

CATTLE GRUB CONTROL



Circular 470
Revised Oct. 1957

OCTOBER							JANUARY						
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT
		1	2	3	4	5	1 2 3 4 AVERAGE SECOND TREATING DATE						
6	7	8	9	10	11	12	5	6	7	8	9	10	11
13	14	15	16	17	18	19	12	13	14	15	16	17	18
20	21	22	23	24	25	26	19	20	21	22	23	24	25
CHECK FOR GRUBS HERE							26	27	28	29	30	31	
27	28	29	30	31									
NOVEMBER							FEBRUARY						
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT
					1	2	1 AVERAGE THIRD TREATING DATE						
3	4	5	6	7	8	9	2	2	4	5	6	7	8
CONTINUE CHECKS HERE							9	10	11	12	13	14	15
10	11	12	13	14	15	16	16	17	18	19	20	21	22
17	18	19	20	21	22	23	23	24	25	26	27	28	
24	25	26	27	28	29	30							
DECEMBER							MARCH						
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT
1 2 3 4 5 6 7 AVERAGE FIRST TREATING DATE													1
8	9	10	11	12	13	14	2	3	4	5	6	7	8
15	16	17	18	19	20	21	9	10	11	12	13	14	15
22	23	24	25	26	27	28	ADULTS BEGIN TO EMERGE						
29	30	31					16	17	18	19	20	21	22
							23 30	24 31	25	26	27	28	29

CATTLE GRUB CONTROL

By

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Every year grubs in cattle cause losses to farmers, ranchers, dairy-men and other members of the livestock industry an estimated 50 to 150 million dollars. Oklahoma's share of these losses has been estimated at

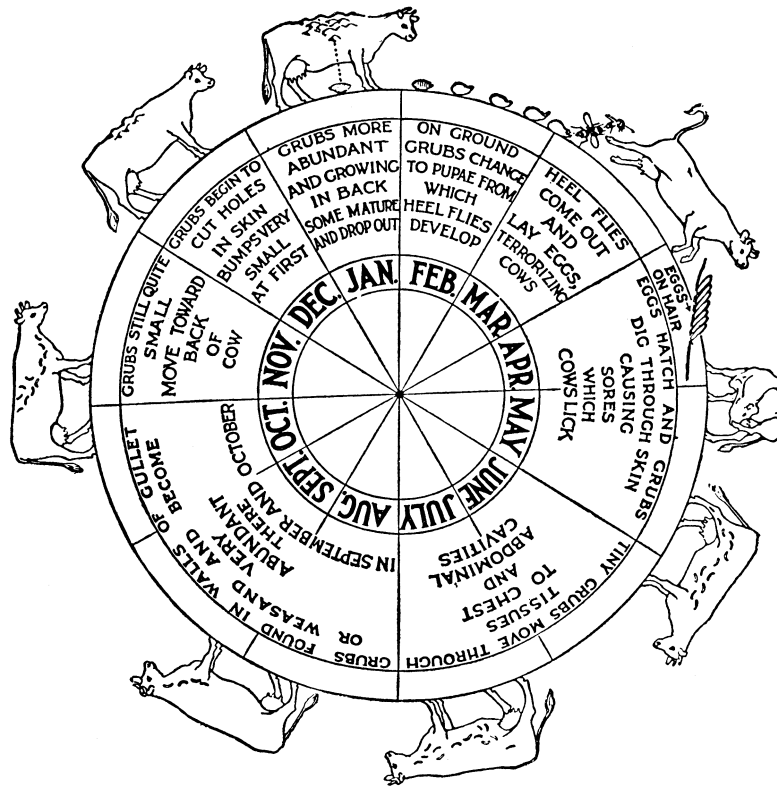


FIGURE 1

Graphic illustration showing seasonal development of common cattle grub, approximately as it occurs in central states. Various stages are reached earlier in southern states, later in northern states.

from 10 to 12 million dollars every year. The principal losses are: 1. Infested animals are slow to gain or may even lose weight. 2. Milk production in dairy herds may decline as much as 15 to 25%. 3. Value of hides are much reduced as a result of the holes cut in the skin along the back. 4. Reduced value of the carcass as a result of trimming to remove the grub cyst. 5. Cattle may be injured as they attempt to escape the adult flies during egg laying time in the spring. For only a few cents a head, cattle can be treated for grubs and these losses prevented.

WHAT TO USE

Since 1947 much of the grub control research has been directed toward a search for chemicals that would destroy grubs during their early developmental period in the tissues of infested animals.

Since 1955 tests with some of the newer phosphates have been very promising. Materials developed by three of the major chemical firms have been extensively tested and may be available in limited areas in the fall of 1957. Newer chemicals, which look very encouraging, are also being studied, but are available only for research purposes at present.

All the new chemicals have systemic action. They are absorbed and translocated to all areas of the animal's body.

For the present, rotenone will be the insecticide most widely used. To be used in the formulas recommended in this bulletin, the powder must contain at least 4.5 to 5 percent actual rotenone.

HOW TO USE IT

Rotenone can be applied in several different ways, any of which will give a good kill. The hand methods are somewhat slower than spraying or dipping, but provide equally good results.

Regardless of which method is used, however, the rotenone must reach the grub in the cyst for kill to result.

DUSTING

Mix 1 pound derris or cube powder containing 5 percent rotenone with 2 pounds of dusting sulfur. Apply the powder with a shaker made by punching 12 to 15 one-fourth inch holes in the lid of a wide mouthed quart fruit jar. Rub the powder into the hair coat by using a rotary motion of the finger tips. This will give better results than if a brush is used to rub it in.

One pound of the mixture will treat 4 to 5 head of adult cattle.

HAND WASH

On windy days, a wash is more convenient to use than the dust. Mix 3/4 pound of derris or cube powder containing 5 percent rotenone

and 3 tablespoonfuls of a detergent to each gallon of water. Wet down the grub area of the back with a pint of the mixture, and scrub with a stiff-bristled brush.

SPRAYING

Spraying is usually more practical when treating large herds. Use 7½ pounds of derris or cube powder containing 5 percent rotenone to 100 gallons of water. Operate at a nozzle pressure of at least 300 pounds, but not greater than 400 pounds. Hold the nozzle 12 to 16 inches from the back, and direct the spray straight down on the grub area.

About 1 to 2 quarts of mixture are used per animal.

DIPPING

Dipping vats can be used for grub control, but normally the percentage of kill will be somewhat lower than that received from spraying. To charge the vats, use 7½ pounds of derris or cube powder containing 5 percent rotenone and 10 pounds of wettable sulfur to each 100 gallons of water.

WHEN TO USE IT

The first treatment should be applied about two weeks after grubs begin to appear in the back and make the breathing holes. Since grubs will continue to appear in the back for about 100 days, and since each grub stays there 4 to 5 weeks, three treatments applied 30 days apart are necessary for control. Under Oklahoma conditions, these are usually applied about the first of December, first of January, and first of February. The earliest date of grub emergence may vary considerably from year to year. Checks for appearance of the first grubs should begin not later than October 15.

Adequate control cannot be expected unless all three treatments are applied.