

MINUTES OF THE SENATE COMMITTEE ON AGRICULTURE & SMALL BUSINESS

Held in Room 423-S, at the Statehouse at 10:00 a.m. a. m./p. m.,

on Tuesday, March 17, 1981, 1981.

All members were present except:     Senator Ross Doyen             (Excused)  
  Senator Richard Gannon       (Excused)  
  Senator Ed Reilly             (Excused)

The next meeting of the Committee will be held at 10:00 a.m. a. m./p. m.,

on Wednesday, March 18, 1981, 1981.

These minutes of the meeting held on Tuesday, March 17, 1981, 1981 were considered, corrected and approved.

  
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Chairman

The conferees appearing before the Committee were:

Rep. Lloyd Polson  
John Blythe, Kansas Farm Bureau  
John Crofoot, Kansas Association of Wheat Growers  
Bill Duitsman, State Board of Agriculture  
Wayne Mathier, Collingwood Grain, Little River

Senator Kerr called the meeting to order. Senator Arasmith moved, seconded by Senator Thiessen, that the minutes of the March 12, 1981 meeting be approved. Motion carried.

HOUSE BILL 2458

Raney Gilliland, Legislative Research Department, stated the passage of Senate Bill 2458 will result in an emphasis by the legislature to gather information and data and to appeal to the Environmental Protection Agency to permit the use of endrine for chinch bug control. Mr. Gilliland stated it had been deemed to be toxic to a certain degree, particularly when that chemical gets in water streams; however, it is degradable.

Representative Lloyd Polson distributed Attachment "A" to the original minutes relative to the usage of endrin. He had addressed this problem two years ago but chinch bugs have become more predominant than at that time. Should endrin get in ponds it would kill the fish but within six weeks' time the pond could be restocked. It would be extremely important that endrin be handled in the proper way. Various pesticides have been tried but none perform as efficiently as endrin.

Answering Senator Karr's question as to what would happen should this bill be passed, Representative Polson said he would hope as a result of added pressure the EPA would rescind their action, all the way up to the federal government. Relative to Senator Arasmith's remarks, Representative Polson said cattle would not eat silage, nor graze on pastures, heavily infested with chinch bugs, probably due to an odor.

John Blythe, Kansas Farm Bureau, read from their 1981 Resolutions: "Damage to agricultural crops by insects and pests has been increasing at an alarming rate. Of particular concern is the corn crop destruction caused by the southwestern corn borer, and the damage to alfalfa production caused by the alfalfa weevil. In addition, spider-mite, chinch bug and green bug infestations continue to cause the loss of thousands of dollars of agricultural income.

"Present and proposed rules and regulations of the Environmental Protection Agency have removed, or will make unavailable, reliable pesticides.

(MORE)

Unless specifically noted, the individual remarks recorded herein have not been transcribed verbatim. Individual remarks as reported herein have not been submitted to the individuals appearing before the committee for editing or corrections.

CONTINUATION SHEET

Minutes of the SENATE AG Committee on Tuesday, March 17, 1981 19    

"We urge continued funding for research programs which could lead to eradication of the southwestern corn borer, alfalfa weevil, chinch bug and other insects and pests."

Mr. Blythe feels the farm emergency procedures should be instigated and presented to the EPA in order than endrin may be used for the control of chinch bugs. He felt under the present restrictions it can only be used west of Hutchinson for treatment of the pale western cutworm. The Kansas Farm Bureau favors the passage of this bill.

John Crofoot, Kansas Association of Wheat Growers, expressed his Association's support for the bill.

Bill Duitsman, Kansas Board of Agriculture, distributed Attachment "B" to the original minutes, a news release dated March 13, 1981, relative to Insect Pest Highlights from the Entomology Division of the KSBA. The Ag Board is extremely interested in assisting in every way possible to secure a pesticide which would be helpful in controlling the chinch bug which has been increasing so rapidly in Kansas.

Although it was thought a rehearing would have to be scheduled before the EPA, he recently learned they could rescind their restriction of the use of endrin should Washington give its final approval, and he was hopeful the legislature would give its approval for the Department to pursue such course of action. The passage of this bill would be a great step forward to persuade the Washington EPA that something has to be done in Kansas to control the huge infestation by chinch bugs, whether endrin or something else is used.

Answering Senator Arasmith's inquiry as to how many applications of endrin would be needed, Dean Garwood of the State Ag Department stated there usually are up to three generations of the chinch bug; one application would be helpful, but more would be necessary to be more successful.

Senator Norvell was concerned about the effect on humans should endrin be used widespread. Mr. Duitsman stated it is lethal but he has never heard of humans being affected by it; there would be strict rules and regulations for its usage.

