an agement options regarding sericea lespedeza

See attached Report of Progress for Kansas Department of Agriculture Project

Other Publications

- Dudley, D.M. 1998. Integrated control of sericea lespedeza in Kansas. M.S. Thesis, Kansas State Univ., Manhattan.
- Dudley, D.M., and W.H. Fick. 1996. Integrated control of sericea lespedeza in Kansas. Proc. North Central Weed Sci. Soc. 51:25-26.
- Dudley, D.M., and W.H. Fick. 1997. An integrated approach to serice lespedeza control. Proc. North Central Weed Sci. Soc. 52:19-20.
- Dudley, D.M., and W.H. Fick. 1998. Sericea lespedeza control in eastern Kansas rangelands. Abstracts, Soc. Range Manage. Annual Meeting, Guadalajara, Mexico, Feb. 8-12, p.62.
- Fick, W.H. 1990. Biology and control of sericea lespedeza. Proc. North Central Weed Sci. Soc. 45:64.
- Fick, W.H. 1992. Biology and control of sericea lespedeza. p. 10. In: Managing Problem Exotic Plant Species in Missouri & the Midwest, Oct. 6-7, Columbia, MO.
- Fick, W.H. 2000. Alternative herbicides and mowing for sericea lespedeza control. Abstracts, Soc. Range Manage. Annual Meeting, Feb. 13-18, Boise, ID (In Press)
- Fick, W.H. 2000. Integrated sericea lespedeza control in Kansas. Report of Progress, Kansas State Univ. Agr. Exp. Sta. and Coop. Ext. Ser. (In Press, Cattlemen's Day, March 3)
- Mayo, J.M., and T. Eddy. 2000. Biological control of sericea lespedeza (*Lespedeza cuneata*). Abstracts, Soc. Range Manage. Annual Meeting, Feb. 13-18, Boise, ID (In Press)
- Miller, B., W. Fick, and G. Kilgore. 2000. Herbicidal activity of triclopyr and fluroxypyr on sericea lespedeza. Abstracts, Soc. Range Manage. Annual Meeting, Feb. 13-18, Boise, ID (In Press)
- Ohlenbusch, P.D. and J.M. Mayo (eds.). 2000. Sericea lespedeza and the future of invasive species: A symposium with a look to the future. Feb. 26, Eureka, KS and March 11, Wamego, KS. Kansas State Univ. Agr. Exp. Sta. and Coop. Ext. Ser., Manhattan (In Press)

KAI AS DEPARTMENT OF AGRICUL! RE Contract No. 1454

Project Name: Developing a Research and Extension Program to Limit the Spread and Enhance

the Management of Sericea Lespedeza in Kansas

Investigators: W.H. Fick, G. Kilgore, P. Ohlenbusch, J. Davidson, and R. Kunard

Report of Progress

- 1. An assistant scientist, Rodney Kunard, was hired to assist with the project. His official start date was September 27, 1999. He recertified as a Commercial Pesticide Applicator.
- 2. A questionnaire was developed and approved by the Committee on Research Involving Human Subjects. The questionnaire will be used to survey selected ranchers to determine the known history and management of sericea lespedeza on infested and non-infested sites.
- 3. The following educational activities were done:
 - a. Presentations on "Introduction to sericea lespedeza" and "Current control technologies" at Sericea Lespedeza Work Group Meeting, Ft. Riley, KS - July 29, 1999
 - b. Presentation on "Sericea lespedeza control" at Controlling Sericea Lespedeza in Nemaha County meeting hosted by Nemaha County Noxious Weed Department, Nemaha County K-State Research and Extension, and Dow Agrosciences September 20, 1999
 - c. Presentation on "Control options for sericea lespedeza" at Field Day, Using Goats to Control Sericea lespedeza, Kansas Department of Wildlife and Parks, Reading, KS -September 28, 1999
 - d. KKSU Radio interview, "Sericea lespedeza history, characteristics, and identification" October 7, 1999
 - e. Invited presentation, "Sericea lespedeza potential weed of the High Plains" at Colorado Weed Management Association Annual Meeting, Pueblo, CO December 7-8, 1999
 - f. K-State Research and Extension and Emporia State University are planning two symposia entitled, "Sericea Lespedeza and the Future of Invasive Species" for February 26, 2000 at Eureka, KS and March 11, 2000 at Wamego, KS.
- 4. A plot was established near Maple Hill, KS on October 11, 1999 to assess the influence of applying herbicides at 5, 10, and 20 gallon/acre spray volumes for sericea lespedeza control.
- 5. Seven herbicide treatments were applied to a sericea lespedeza stand during seed production on October 25, 1999 at a site near Eureka, KS. On November 10, 1999 the plots were evaluated for defoliation and seed collected for germination tests. Herbicides resulted in 55 to 88% defoliation. Seed production ranged from 81 to 501 seeds/plant and averaged 267 seeds/plant. Dry weather and early freezes probably reduced seed production in 1999. Germination tests are yet to be done.
- 6. A site near Blaine, KS has been flagged and initial sericea lespedeza density determined. The site will be used in the spring, 2000 to determine the influence of burning on seedling germination and establishment and the effects of herbicides for seedling control.

