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FOWL TICK

how to
control it

Leaflet No. 382

U. S. DEPARTMENT OF AGRICULTURE

the FOWL TICK

how to control it

The fowl tick¹ injures poultry by sucking blood. Its preferred victim is the chicken, but it also attacks other poultry, chiefly the turkey.

The fowl tick is also called the chicken tick and the bluebug.

Fowl ticks occur mostly in the southern part of the United States, particularly where the annual rainfall is light, as in the Southwestern States. They sometimes occur in more humid, cooler States through shipment of infested poultry and crates.

Fowl ticks can be controlled by following good sanitation practices, and by spraying with insecticides.

NATURE OF INJURY

The bloodsucking of fowl ticks causes poultry to be unthrifty, to lose weight, and to lay fewer eggs. Heavy infestations sometimes kill fowls by removing their blood, and often cause setting hens to desert their nests.

Chickens infested with ticks show weakness in the legs, droopiness of the wings, loss of appetite, and pale combs and wattles.

HOW THEY DEVELOP

Female ticks lay brownish, spherical eggs in cracks and rough places of poultry houses or roosting areas. In warm weather, the eggs hatch in about 2 weeks. In cool weather, hatching may take 2 or 3 months.

When the eggs hatch, the young ticks, or larvae, attach themselves to the poultry. They gather in places where the feathers are sparse—under the wings and on the thighs and neck. They remain on the fowls about a week, sucking blood. Then they drop off the fowls at night, while the fowls are on the roost, and seek a hiding place. They are about one-tenth inch long and are dark blue or purplish.

After a few days the larvae molt to the next stage: they become nymphs. The nymphs also attach themselves to the fowls and feed on them, but they remain attached only a few minutes at a time. After each feeding they drop off the fowls and seek a hiding place. Each nymph feeds two or three times, and molts several days after each meal. After the final molt, the ticks become adult males and females. The adults feed several times, for a few minutes each time, and the females lay eggs after each meal. Adults are one-fifth to nearly one-half inch long.

The fowl tick:
Nymph as seen
from beneath.

The fowl tick:
Adult female, upper
and lower sides.

Spraying roosts to
control fowl ticks.

¹ *Argas persicus*.

GUIDE FOR PREPARING SPRAYS

Purchased product	Amount of product to mix with 5 gallons of water		Amount of product to mix with 1 gallon of water	
	Lindane, toxaphene, or chlordane	DDT	Lindane, toxaphene, or chlordane	DDT
Wettable powder:				
20-percent.....	1 pound 1 ounce.....	10 pounds 7 ounces.....	3½ ounces.....	2 pounds 1 ounce.
25-percent.....	13 ounces.....	8 pounds 6 ounces.....	2½ ounces.....	1 pound 11 ounces.
50-percent.....	6½ ounces.....	4 pounds 3 ounces.....	1½ ounces.....	13 ounces.
75-percent.....	4½ ounces.....	2 pounds 13 ounces.....	1 ounce.....	9 ounces.
Emulsifiable concentrate:				
20-percent.....	2 cupfuls.....	5 quarts.....	6½ tablespoonfuls.....	4 cupfuls.
25-percent.....	1½ cupfuls.....	4 quarts.....	5 tablespoonfuls.....	3 cupfuls.
50-percent.....	¾ cupful.....	2 quarts.....	2½ tablespoonfuls.....	1½ cupfuls.
75-percent.....	½ cupful.....	1½ quarts.....	1½ tablespoonfuls.....	1 cupful.

HOW TO DETECT THEM

Fowl ticks are not easily noticed because they hide during the day in the cracks and crevices of poultry houses and come out only at night to suck blood from poultry.

Usually you don't know they are around until your flock shows marked symptoms of attack.

It is easier to discover ticks by looking for masses of them in cracks and rough spots, or under loose pieces of bark or boards about the roosts, than it is to find them on the fowls. You can sometimes see them as small, dark objects attached to the skin of the fowls, but only in their first stage of life.

Spots of black excrement near cracks where ticks are hiding is another clue to their presence.

CONTROL METHODS

Once established in a poultry house, fowl ticks are difficult to control. Removal of fowls from infested areas is not a practicable way to get rid of the ticks, which can live as long as 2 years without feeding.

Spraying With Insecticides

A spray containing 0.5 percent of lindane, toxaphene, or chlordane, or 5 percent of DDT, will control fowl ticks. Apply it to roosts and to the interior of poultry houses and coops. Pay particular attention to cracks, crevices, and rough spots where the ticks may be hiding.

Make a spray by mixing a wettable powder or an emulsifiable concentrate with water. (An emulsifiable concentrate is preferred if you use DDT.) The chart above shows how to make sprays from wettable powders and emulsifiable concentrates containing varying percentages of insecticide.

The amount of spray that you will need depends on the size of the poultry house. Thorough coverage with the spray is essential. Repeated treatments may be necessary.

A small power sprayer is the most effective device for applying sprays. You may use a garden-type compressed-air sprayer; but if you are applying a wettable-powder spray, agitate the liquid frequently to keep the powder in suspension in the spray mixture.

Creosote oil, anthracene oils (also known as carbolineums), and crude oil are also effective against fowl ticks when sprayed into their hiding places.

Sanitation and Management Practices

Use roosts and nests of the knock-down type for easier cleaning and spraying.

Eliminate hiding places of ticks by removing loose boards and rubbish.

Do not permit fowls to roost in trees, livestock sheds, and similar unsuitable places. Provide a modern, well-ventilated poultry house and keep it clean.

PRECAUTIONS

Most insecticides are poisonous to people and to animals. Handle insecticides with care.

Label insecticide containers and store them where children, pets, and livestock cannot reach them.

Wash off any insecticide material spilled on the skin. Do not contaminate feed and water troughs with insecticide.

Do not use insecticides in greater strengths than those recommended.

Insecticides recommended for spraying the interior of poultry houses may be harmful if applied to the fowls. Do not spray fowls with one of those insecticides or dip them in it.

This leaflet was prepared by the Entomology Research Branch, Agricultural Research Service. It supersedes Farmers' Bulletin 1070, The Fowl Tick and How Premises May Be Freed From It.

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