

# Growers Protect Against Thrips

### Tiny Insects Are Hard to Control Once They Get Good Foothold.

Cucumber growers have recently complained of curling of the leaves accompanied by whitish spots of varying size. This damage is caused by thrips, minute sucking insects, says the Cornell university experiment station, and growers should take care to control them before they gain a foothold.

#### Mistaken for Fungus.

Thrips are frequently mistaken for fungus growths because the insects are so small. They are usually found on the under sides of leaves. Leaves so damaged curl as if injured by aphids, but the injury differs in possessing characteristic white spots.

A satisfactory remedy for thrips is applied as soon as the injury is detected is: One-half pint of nicotine sulphate containing 40 per cent free nicotine; three pounds of laundry soap dissolved in water, and enough water to make fifty gallons of the mixture. This mixture should be applied with a pump which has considerable pressure. Care should be taken to spray the under sides of the leaves for only when reached by the spray are the insects killed.

#### Dusts Prove Satisfactory.

Dusts containing 3 per cent of free nicotine have proved satisfactory when

applied on warm days when little wind is blowing. Such dust must be applied with a duster and not merely shaken over the plants in order to be effective. The plants must be enveloped in a dust cloud. The Cornell experiment station has received word also of considerable damage in other states.

### Treat Baby Pigs With Serum Before Weaning

Pigs treated with serum and virus before weaning time are as likely to be immune to cholera as those treated at a more mature age, according to Dr. Charles Murray, Iowa state college.

Some of the advantages to early treating of pigs are:

1. Pigs are over effects of vaccination when weaned.
2. Are less subject to infections and diseases than after they are weaned and getting adjusted to grain feed.
3. Small pigs are easier to handle.
4. Quantity of serum is less than that for larger pigs.

Out of approximately 4,000 pigs varying from twenty-four hours to eight weeks of age there have been only 23 dead animals in the last five years. Many of these pigs have been injected with virus to test the immunity acquired by baby pigs. Most of those that died were in the year 1923, when virus was produced under great stress of demand in the epidemic.

# Sudan Grass to Meet Emergency

### Makes Excellent Pasture Just When Blue Grass Begins to Fade.

When blue grass pasture begins to fail, or when a farm owner decides to add to his live stock department, and pasturage becomes a problem, sudan grass offers a most promising emergency pasture and hay crop. In the opinion of Dr. C. J. Willard of the farm crops department of the Ohio State university, its rapid growth, luxuriance, and drought resisting qualities qualify it to fill in most acceptably, according to Doctor Willard.

#### Supplies Good Pasture.

"Sudan grass may be sowed as late as June 1, and will be ready to pasture by July 15. It will supply good pasture from then until frost if it gets a few days rest occasionally to make a rapid recovery from close cropping. On good land, sudan grass will support one dairy cow for nearly every acre," says Doctor Willard.

"In sowing sudan grass, the grower should apply from 20 to 30 pounds of seed to the acre with a grain drill. Sudan grass will grow on nearly any soil, although of course it grows better on good soil than on poor soil.

#### Is Nourishing Food.

"It is highly palatable to cattle, and is nourishing feed, although not particularly high in protein, of course. Southwestern states with dry climates have found it particularly valuable, but it has been used to advantage in other climates. Sudan grass was first brought into the United States in 1911, and comes from the Egyptian Sudan, on the edge of the Sahara desert."

### Importance of Suiting Load to the Tractor

With increased use of tractors, farmers are rapidly becoming alert to the importance of suiting the load to the tractor. Fortunately, a majority of implements are easily arranged in hook-ups which insure a full load.

The ordinary spike-tooth or drag harrow, however, is sometimes a rather unwieldy tool to transfer from one field to another, when it is used in wide enough widths to be economically adapted to tractor power. To aid farmers in handling these wide hook-ups tractor manufacturers have devised plans for hitching which can be easily arranged on the farm. In addition, tractor owners can secure folding eveners made of steel, enabling implements of unusual width to pass through ordinary gates.