EXECUTE Research and Extension

Sericea Lespedeza: History, Characteristics, and Identification



Figure 1. The flowers of Sericea lespedeza are born in the axils of the leaves.

Sericea lespedeza (Lespedeza cuneata) or Chinese bush clover is an introduced perennial legume native to eastern Asia. It was first recognized as a potential weed problem in southeast Kansas in the early 1980s. Sericea lespedeza is most common in the eastern third of Kansas, but has spread westward, with more than 50 counties reporting its occurrence. Counties began declaring it a "county option" noxious weed in the late 1980s. More than 300,000 acres are currently infested by sericea lespedeza. The Kansas Legislature has passed legislation that will make it a statewide noxious weed July 1, 2000. Sericea lespedeza is the first federally listed crop to be declared a noxious weed.

Sericea lespedeza was first planted in the United States in 1896 by the North Carolina Agricultural Experiment Station. Little study or use of sericea lespedeza was done until 1924 when the USDA secured seed from Japan and planted it at the Arlington Experiment Farm in Virginia. Its value for erosion control, hay, wild-

life, and seed production were soon demonstrated. It was not widely used for pasture until the late 1940s.

Sericea lespedeza is adapted to climatic conditions extending from Florida to Texas, north to Nebraska, and east through Michigan and New York to the Atlantic Coast (Figure 2). It grows best where annual precipitation is 30 inches or more and has survived winter temperatures of minus 17 degrees Fahrenheit.

It is recognized for its tolerance of drought, acidity and shallow soils of low fertility. It will tolerate soils ranging from very acidic to slightly alkaline, but is best adapted to a pH of 6.0 to 6.5. It does best on clay and loamy soils that are deep, fertile and well drained, but also will grow on poor sites. It has few insect and disease problems.

In the 1930s it was grown at Hays and planted on strip-mined areas in southeast Kansas. Plantings were made on federal and state reservoirs for wildlife habitat in the 1940s and 50s. It was also used in Soil Bank plantings along with tame grasses in the 1950s. Most recent introductions of the plant occurred while establishing native grass on Conservation Reserve Program (CRP) acres, a provision of the 1985 Farm Bill.

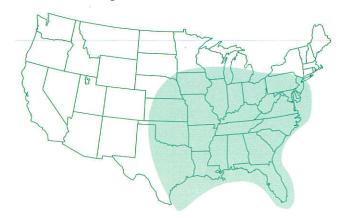


Figure 2. The known area of adaptation of Sericea lespedeza.



Figure 3. A field view of Sericea lespedeza as it approached the bud stage.

The native grass seed harvested from rangeland and used in these plantings contained sericea lespedeza seed. Sericea lespedeza was not recognized as a potential weed at that time.

Identifying Sericea Lespedeza

Sericea lespedeza is a shrubby, deciduous perennial about 2 to 5 feet tall (Figure 3). Stems are single or clustered with numerous branches (Figure 4). Each year, new growth comes from buds located on the stem bases or crown about 1 to 3 inches below ground (Figure 5). Stems and branches are densely leaved. Leaves are trifoliate and attached by short petioles. Leaves are club-or wedge-shaped (wider at the tip than the base), ½ to 1 inch long, and ½ to ½ inch wide. The leaf has a round to flat tip. The lower leaf surface has silky hairs. Scalelike stipules are present on the stem.

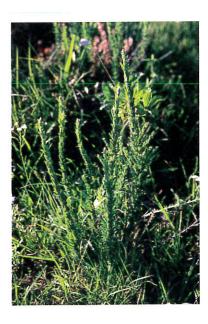


Figure 4. The multistemmed growth habitat of Sericea lespedeza at an early stage.