Wayne Mathier, of the Collingwood Grain Company, stated he had been following the prevalence of chinch bugs for more than four years and the problem continues to get worse. Last year he feels grain receipts in his area of central Kansas dropped off 30% due to the chinch bug damage. He feels they need a product that will last 21 days.

Time ran out so House Bill 2458 will be continued to be heard on Friday, March 20.

Meeting adjourned.

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House Bill 2458 was introduced by the Committee on Agriculture and Livestock to re-authorize the usage of endrin to control and eradicate chinch bugs.

The problem has reached crisis proportions and the economic loss to the state of Kansas from the destruction of milo, corn, and small grains runs into and beyond tens of millions of dollars. The insect is roughly found in nearly all of the eastern half of Kansas. The economic loss in Marshall county alone for the year 1980 has been estimated at upwards of 14-16 dollars. Other counties have similar losses. There is no way that Kansas agriculture can remain viable and allow this carnage to go on.

This bill, alone, will not allow the usage of endrin for chinch bug control on corn or milo unless the E.P.A. approves it. Currently it is legally usable for control of any cut worms in wheat, and is used extensively in western Kansas whenever that infestation occurs.

It has been proven effective, is economical and was used extensively prior to being excluded for chinch bug control.

The chinch bug has seriously altered the pattern of farming in Kansas. Soybeans have replaced grain sorghum and corn as an alternative. There has been a shift of small grain eastward as a direct result. It is no longer a matter of border treatment along wheat fields. The infestation now occurs miles from small grain and one has to see the extent of damage to fully comprehend what has happened. Last year, they hit the windshield like sand. This year they are expected to be worse and present methods of control are not doing the job.

Ladies and gentlemen of the committee, agriculture has had ten black years.

We have been saddled with regulations we've never dreamed of. Natural farming is perfectly alright as long as you believe in natural famine or organic starvation.

Every year american farmers plant over one billion acres of crops but each year 40% --almost 500 million acres--is destroyed by pests. Our crop losses equal the combined area of Texas, California, Oregon, Washington, and Idaho.

For at least ten years now most of us in agriculture have procrastinated, ignoring the attacks, waiting for someone else to defend our jobs and way of life, or just hoping the problem will go away. Our choice is simple--Wake Up or Go Hungry.

## DIRECTION GUIDE FOR ENDRIN 1.6 EC

CROP (or Use)	INSECTS AND DIRECTIONS	DOSAGE/ACRE ENDRIN 1.6 E.C.	LIMITATIONS
COTTON	Boll weevil, bollworm For early season apply 1 pt./A. For late season apply 1-2 pts/A.	1-2 pts.	Workers entering treated fields within 5 days after application should be protected. Do not graze dairy animals or animals being finished for slaughter.
	Thrips, fleahoppers Early season—apply ½ pt./A. Mid season—apply ¼ pt./A. Late season—apply 1 pt./A.	½-1 pt.	
	Brown cotton leafworm, cabbage looper, celery leafminer, cotton leafworm, cutworms, garden webworm, leaf perforator, lygus bugs, rapid plant bug, salt marsh caterpillar, tarnished plant bug. Apply when insects are present. Repeat as necessary.	1-2 pts.	
	Grasshoppers Fall armyworm, garden webworm, Greenhouse leafminer. Apply when necessary.	1½ pts. 1-1½ pts. 2 pts.	
SMALL GRAIN (barley, oats, rye, wheat)	Armyworms, army cutworm, chinch bug, cutworms, fall armyworms and pale western cutworm. Make single application when insects first appear. For chinch bugs apply either as barrier strip around field or broadcast.	1-1½ pts.	Single application only. Do not apply within 45 days of harvest or feeding. Do not graze treated fields. Do not feed threshings to livestock.
APPLES	For control of pine mice use 3 pints per 100 gals. water. Boom application: apply 100 gals. of spray in a band 11 feet wide and 670 feet long on each side of a tree row (350-400 gals. per acre). Hand done application: apply 11 gals. of spray to each under tree area (5.5 gals. per side). In order to penetrate ground cover to reach pine mice trail systems, all sprays should be applied at 500 p.s.i.g. pressure. For control of meadow mice use 2 pints per 100 gals. water. Apply 300 to 350 gals. of spray per acre as directed for pine mice control.	8-12 pts.	Make post harvest applications only. Allow a minimum of 2 months before cultivating after spraying during cool periods of autumn in accordance with the State Agricultural Extension Service.  Post and otherwise exclude entry to treated orchards for at least 30 days.