### Barn and House Flies Transmit Hog Cholera

Cholera is not, as commonly supposed, carried so much by man or pigeons as it is by both barn and house flies. This finding is the result of ten years of investigational work, chiefly in Iowa. By liberating flies that were colored for later identification, it was learned that they traveled as far as thirteen miles, going six miles in 24 hours. Horse flies followed a team two miles.

According to Dr. C. N. McBride, of the United States bureau of animal industry, if middle-western farmers would bale as much straw as needed and spread the remainder on the land, to be plowed under, they would be doing a wise thing so far as cholera is concerned. Wet straw and manure piles make ideal breeding places.

### Kill Perennial Plants During Summer Season

July and August are the best months to kill perennial plants. There is no set day that will give better results than another.

The reason that this season of the year is most effective in killing plants is because the plant has exhausted its supply of food from its roots and in these late summer months is manufacturing food on which to live the following winter. If anything happens to prevent a normal food-storage, which is made in leaves and is transferred to the roots, the plant will have a hard time living over the next winter. This applies to perennial weeds as well as trees.

### Agricultural Hints

In a dry season paper mulch generally increases yield.

Alfalfa is recommended as the best hay plant for all classes of live stock.

A farm without poultry is unusual. In early days a home without it was just as much so.

Getting the lambs off early gives the breeding ewes a better chance to get in good condition for winter.

### Danish Death Rate Cut When Meat Was Barred

During the World war the Danish government forced the people to adopt a meatless diet to conserve food and was surprised to note an immediate reduction in the mortality rate, according to the national monthly Good Health. The Danish government left to Doctor Hindede, its commissioner of health, the complete control of the nation's food supplies, says Good Health. He decided that the barley and potatoes usually fed to pigs were essential to the health of people and that both man and pigs could not live. The number of pigs was reduced to one-fifth. In addition he reduced the number of cows to two-thirds and incorporated the wheat bran of their food in the coarse rye bread of the country. The result of feeding a nation on a meatless dietary, and with the coarsest bread ever made, was remarkable. The mortality of the whole country in the first full rationing year fell 17 per cent, and was the lowest death rate ever recorded in any country. This national experience provided incontrovertible evidence that the old idea of the necessity of a meat diet is utterly wrong.

### Good Camp Oven

An easily constructed oven for campers who tire of a constant fried diet is suggested by a writer in Modern Mechanics Magazine. Small holes are punched along the seams of a five-gallon, square oil can and the joints lined with wire to prevent the can's opening if the solder melts. Next, half of one end is cut away with a can opener, and the piece removed is wired to the edge of the can to form an oven door. Holes are punched in each side of the can and heavy wire passed through for a supporting grate. Cover the can bottom with a layer of dry sand, which helps to even out the heat.

### Unkind Wish

"Dancing is the poetry of motion." "I have heard so," answered Miss Cayenne. "My casual reading makes me wish more poets would quit writing and take up dancing."

### Caught

Perdita—Do you ever allow Jack Huggins to catch you in his arms? Philippa—Yes, but I'm careful not to allow him to catch me in any other man's arms.

## This Doctor's Prescription Will Keep Your Family Healthy

Dr. Hitchcock learned during his 63 years' practice as a family doctor that 90% of all sickness starts with stomach and bowel trouble. He advised against the use of drastic purgatives which cause chronic constipation. When any of his patients were constipated, showed signs of losing their appetite, or complained of indigestion, dizziness, headache, biliousness, or upset stomach, he gave them his prescription known as Hitchcock's Laxative Powder, and the trouble was soon removed. He found it safe for women and children; ideal for old folks, as well as for the most robust men. Dr. Hitchcock's Laxative Powder quickly relieves constipation and makes the stomach and bowels pure and clean, by removing all of the poisonous fermenting residue of the accumulated undigested food that causes these troubles. Get a large yellow tin box for 25c at any drug store.