Flowers are yellowish-white with purple to pink markings from mid-July to early October. The flowers occur in clusters of 1 to 3 in the upper leaf axils (Figure 1). Flowers are 1/4 to 3/8 inch long and fused at the base. Seeds are 1/16 to 1/8 inch long and tan or greenish in color (Figure 6).

Several species of lespedeza occur in Kansas. All are perennial except Korean and common lespedeza. These two annuals are introduced and commonly used in tamegrass pastures and are a valuable forage in southeast Kansas. Native perennial lespedezas in Kansas include roundhead, violet, and slender lespedeza. None of these species has shown the invasive nature of sericea lespedeza. Slender lespedeza is the easiest to confuse with sericea lespedeza. Slender lespedeza has the same tall, coarse, branched stems as sericea lespedeza but has different colored flowers and a different leaf shape. Flower color of slender lespedeza ranges from purple to pink and the leaves are linear or elliptical with both a rounded tip and base.

Competitive Characteristics

Established sericea lespedeza plants will reduce or eliminate competing vegetation. It is relatively slow to establish, having a rather weak, vulnerable seedling stage. At the same time, it is opportunistic, and will establish itself in full sun or partial shade. Sericea lespedeza tolerates shade quite well, establishing in dense shade where direct sunlight does not reach during the day.

Germination and seedling growth are regulated by day length and temperature. Growth increases as day length exceeds 11 hours with maximum seedling growth at 13 to 15 hours of day length. Optimum temperatures for germination and growth range from 68 to 86 degrees Fahrenheit.

During establishment, sericea lespedeza uses most of its energy producing a root system. It has a deep woody taproot producing numerous branches that spread laterally and downward to a depth of 3 to 4 feet. Finer more fibrous roots also are produced. This extensive root system helps make sericea lespedeza competitive and somewhat drought resistant.

Sericea lespedeza has been found growing in ditches or fence rows without invading adjacent

well managed range and pasture with good plant cover. Sericea lespedeza appears to establish best where competing vegetation is very short and light is allowed to reach the germinating seed and seedlings. Many legumes need good exposure to sunlight during the seedling stage, which is the situation found in a burned pasture. Fire is assumed to enhance establishment possibly due to more sunlight available to the seed and seedlings. Seedlings will germinate and survive at low population levels where ground cover and other plant competition is quite dense such as fence rows, brushy and grassy areas, and where fire and grazing have been excluded for years.

When sericea lespedeza becomes established, it restricts the amount of light reaching other plants. Its tall, upright growth with multiple branches and dense foliage provides heavy shading. Cool-season grasses such as Kentucky bluegrass are better able to survive shading caused by dense stands of sericea lespedeza. Warm-season grasses such as big bluestem may survive some shading but will be weak and produce little forage unless the shading is removed.

The photosynthetic rate of sericea lespedeza is only half that of alfalfa. It requires more water to produce foliage than other warm-season plants, creating a "drought" for competing vegetation. The plant produces allelopathic chemicals, which inhibit seed germination and growth of some plants. These chemicals are released from the roots and leached from other plant residues, chiefly leaves.



Figure 5. The root and stem growth of Sericea lespedeza.

Sericea lespedeza is a legume, but has a low nitrogen fixation rate and has little effect on the status of soil nitrogen. It has been shown to increase the nitrogen content of associated grass, but what nitrogen is supplied is offset by the allelopathic substances produced. Grass shoots exposed to allelopathic substances have lower nitrogen content resulting in reduced forage quality. Nitrogen fertilizer is required to maintain production of introduced forage grasses grown in mixtures with sericea lespedeza.



Figure 6. The seed of Sericea lespedeza.

Sericea lespedeza is a prolific seed producer. Individual stems may produce in excess of 1,000 seeds with 300 to 600 pounds of seed produced per acre. There are about 350,000 seeds per pound. Most sericea lespedeza seed is hard with normal germination rates of only 10 to 20 percent. The seeds are nearly impervious to water so they must be scarified to enhance germination.

Forage Quality

Sericea lespedeza has been recognized as a quality forage due to its high levels of crude protein. The sericea lespedeza that is invading has a high tannin content unlike newer varieties that have been developed. Livestock do not like to graze sericea lespedeza high in tannins. The level of tannins appears to increase with maturity of the plant, high air temperatures, and low rainfall. Tannins bind with proteins causing them to be unavailable for digestion. This combination makes sericea lespedeza unpalatable and reduces

intake and digestibility. The tannins also reduce insect feeding.