Apply with ground equipment using 100 gallons of water per acre.

For airplane application on cotton and small grains use 3 to 10 gallons of water per acre.

### NOTICE

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**Insecticide, liquid, N.O.S.**



**KANSAS  
STATE  
UNIVERSITY**

## Cooperative Extension Service

FEB 25 1981

Nemaha County Extension Office  
Post Office Building  
Seneca, Kansas 66538  
(913) 336-2184

February 24, 1981

Representative Lloyd Polson  
171 West Statehouse  
Topeka, Kansas 66601

Dear Lloyd:

I'm writing in regards to the past and present problems created by the devastating numbers of chinch bugs in our county.

This fall chinch bug numbers were at their highest. They took over several corn fields in Nemaha County. Yields were as low as 20 to 30 bushels per acre. Their numbers were also very high in grain sorghum in our county and several others. The large number of bugs have several ramifications.

\* Harvest stored grains-with the large number of bugs in the head, grain samples were loaded with bugs. They affected test weights, moisture contents and quality of feeds. Storage of grain was threatened by the large number of bugs in the grains.

\*Feeding difficulties - Feeding of grain or forage infested with the over-wintering chinch bugs has been very difficult. Livestock have been known to ignore feeds containing a large number of bugs.

\* Overwintering habitats- The chinch bugs over-winter in almost any grass. Their favorite spots are prairie grass, bunch grass, broomsedge, and blue stem. Over-wintering mortality is usually very low. They can easily survive freezing and thawing conditions and temperature as low as 20 degrees below zero tend to have little effect on them. In the spring when temperatures reach 70 degrees or more for several hours, they will begin moving into fields of small grains. Eggs are deposited in lower leaves or in soil around the roots. The insects mate repeatedly laying a few eggs each day for three weeks to a month, an average of 200 eggs per female. The bugs require 30 to 40 days to complete development. Mating takes place again and the second generation develops. As a rule, a naturally occurring fungus disease begins to develop to greatly reduce the potential abundance of the second generation. This fungus did not develop this year to any significant extent, because moisture for three weeks is required to get the fungus started.

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Rep. Lloyd Polson  
February 24, 1981

*It is a grim situation we face. We have more chinch bugs than ever with very dry conditions. The farmers have done their share by burning ditches, waterways and pastures where the bugs are over-wintering. Unfortunately, this does not kill a significant amount. A lot of farmers are going to plant soybeans instead of milo to reduce crop loss.*

*Unless mother nature treats us with a wet spring, we can expect insect devastation of corn and milo fields.*

*Please consider our grim situation in your legislative actions!*

*Sincerely,*

*Jody*

*Jody R. Garrison,  
County Extension Agricultural Agent  
Nemaha County*

IRG:llb



# KANSAS STATE BOARD OF AGRICULTURE

TOPEKA, KANSAS 66612

W. W. DUTSMAN  
Secretary

901 Kansas Avenue  
913-296-3556

March 13, 1981  
Carole Spinharney

GROWING SEASON UPDATE . . . Insect Pest Highlights from the Entomology Division  
of the Kansas State Board of Agriculture

Results of the recent winter survey of chinch bugs in Kansas show the highest overwintered populations of the pest since recording began. The Kansas State Board of Agriculture, aided by two area extension specialists, conducted the survey in late February and early March.

The annual survey measures numbers of overwintered bugs in bunch grasses, including bunches of well thatched fescue, taken as close as possible to fields planted to sorghum in 1980. The chinch bug particularly is a pest of sorghum in this state. Survey results showed no winter mortality from cold and only trace numbers of bugs killed by disease.

Entomologists were not surprised by the high overwintered numbers of this pest, since the 1980 growing season's hot, dry weather encouraged unusually large numbers of third generation bugs late in the growing season, even in areas where overwintered and first generation bug numbers were low.

Although Kansas now faces the greatest potential for damage to sorghum by the chinch bug ever recorded, actual damage in the 1981 growing season will depend on a number of factors. Future growing season populations will be influenced by amounts of overwintered bugs, the condition of the crop, and weather, especially rainfall, which can greatly affect both the crop and the chinch bug.

Chinch bugs thrive during hot, dry weather and seem to prefer to breed in thinner stands of host crops, particularly in the case of small grains. Entomologists in the past have observed large numbers of bugs breeding in

(more)



small grains being killed by hard rains, either by drowning or by burying. Unfortunately, a resurgence in numbers often occurs when weather again turns hot and dry after such rains.

