

Common Poultry Lice Control

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The body louse, Menacanthus stramineus, and the shaft louse, Menapon gallinae, are the most common of six louse species that infest poultry in California. These two species cause considerable irritation. Infested birds become restless and injure themselves by continually pecking their body areas; decreased weight gain and egg production may result.

All poultry lice have chewing mouthparts and feed on dry skin scales, dead scab tissue, feather parts and debris, and, when present, the excreta of parasitic bloodfeeding mites. Since these lice do not usually suck blood, they are amber to straw colored and are difficult to see on White Leghorns but readily observed on darkfeathered birds. (See figure 1.)

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Figure 1. Body lice, M. stramineus, feeding on skin debris on poultry.

Figure 2. Egg masses of the body louse, M. stramineus, attached to feather barbs.

The body louse moves rapidly among the feathers. To determine if lice are present, one must quickly part the feathers and examine the bird closely. When populations on birds are dense, lousiness is easy to see because of the numerous skin scabs and pearl-colored egg masses at the bases of feathers (body lice) or the strings of light-colored eggs along the feather barbs (shaft lice). (See figures 2 and 3.) The most common areas of infestation are the vent, along the back, on the neck, under the wings, and on the head.

Both body and shaft lice occur on poultry of all ages, but infestations are more common on adult birds. Besides chickens and turkeys, these lice and closely related species have been found on pigeons, guinea fowl, and ducks. Infestations develop through contact with infested birds. The lice usually crawl from one bird to another when poultry are closely confined in cages or pens. Contact with louse-infested feathers, particularly when birds are molting, can be another means of transfer.

LIFE CYCLE

The average incubation of louse eggs (nits) is 5 days. The young, pale, almost transparent lice then begin to feed and grow in size for 10 to 15 days before they become amber-colored adults. Adult lice mate on the bird and egg laying starts in about 2 days. A female louse may lay from 50 to 300 eggs during a 3-week life-span.

The lice cannot live long when not on a bird. Poultry lice do not transfer to livestock, nor do livestock lice transfer to poultry.

WHAT TO DO

For immediate and complete control of the parasites, spray or dust louse-infested birds with insecticides. Several materials are available:

- Sevin® (carbaryl)¹ sprayable powder as ½ percent spray at 1 gallon per 100 birds, or a 5 percent Sevin® dust applied to litter at a rate of 1 pound per 50 square feet:
- malathion emulsifiable concentrate as 0.7 percent spray at 1 gallon per 100 birds;
- Rabon® ("Poultry Spray 50% Wettable Powder") as
 ½ percent spray at 1 gallon per 100 birds;
- Co-Ral[®] (coumaphos) wettable powder as ¹/₄ percent spray at 1 gallon per 100 birds; or
- Korlan® (ronnel) 5 percent granules spread over litter at 1 pound per 100 square feet.

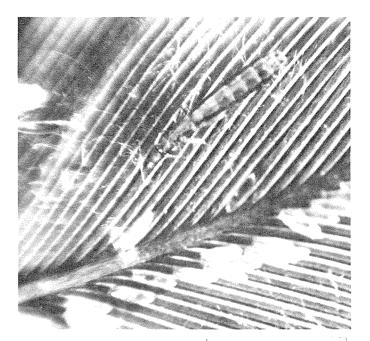


Figure 3. Eggs and female of the shaft louse, M. gallinae.

When spraying caged birds, be certain to spray from underneath as well as from the tops and sides to completely cover each bird. When you use wettable powder formulations, be sure the sprayer is equipped with a mechanical agitator to keep the material in suspension.

Birds on litter are difficult to spray. It is better to treat them indirectly by dusting or by spreading granules on the litter or in floor areas where the birds dust themselves. Dusts or granules can also be put in shallow boxes, about 3 inches high and 18 inches square, and placed inside colony wire cages that hold 20 to 30 birds. (One box containing 3 pounds of dust or granules per 20 to 30 birds should be sufficient.)

For small poultry operations or for birds on floors, you can treat roosts with a liquid material—Black Leaf 40

(40 percent nicotine sulfate) at 1 pint per 200 linear feet, repeated in 2 weeks. Or hand treat with this insecticide at two drops per bird. (Apply to vent area for body lice.) Use extreme caution when applying this material. It is very toxic if spilled on the skin of humans and is toxic to birds if applied in higher dosages than recommended.

For treating individual birds, any of the previously listed spray materials may be applied with a plastic squeeze bottle. Use $\frac{1}{2}$ fluid ounce of spray mixture per bird (about five jet squirts).

WARNING ON THE USE OF CHEMICALS -

Pesticides are poisonous. Always read and carefully follow all precautions and safety recommendations given on the container label. Store all chemicals in their original labeled containers in a locked cabinet or shed, away from foods or feeds, and out of the reach of children, unauthorized persons, pets, and livestock.

Recommendations are based on the best information currently available, and treatments based on them should not leave residues exceeding the tolerance established for any particular chemical. Confine chemicals to birds and to the area being treated. THE POULTRYMAN IS LEGALLY RESPONSIBLE for residues in poultry and in eggs as well as for problems caused by drift from his property to other properties or crops.

Consult your County Agricultural Commissioner for correct methods of disposing of leftover spray material and empty containers. Never burn pesticide containers.

To simplify information, trade names of products have been used. No endorsement of named products is intended, nor is criticism implied of similar products which are not mentioned.

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