Livestock readily consume the hay since field drying decreases the tannin concentration. Cattle will graze sericea lespedeza mainly early in the growing season, under management-intensive grazing, or intensive early stocking. It is especially available for grazing if the previous years growth has been removed by a spring burn. Sheep and goats will more readily select and consume sericea lespedeza.

Wildlife Considerations

Sericea lespedeza was originally considered valuable as food and cover for wildlife. This has not been supported by research or practical experience. Deer will utilize sericea lespedeza that is kept short by mowing or grazing. They also will use sericea lespedeza as browse in winter but their role in spreading sericea lespedeza is unknown.

Jeff Davidson

Extension Agriculture Agent Greenwood County

Gary Kilgore

Extension Specialist Crops and Soils, Southeast Quail consume the seeds in fall and early winter, but the energy content of the seeds will not sustain quail through adverse weather conditions. Seeds have also been found in the stomach contents of cotton rats. Sericea lespedeza probably holds its greatest wildlife benefit as a source for cover. However, when dormant, little cover is provided since sericea lespedeza is deciduous and shade prevents other plants from developing.

Summary

Sericea lespedeza has occurred in Kansas since the 1930s but was not considered a problem until the 1980s. Its highly competitive and invasive nature together with low palatability make it undesirable on rangeland, improved cool-season pasture, and roadsides. Early identification and prevention of seed production are essential for long-term management and control.

Walter H. Fick

Range Research Scientist Department of Agronomy

Paul D. Ohlenbusch

Extension Specialist
Range and Pasture Management

The authors would like to acknowledge the contributions of Dr. Jim Mayo, Dr. Tom Eddy, and Joan Young from Emporia State University and Bill Scott from the Kansas Department of Agriculture. Printing financed all or in part through a special appropriation from the Kansas Legislature for the Biology and Control of Sericea lespedeza.

Brand names appearing in this publication are for product identification purposes only. No indorsement is intended, nor is criticism implies of similar products not mentioned.

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Kansas State University Agricultural Experiment Station and Cooperative Extension Service

MF-2408 August 1999

It is the policy of Kansas State University Agricultural Experiment Station and Cooperative Extension Service that all persons shall have equal opportunity and access to its educational programs, services, activities, and materials without regard to race, color, religion, national origin, sex, age or disability. Kansas State University is an equal opportunity organization. Issued in furtherance of Cooperative Extension Work, Acts of May 8 and June 30, 1914, as amended. Kansas State University, County Extension Councils, Extension Districts, and United States Department of Agriculture Cooperating, Marc A. Johnson, Director.

Huff's Gardens, Inc. 617 Juniatta Street Burlington, Ks 66839 February 02, 2000

Agriculture Committee House of Representatives State of Kansas

Honorable Representatives:

Huff's Gardens respectfully requests that any and all Kansas State Statutes wherein agriculture is defined be amended to include the wording greenhouses and greenhouse ornamental crops within the definition of agriculture.

We had considered ourselves as agriculture for several years and treated as such by various governmental agencies, (USDA, US Census, IRS, County Treasurer-allowed farm tags). When we heard there was a statute that allowed property tax exemption for farmers(agriculture), we applied for exemption. We were denied because the statute did not specify greenhouses as agriculture. After hiring an attorney and applying for a hearing before the State Board of Tax Appeals (Docket Nos. 1998-7343-TX & 1998-7344-TX), we were again designated agriculture.

We do not expect a change in status or taxation. We ask respectfully that you clarify Kansas State Statutes to be amended to include greenhouses and greenhouse ornamental crops as part of the definition of agriculture. It will save the greenhouse industry from being treated inconsistently and sometimes unfairly. Thank you for your consideration.

Respectfully yours,

Harry E. Huff President, Huff's Gardens, Inc.

SEIVLEYS GARDEN CENTER

415 METCALF EL DORADO, KS 67042 PHONE (316) 321-3331

Feb. 1,2000

Agriculture Committee House of Representatives State of Kansas

As a greenhouse grower, I have spent many hours trying to receive an agricultural rating for my growing operation. After repeated appeals, an agricultural classification was finally granted. The county official in which my greenhouses are located, did not know which statute to refer to. I made numerous calls to other growers in the state about how to get an ag rating. No one knew, other than the fact that some counties see greenhouses as agricultural while other counties do not.

A clarification of which statue to be used by the state of Kansas is needed so that all counties will be uniform in regards to greenhouse growing operations.

Sincerely,

Larry Seivley

Larry Seinley

Owner, Seivley's Garden Center

Stutzman Greenhouse Inc.