When wet weather continues, it sometimes encourages the development of a fungus disease which attacks chinch bugs, but growers cannot count on the fungus for control. The effects of a beating rain on the chinch bug population can be very localized or rather widespread. Growers are aware that rainfall and its intensity may be distributed uniformly over an area or may vary greatly within rather short distances.

The 1981 survey best indicates the potential for damage by overwintered and first generation chinch bugs. This generation usually is completed by mid-July. It sometimes causes heavy stand losses in seedling sorghum adjacent to or near infested small grains when hordes of mostly immature bugs migrate from the maturing grain. Later surveys will monitor development of second and third generation populations.

Survey results, as illustrated on the attached map, identify general regions of the state with potential for chinch bug damage in 1981. Because of the limited nature of the survey, there always is the possibility that sites near those sampled could have numbers of bugs substantially greater or lower than those in sampled areas.

With favorable conditions, however, the frequency of problem early-season infestations in a given area generally will be greater in regions with the highest ratings and lowest in regions with mostly lower ratings. Some damage generally is expected in regions with some ratings of two or greater unless conditions are very adverse to the chinch bugs.

The survey indicates some chinch bug problems might occur under favorable conditions at least as far west as Smith, Ellis, Rush, Stafford, Kingman and Sumner counties. Some problems have not been ruled out totally for some

(more)

Growing Season Update, add 2

adjoining counties farther west than these which were not surveyed. Entomologists think there is greater potential for damage than the map indicates in Butler County, particularly the northern portion, which was not sampled, and Cowley County, based on much higher counts often found in adjoining counties.

Entomologists say it is probable that overwintered chinch bugs may be more numerous than indicated by the survey, because fewer than usual likely were killed by cold weather during the unusually mild '80-'81 winter. Winter survival usually is very high in such highly protected habitats as thickly-thatched bunch grass and fescue most winters, but survival usually is not possible in wheat or thin-based grasses, such as brome, which provide little winter protection. This winter, however, chinch bugs reportedly survived in wheat in some fields of southeast Kansas. It seems likely that much survival also occurred in many other areas as well. Even as far north as Manhattan, only 80 to 90 percent had frozen in one wheat field checked late in February. Live bugs were not uncommon in thicker brome near an old sorghum field near Junction City and in established alfalfa in Sedgwick County.

Much serious plant damage and stand loss in past years has been caused by first generation bugs after migrating from maturing small grains into nearby or adjacent seedling sorghum and occasionally corn. Parts of the state where the most sorghum is just emerging or still very small when this migration occurs usually sustain the greatest loss. Larger sorghum, more common in the eastern fifth of Kansas, is more resistant to swift stand losses at the time of this migration. It takes many more bugs to quickly kill an eight-inch sorghum plant than one just an inch or two tall. The easternmost Kansas counties often have less chinch bug damage than infested counties farther west because of higher rainfall's influence both on crops and chinch bugs.

(more)

Growing Season Update, add 3

Early planting, however, does not ensure freedom from serious early season problems with chinch bugs. In 1979, for example, significant stand damage by large numbers of overwintered bugs occasionally was reported, particularly in the eastern fifth of Kansas both in seedling corn and early sorghum. With the large overwintering populations just encountered, more such problems may be expected in 1981.

