THE CONTROL OF POULTRY LICE AND MITES

By S. Marcovitch

To keep poultry in a healthy condition it is essential to protect them from lice and mites. These pests, by their constant irritation, lower the egg-production, and, if allowed to become very numerous, sometimes kill the birds, especially the young ones. It is particularly important that lice be kept away from sitting hens to prevent the young chicks from becoming infested.

LICE

Dust Bath with Fluosilicate.—A very simple method of freeing the farm flock from lice was tried out the past year with good results. It consists of the use of a dust bath containing sodium fluosilicate. In the experiments an ordinary tub was used in which were mixed three parts of finely ground phosphate rock and one part of sodium fluosilicate. Ordinary road dust could be substituted for the phosphate rock. The tub was placed, on March 26, in one corner of a pen containing 72 barred rocks which were thoroughly infested with lice. By May 12, about 60 per cent of the hens were free from lice. Within eight months almost all of the hens were free. A few showed the presence of lice, probably because some fowls seldom use a dust bath. This appears to be the principal disadvantage. The dust-bath method, however, is so simple as to appeal readily to the farmer who would not use any other method of louse control. It has this further advantage, that it does not disturb laying hens.

Pinch Method.—Sodium fluoride is commonly recommended for the control of lice on poultry.¹ In our experiments sodium fluosilicate proved superior; the hens remained free of lice for a longer period and the expense was less. With sodium fluoride hens remained free for about four months, whereas with the sodium fluosilicate lice did not appear again for eight months or longer. There are several grades of sodium fluosilicate on the market, but the commercial form as sold by the Virginia-Carolina Chemical Company was found to be very suitable. It may be obtained for eight to ten cents a pound in 100-pound lots.

The material is best applied in the dust form to various parts of the body by the so-called “pinch method.” The fowl may be held in one hand, or placed on a box, and a pinch of the chemical applied next to the skin on the back, another pinch in the fluff around the vent, one under each wing and one on the breast and neck. Sodium fluosilicate is only slightly soluble and remains long enough on the fowl to destroy all the young hatched from the eggs. Care should be exercised to avoid breathing the material, as it is irritating to the nose. A pound is sufficient to treat about 100 birds.

Dipping.—Most poultrymen prefer dusting by the pinch method, but dipping may also be used if desired. Three-fourths to one ounce should be dissolved in one gallon of warm water. A tub filled to within six or eight inches of the top is suitable. A warm day should be selected and the fowls dipped in the solution by holding the wings over the back, leaving the head out. The feathers should be ruffled to allow the solution to penetrate next to the skin. The head is then ducked once and the bird lifted out, allowed to drain, and released. From 20 to 30 seconds in the bath is enough.

MITES

Mites are very small gray- or red-colored parasites, and live by sucking the blood of the fowl. They are very troublesome and hard to get at, because they hide away during the daytime in cracks and crevices. If they are not kept in check, the fowls become unthrifty and fail to gain weight.

The poultry house and roosts should be thoroughly cleaned and then sprayed with the following mixture:

Kerosene 5 gallons
Creosote 1 pint

Crude petroleum or old crankcase oil thinned with kerosene may also be used. The roosts should be sprayed every week, and the whole house should be sprayed every three months, care being taken to see that the spray reaches all the cracks and crevices where mites may be hiding. Commercial carbolineum is also very effective but more expensive.

Poultry should be kept away from the spray and out of treated buildings until the material is well dried into the wood.

Credit is due Mr. Joseph Zuger, who is in charge of the poultry plant at the University Farm, for the careful manner in which he carried out the plans for the experiments reported in this circular.