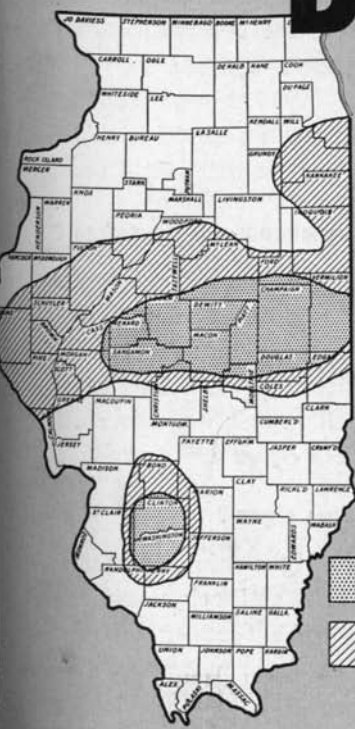


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# New Control for **CHINCH BUGS**



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**Main areas  
of infestation**



**Severe**



**Light to moderate**

(Fall survey, 1952)

**CIRCULAR 707**

## **1953 BRINGS CHINCH BUG THREAT**

Large numbers of chinch bugs are overwintering in certain areas in central and southwest Illinois (see "severe" areas on map). If the weather is favorable to these bugs in May, June, and July, there is a distinct possibility that loss will be serious in these severely infested areas unless control measures are applied. Also in the "moderate" areas farmers should be alert to the chinch bug threat.

### **What weather will favor chinch bugs?**

Dry weather in May, June, and July is the main condition favoring chinch bugs. Hard beating rains ordinarily kill the tiny red nymphs but not the older ones. The mature bugs and the older nymphs survive these rains unless humid weather occurs for several days in succession, then disease destroys them.

The dry weather of 1952 was responsible for the great increase in these pests, which have been observed in local areas for the past 4 years.

### **What preventive measures can be taken?**

Do everything to insure good, vigorous stands of grain and legumes. Good stands of legumes growing in thick, sturdy stands of small grains make unfavorable sites for chinch bugs.

Do not plant small grains next to corn if you can conveniently make other arrangements.

### **What are the warning signs?**

Look for white or light-colored areas in grain fields in June. Closer examination may reveal the tiny chinch bug nymphs feeding on the plants. The RED COLOR of these nymphs will identify them.

Watch all small grains: wheat, oats, barley and rye. Chinch bugs especially like weak stands of these crops.

### **What's the newest method of control?**

DIELDRIN, a new insecticide, is giving excellent results. It is applied to barrier strips in a spray at the rate of  $\frac{1}{2}$  pound to the acre.

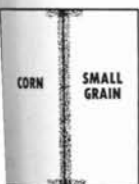
Though creosote and di-nitro barriers are still effective, this new spray requires much less labor.

### **When should dieldrin be applied?**

Usually in late June or early July, just before the bugs start toward the corn. This will be when the plants they have been feeding on begin to dry up and the bugs have not yet developed wings. In fact, many of the tiny red nymphs are still in the population.

### **Where and how is dieldrin applied?**

Spray a strip about 4 rods wide where fields of corn and small grains join. Take in 2 rods of the cornfield along its entire length, and 2 rods of the small grain. Then at right angles to this strip and at each end of it, spray a strip a few rods long and 2 rods wide.



The bugs are killed when they come in contact with the insecticide.

Ground applications made with drop nozzles have given good control when the spray has been pointed to the lower portions of the grain and ground cover. Airplane applications have also given good results.

### **How long are barriers effective?**

These dieldrin barriers remain effective for 7 to 14 days where the infestation is moderate. This is usually long enough to stop the bugs.

Where the migration is very heavy, or the weather is such as to destroy some of the effect of the spray, two or more applications may be needed.

## **Are residues a problem?**

When  $\frac{1}{2}$  pound of dieldrin per acre is applied below the heads of the grain, practically no residue is left. Treated grain must not, however, be harvested for 7 days. Treated straw and corn fodder should not be fed to livestock within 90 days after treatment.

## **Will other insecticides kill chinch bugs?**

Yes, there are several that will, by direct contact, kill bugs that are already on the corn. But they do not last long enough to be used as barriers.

Among these insecticides are *parathion*, which is used at 0.25 pound an acre; *lindane* or *BHC* used at 0.25 pound of the gamma isomer an acre; *aldrin* at 0.5 pound; and *chlordane* at 1 to 1.5 pounds.

## **Avoid 2,4-D injury to legumes**

If the sprayer has been used for 2,4-D, see that it is thoroughly cleaned before using it where small grains are growing with a legume seeding. Use kerosene washes followed by detergents and then ammonia. Include nozzles and boom in the cleaning operation.

## **Use care in handling insecticides**

Regardless of what insecticide you use, do not let it get on your skin or clothing. Always read the caution label on the container and follow exactly the directions given there for handling and storing.

Keep all insecticides out of reach of children and out of the way of livestock.