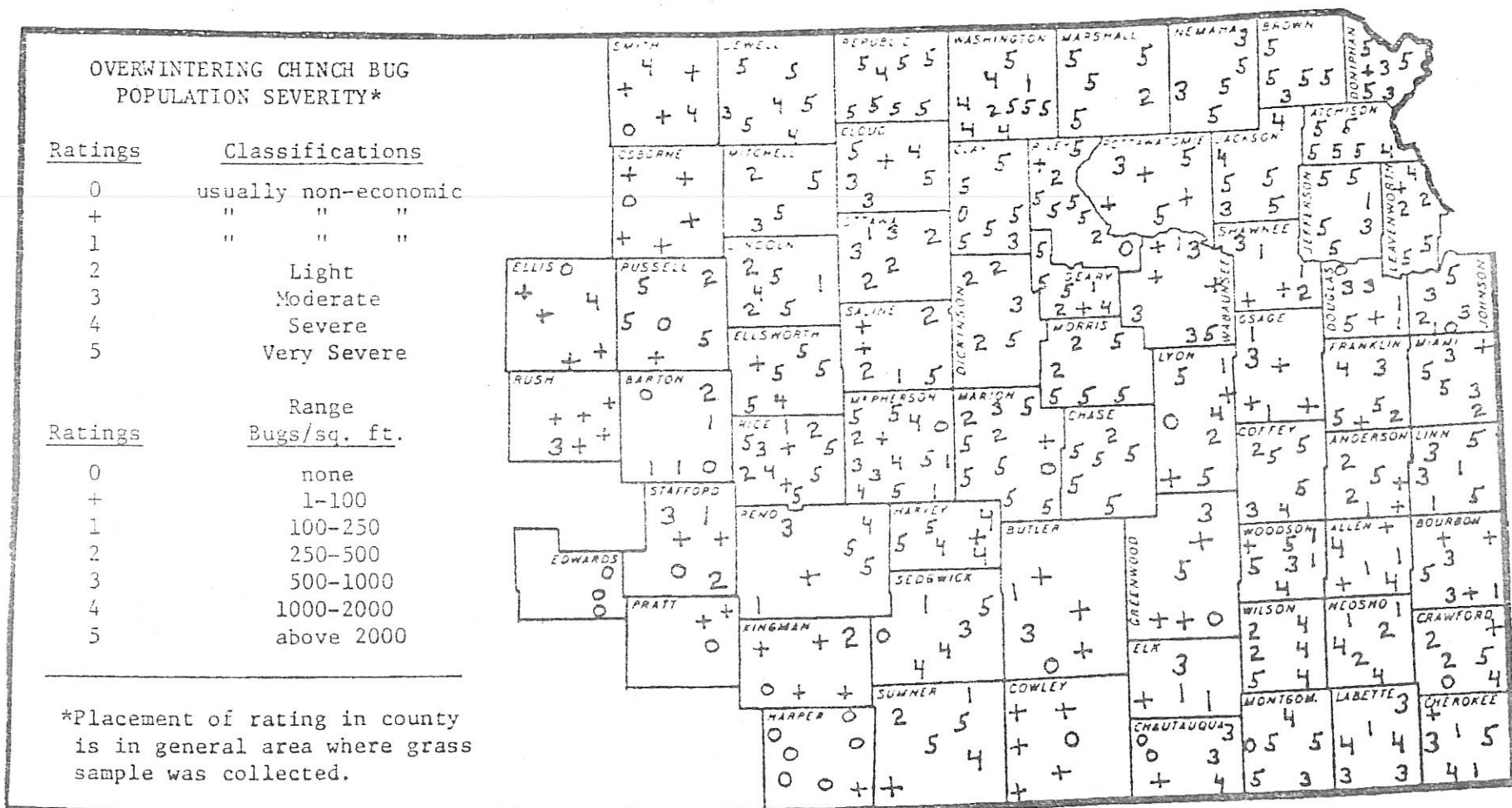
Chinch bugs seem to prefer thin stands or shorter small grains for breeding rather than thick stands and taller wheat. Differences in stands and growth may vary even within fields, so infestations often develop unevenly. There is some speculation that this pattern, which often was very obvious in the past two years, may not hold up with the larger chinch bug numbers going into the 1981 growing season. That remains to be proven, but entomologists can say that small grain stands generally are better than they were during 1980. Little winter kill has occurred, but some stand loss has been reported in some areas from wind erosion in February. Some stands have been thinned seriously by greenbugs in parts of the Wichita, Hutchinson and McPherson areas.

Growers should contact local county extension agents for control recommendations and other advice about chinch bugs.

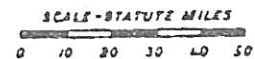
--KSBA--

# KANSAS EARLY-SEASON CHINCH BUG OUTLOOK FOR 1981\*

(only those counties shown were surveyed)



\*Each rating on the map is based on counts of overwintered chinch bugs from a single sample of bunch grass taken at a specific location. Growers are reminded that "0-1" range site ratings do not preclude the possibility of higher numbers of bugs being sometimes present at sites not too distant.



SENATE

AGRICULTURE AND SMALL BUSINESS COMMITTEE

DATE Tuesday, March 17, 1981

PLACE: Room 423-S

TIME: 10:00 a.m.

GUEST LIST

NAME

ADDRESS

ORGANIZATION

Arthur B. McCallum 324 E. 11<sup>th</sup>, KC, MO U.S. E. P.A.

C. E. Pindexter " " " EPA - Region VII

John Blythe Manhattan Kansas Bureau

Bill Williams Topeka Agv

Freema Bieg " Agv

Gary Vangel Topeka Fmc

Dean Garwood Topeka Ed of Agr.

Dale Lambly Topeka Bd. of Ag.

Wayne Mathias Little River Collingwood Grain Co.

Morgan McLash Emporia Citizen at Large

James W. Gurnea Emporia " " "

Phil White Emporia " " "

Mike Mean Emporia " " "

Harold Stephens Emporia Citizen