6709 W. Hwy 61 Hutchinson, KS 67501 316-662-0559 316-332-4211 Fax

Testimony to: Committee of Agriculture, House of Representative, State of

Kansas

Date: February 2, 2000

Stutzman Greenhouse Inc. is located in Reno County. During the past ten years, repeated efforts have been made on our part to prove our agricultural status to Reno County. Our efforts would be recognized, taken into consideration, and eventually denied by the County Appraiser. Several years ago, a county employee was sent out to our greenhouse facility to evaluate our business. After a thorough investigation, the county agreed that we had proven our case, and they sent out corrected paperwork. Months later the county reversed the findings of their representative, with little explanation.

In the meantime, Kansas greenhouses were proving their agriculture status, through the legal process and rulings were made in this process. These rulings could be obtained and used to prove our case. In 1998, it became apparent that the only way to successfully prove our agriculture status was to engage the legal system. We hired a lawyer and together presented these findings to our County Appraiser. The County Appraiser promised full cooperation, but stated that he did not understand the rulings and would have to enlist the help of the County Attorney. After many meetings, lost paperwork and delays on the part of the county, time, and considerable expense, the conclusion was made that Stutzman Greenhouse Inc. was indeed and agricultural business.

We are here today asking for clarifying language that would include the terms greenhouse and greenhouse ornamental crops, so that each greenhouse is not left with the burden of proving their agricultural status to their county.

My name is Loren Bloomgren, owner and operator of Grigsby Greenhouse in Salina. Grigsby Greenhouse is in the business of growing Hot House tomatoes and in the production of bedding plants. Grigsby's have been in business for more than 63 years and have always been classified as agriculture.

Often with changes in personel in the Appraiser's office, they have interputed the definition of agriculture differently or inconsistantly. This has caused a lot of headaches and taken considerable time and expense to appeal. Numerous times we have had to protest the change of classification of the business by the County Appraiser's office. The different Boards' of Appeal have made judgements that we are in the defination of agriculture.

I am aware of other greenhouses in the state to be having the same problem that I have encountered, I strongly believe that it is time that the Kansas State Statues include the wording Greenhouses and Greenhouse ornamental crops in the definition of agriculture. With this wording included in the definition of agriculture, it would eliminate confusion and make it consistant state wide.

Thank you for your consideration on this very important classification.

Yours truly,

Loren Bloomgren

Loren Bloomgren

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Kansas Greenhouse Growers Association

January 19, 2000

Agriculture Committee House of Representatives State of Kansas

The Kansas Greenhouse Growers Association respectfully requests that any and all Kansas State Statutes wherein agriculture is defined be amended to include the wording **greenhouses and greenhouse ornamental crops** within the definition of agriculture. The exclusion of such specific wording has and continues to cause Kansas greenhouse companies undo harm in the form of legal fees, wasted managerial time, and unfair disadvantage in the marketplace.

Various local and county governing entities are interpreting Kansas statutes differentially as they relate to the wholesale greenhouse industry being included within the statutory definition of agriculture. They point to a Kansas statute defining agriculture and note the definition specifically includes everything from farming and ranching to aquiculture and Christmas trees but nowhere does the word greenhouse appear. Therefore greenhouse production of floral crops must not be agriculture. A similar governmental agency in an adjacent county says, well, of course greenhouses are agriculture and applies the statutes appropriately. One company then has an unfair advantage over another company. The playing field should be level.

Greenhouses in Kansas are being required to spend considerable amounts of time, energy and large legal fees to receive what they have always been entitled to. To overcome the erroneous application of a Kansas Statute by a local governmental agency, greenhouse companies are repeatedly being required to hire lawyers and work the problem through the appellate process.

The decision of No. 73,330 in the Court of Appeals of the State of Kansas, in the Matter of the Appeal of Alex R. Masson, Inc. clearly defined the growing, cultivation, and selling of ornamental plants by a commercial greenhouse as an agricultural pursuit.

We are not asking for a change in status. We are not asking for any change in taxation. We are not asking for a new definition of agriculture. We only are asking for clarity. We request that any and all Kansas State Statutes wherein agriculture is defined be amended to include the wording **greenhouses and greenhouse ornamental crops**. This amendment is necessary to prevent the continued local misinterpretation of State Statutes and unfair, inconsistent treatment of Kansas greenhouse companies.

Sincerely,

Alan Stevens

Man Stevens

Executive Secretary, Kansas Greenhouse Growers Association.