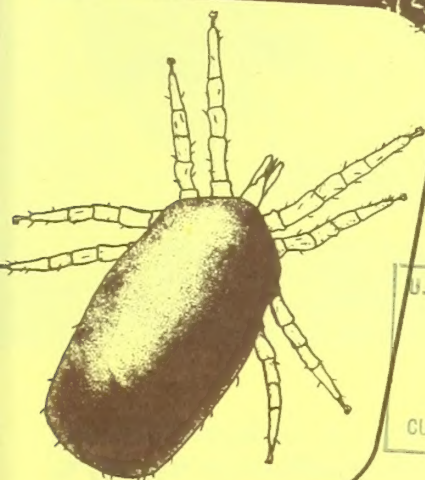


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# POULTRY MITES

## how to control them

Leaflet No. 383

U. S. DEPARTMENT OF AGRICULTURE



# POULTRY MITES

## how to control them



Poultry mites retard the growth of poultry, lower vitality, damage plumage, and reduce egg production. Fowls heavily infested by mites sometimes die.

Mites reproduce rapidly, especially in summer, when tremendous numbers may occur. They are spread from yard to yard in infested crates and coops, and by poultry and wild birds. Persons who work with infested poultry may carry mites on their clothing.

Mites most commonly found on poultry are the chicken mite (or roost mite),<sup>1</sup> the northern fowl mite,<sup>2</sup> the scaly-leg mite,<sup>3</sup> the depluming mite,<sup>4</sup> and chiggers.<sup>5</sup> The adult mites are  $\frac{1}{40}$  to  $\frac{1}{30}$  inch long.

Several insecticides are used in controlling poultry mites. They are used in dusts, sprays, roost paints, dips, and ointments. A dust is ready for use when purchased. A spray, roost paint, or dip is made by mixing an emulsifiable concentrate or wettable powder with water.

Apply sprays with a small power sprayer or a garden-type compressed-air sprayer. If you apply a wettable-powder spray with a compressed-air sprayer, agitate the liquid frequently to keep the powder in suspension in the spray mixture. . . . For treating small surfaces, such as a roost, use a paintbrush and a can. . . . Use a rotary-type hand duster for dusting an entire flock.

The insecticide to use, its strength, and the method of applying it depend on the kind of mite to be controlled.

Do not depend on an insecticide to do the whole job. Eliminate hiding places by removing loose boards and rubbish. Use roosts and nests of the

knock-down type: they are easy to clean and easy to treat with an insecticide. Provide good ventilation in the poultry house.

### CHICKEN MITE

Chicken mites attach themselves to poultry during the night and suck blood. During the day they hide in cracks of poultry houses and coops. Their excrement looks like a salt-and-pepper mixture. If you examine cracks, you may see masses of mites, their eggs, and the silvery skins cast by the immature mites.

Females require a blood meal before laying eggs. Under favorable conditions, eggs hatch and mites mature in about 10 days. Several generations a month are produced in the summer. In winter the mites develop more slowly, and may be dormant in northern regions that are exceptionally cold.

In heavily infested coops, fowls have pale combs and wattles. They become droopy and weak and are more susceptible to other parasites and to diseases. Some fowls die.

### Control

Apply a 0.5- or 1-percent malathion spray, or a 0.5-percent Sevin spray, to roosts, nests, and inside wall surfaces. Pay particular attention to cracks and rough spots. A second application may be necessary in 10 to 14 days.

Malathion at 3-percent strength can be used as a roost paint. One pint covers about 150 feet of roost. The insecticide on the roosts kills mites crawling to the chickens, the fumes kill mites already on the chickens.

Treat poultry house floor litter with 4- or 5-percent malathion dust, or 5-percent Sevin dust,

<sup>1</sup> *Dermanyssus gallinae*.

<sup>4</sup> *Knemidokoptes gallinae*.

<sup>2</sup> *Bdellonyssus sylviarum*.

<sup>5</sup> *Eutrombicula alfreddugesi*.

<sup>3</sup> *Knemidokoptes mutans*.



### **SPRAYING CAGES**

**to control chicken mites  
and northern fowl mites**

if it is heavily infested with mites. Apply 1 pound per 40 square feet of litter surface.

The percentage of insecticide varies in emulsifiable concentrates and wettable powders. The accompanying chart shows how to prepare a 0.5-percent spray. To make a 1-percent spray, double the amounts.

### **NORTHERN FOWL MITE**

Northern fowl mites, which look like chicken mites, stay on the fowls. They congregate near the vent, tail, and neck, and suck blood. Feathers become soiled. Scabs often form on the skin of infested fowls.

#### **Control**

Use 4- or 5-percent malathion dust, or 5-percent Sevin dust, in litter for chickens only. Apply 1 pound of 4-percent dust per 40 square feet of litter surface. Apply dust uniformly with a hand-operated plunger or rotary duster or with a shaker jar. Repeat as necessary.