# FREEDOM FROM PERENNIAL WEED PESTS MOST DIFFICULT TASK

### Prevent Seed Formation by Mowing and Spraying.

Eternal vigilance is the price of freedom from perennial weed pests, according to Charles F. Rogers, former assistant botanist and deputy state entomologist at the Colorado Agricultural college, who is the author of a bulletin on "Canada Thistle and Russian Knapweed and Their Control."

Copies of this publication may be obtained by those interested by writing to the Colorado Experiment station at the college.

"Canada thistle and Russian knapweed, two of the worst weeds known to agriculture, are found associated with all crops and almost every kind of soil, and in every agricultural region of Colorado," the bulletin states.

"The best way to keep any perennial weed out of a locality is to use

clean seed, to clean all farm machinery before it leaves the place where it has been used, and to prevent flowering and seed production.

"Proper control measures for perennial weeds should consist of the prevention of seed formation by mowing and spraying, the burning of mowed weeds, separate, clean cultivation of infestations, clean fallow at intervals, crop rotation and smother crops."

### Sweet Potato Diseases Prevented or Checked

A combination of several practices for disease prevention is necessary in controlling sweet potato diseases, any one of which, if omitted, will fall in securing the desired results. For the best control of wilt the seed should have been hand selected in the field last fall. The use of certified seed is equally good. Treat all the seed before bedding. Treated seed should be placed in new hot beds. Old beds are "hot beds" of diseases. New sand and new or sterilized lumber should be used for hot beds. When the plants are pulled and ready for transplanting they should be set in fields that have not been in sweet potatoes for five to seven years. Unless all these steps are followed, one or several of the common diseases may be present.

### Aphids Big Limiting Factors in Production

Aphids in the garden are limiting factors in the production of good vegetables. They are on the radishes, turnips, spinach, and other plants. The adults are about one-sixteenth inch long and vary in color from green to red to black to mottled. The color depends on which plant they are feeding. Ordinarily the aphids are called plant lice. Do not wait till the plants are damaged beyond repair to look for the bug that is doing the injury. Treat plants infested with aphids with nicotine dust containing about 7 per cent nicotine sulphate or 3 per cent free nicotine. The dust should be applied thoroughly with a good dusting machine.

### Agricultural Hints

A farm without trees is like a dog without fleas; there is something lacking.

Cost per hour, with both tractors and horses, depends to a large extent upon the total hours work performed in a year.

Planting soy beans too deep delays their coming up and may permit a crust to form on the soil. One inch in a good seed bed is deep enough.

To get rid of mustard not only must all the mustard plants be killed and prevented from producing seed but the seeds in the soil must be destroyed also.

### Poison Bran Controls Cutworms in Gardens

(Prepared by the United States Department of Agriculture.)

Seeding tomatoes, cabbage, lettuce and melons are frequently cut off near the ground by cutworms, especially in the spring and early summer, says the United States Department of Agriculture. A cutworm is the young or caterpillar of a night-flying moth. The moth lays its eggs upon plants or other objects and in some cases directly upon the ground and the eggs hatch into cutworms.

The common cutworms are stout, soft-bodied, smooth or nearly smooth, and cylindrical, varying in color from gray to brown or nearly black and sometimes spotted or marked with stripes. Cutworms ordinarily work at night, but often feed on dark, cloudy days. Many kinds of cutworms go through the winter in the soil and begin work again early in the spring. Not only vegetable crops are attacked, but also a wide variety of ornamental plants and field crops may be severely damaged.

Cutworms may be gotten rid of readily by using a poisoned-bran bait made up of one peck (or five pounds) of dry bran, one-fourth pound white arsenic or paris green, one pint strup or molasses and three or four quarts of water.

### Fighting Quack Grass Most Wearisome Task

Fighting quack grass is about as mean a job as any that exists on American farms. Experience has proved that it is almost impossible to eradicate the grass completely, once it gets a start and extends its rootstocks in the fields, and that ordinary cultivation is just about as bad as leaving the weed alone.

The ideal weather for killing quack grass is hot days and cool nights, with just enough moisture in the soil to keep the grass growing. In midsummer, say in July, when the grass becomes sod bound and the plants are in bloom, the roots accordingly are weak.