### **PAINTING ROOSTS**

**to control chicken mites  
and northern fowl mites**

Apply a 1-percent malathion spray, or a 4-percent malathion dust, or a 5-percent Sevin dust, or 0.5-percent Co-ral dust, directly to individual birds or to flocks. Use 1 gallon of spray or 1 pound of dust per 100 birds.

Nicotine sulfate (40-percent nicotine) or 3-percent malathion emulsion may be used as a roost paint. Apply 1 pint per 150 feet of roost one-half hour before roosting time. Repeat as necessary.

Do not use Co-ral more often than once a week. Do not apply Co-ral less than 45 days before slaughter.

Do not apply Sevin less than 7 days before slaughter.

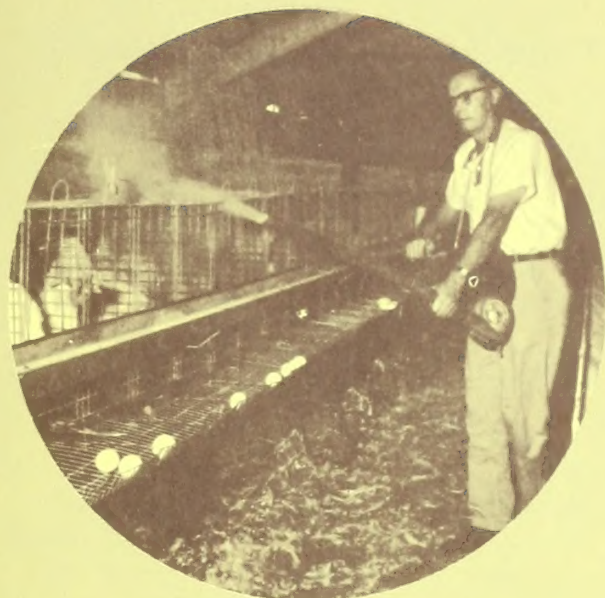
### **SCALY-LEG MITE**

Scaly-leg mites burrow under the scales of the fowls' feet and lower legs. The burrowing causes itching and irritation. The scales are pushed up from the legs, scabs or crusts form around them, and they are easily detached.



### SPRAYING ROOSTS

to control chicken mites



### DUSTING

to control northern fowl mites

If untreated, the legs and feet become distorted and some of the terminal joints of the feet may be lost.

#### Control

Soak the fowl's feet in warm soapy water until scales are loosened. Then grease lower legs with lard containing 15 percent of sulfur (325 mesh).

*Or*—Dip or paint the feet and lower legs with crude oil or with water emulsion containing 0.1 percent of lindane. (Kerosene is less effective than crude oil.) Do not get oil on the upper legs. One treatment is usually enough, but if distorted scales are not shed within a month, repeat the treatment.

### DEPLUMING MITE

Depluming mites burrow into the skin and cause an irritation at the base of the feathers. In trying to relieve the irritation, fowls pull out their feathers until they are almost naked.

#### Control

Make a dip containing 2 ounces of sulfur (325 mesh) and 1 ounce of soap per gallon of water. Dip birds long enough to wet the feathers to the skin. Dip on warm days only. Repeat after 3 or 4 weeks if necessary.

### CHIGGERS

Chiggers that attack poultry are the same tiny red mites that attack man. They attach themselves to the skin of poultry in clusters under the wings and on the back and neck. Injury is most severe among young fowls.

Infested fowls become droopy and emaciated, and refuse to eat. Abscesses and extensive areas of inflammation are common. Many birds die.

#### Control

Rub one of the following substances on infested fowls to kill the chiggers: Sulfur ointment, kerosene, lard, mineral oil, or vaseline.

Use a good disinfectant, such as a 4-percent carbolic acid solution, on areas that contain pus.

## PREPARING A 0.5-PERCENT SPRAY

Purchased product	Amount of product to mix with water	
	With 5 gallons	With 1 gallon
<b>Wettable powder :</b>		
20-percent-----	1 pound 1 ounce	3½ ounces
25-percent-----	13 ounces	2½ ounces
50-percent-----	6½ ounces	1½ ounces
75-percent-----	4½ ounces	1 ounce
<b>Emulsifiable concentrate :</b>		
20-percent-----	2 cupfuls	6½ tablespoonfuls
25-percent-----	1½ cupfuls	5 tablespoonfuls
50-percent-----	¾ cupful	2½ tablespoonfuls
75-percent-----	½ cupful	1½ tablespoonfuls

## PRECAUTIONS

Handle insecticides with care. Most of them are poisonous to people and to animals if used carelessly. . . . Wash off any insecticide that is spilled on the skin. . . . Don't spray or dust near feed and water troughs. . . . Don't use insecticides in strengths greater than those recommended.



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