

POULTRY YARD

Remedies for Chicken Mites

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The best remedies for mites are cleanliness, sunlight, and spraying with disinfecting solutions. The poultry house and fittings should be scrubbed to be easily cleaned. The walls should be smooth and as free from cracks as possible. Nests, roosts, and dropping boards should be easily removable to allow spraying of their entire surface and the walls beneath them.

There are several preparations for the eradication of mites of which four good ones are given below:

CRESOL SOAP.—Shave or chop one ten-cent cake of laundry soap into one pint of soft water. Heat or allow to stand until a soap paste is formed. Stir in one pound of commercial cresol and heat or allow to stand until soap paste is dissolved. Stir in one gallon of kerosene. For use dilute with 50 parts of water, which will make a milky, colored liquid.

Commercial cresol is a coal tar by-product and may be obtained from the druggist at about 30 cents per pound. Care should be taken not to get any of the hands or face as it will cause intense smarting.

KEROSENE EMULSION.—Shave or chop one-half pound of hard soap, add to a gallon of soft water, place on a fire and bring to a boil to dissolve the soap. Remove from the fire and stir in while hot two gallons of kerosene. This makes a thick, creamy emulsion which may be kept as a stock solution. For use dilute with 10 parts of soft water. It is better to apply it hot if possible.

KEROSENE AND FLAKE NAPHTHALENE. Dissolve in two gallons of kerosene all of one flake naphthalene will take. Apply with dilution. Flake naphthalene is a petroleum by-product in the form of white flakes. It is the basis of moth balls and has the same penetrating gas inside. It may be obtained from the druggist at a cost of from 8 to 15 cents per pound, depending upon the amount purchased.

KEROSENE AND CARBOLIC ACID.—Add 1 part of crude carbolic acid to 3 parts of kerosene. Apply without dilution and keep stirred while applying. Crude carbolic acid is preferred to the better grades because of its containing other coal tar compounds in addition to phenol.

Of these preparations probably the best is the cresol soap solution as it is readily prepared, cheap, efficient, and easily applied. It is used at this station in preference to all other similar preparations.

Any of the commonly advertised coal tar stock dips may also be used with satisfactory results. They may be diluted with 50 parts of water.

These mixtures may be applied with a large brush or with a spraying machine. A good spraying machine is quicker and more efficient than a brush. Great care must be taken to fill thoroughly every crevice in the walls, perches and nests with the liquid. Any of these mixtures will kill any mites with which it comes in contact, but it is impossible to get all of them with one spraying. Two thorough sprayings should be made on the first day. The next day a careful examination should be made and if any mites can be found alive, the house should be thoroughly treated again. Although these solutions will kill the adult mites, it is not likely that they will reach the young eggs and prevent them from hatching. The houses should, therefore, be thoroughly sprayed twice again at intervals of one week. This will catch any mites that have hatch-

ed out from eggs laid previous to the first sprayings.

Before miting hens are placed upon eggs for hatching the nest should be thoroughly saturated with some of these preparations to kill any mites that may be present and to forestall immediate infestation. A tea-spoonful of the undiluted cresol soap solution placed beneath the straw in the hollows of the nests will keep them free from lice as well as mites but it should not come in contact with the eggs.

Extreme care should be taken that none of these mixtures come in contact with eggs that are to be sold for table purposes, as they will be spoiled in taste. Customers who obtained some eggs from the station flock, which had been sprayed with cresol soap solution, complained that the eggs tasted of carbolic acid.

Some Facts Concerning Fertility

How many hens should be placed in a pen with a male bird of good fertility? That question is asked time and again by beginners and it might be interesting to note the differences of opinion. The writer says the best results can be obtained both in fertile eggs and vigor of chicks, by having two males for each pen, and using them alternate days. If one has but a few hens, say a half-dozen or less, better allow the male with them; but for a half day at a time. Professor Wheeler says some of the best results in fertile eggs and good hatching that he has ever had, were 10 hens mated with a year-old male. The hens were in three pens, four in one, and three in each of the others. The male was in each pen one day in three. Stevenson says he always had the best results for fertile eggs when he kept about 30 to 40 hens in one pen, and kept two vigorous cockerels, allowing only one of them with the hens at a time. He kept them in a group arranged for the purpose, and changing them every day. Mount prefers using enough hens for one cock in each pen. With the small, active breeds such as Lehigh Game, etc., 30 hens to one cock are the best number, and with the larger breeds, such as Wyandottes, Plymouth Rocks, etc., 15 hens to one cock. With Brahmas and all very large breeds, 10 hens are enough for one male.

Speaking of fertility, Fred Grundy says small, penned-up flocks, comprising six to 12 females and one male will give 60 to 80 per cent. of fertile eggs, and strong chicks, for 15 to 25 days at the beginning of the season. After that the per cent. of fertility decreases rapidly, and the chicks are invariably weak, and never make good, vigorous breeding fowl. It pays well to have two male birds for each pen, and alternate them. It is a practice the writer has used in his yards for years with marked success. —P.C.E.

Round and How to Prevent it

Round is considered contagious by eminent authorities. Sanitary conditions are a powerful factor in the transmission of the disease after it is once introduced. The symptoms of the disease are very noticeable. Among the first to be observed is the thin watery discharge followed by obstructed breathing. These cases may be readily detected by passing through the houses at night.

Dr. G. E. Salmon claims that the inflammation extends, as the disease advances, from the membrane of the nasal cavity to those of the other connecting passages. The space surrounding the eye connects with the nasal passage consequently this becomes inflamed and a bird in such a condition presents a most miserable appearance. Sometimes the inflammation is so far advanced that the bird is completely blinded.

In the later stages of the disease the false membrane obstructs the nasal passages, presses down the palate, and may prevent swallowing. The specific agent which causes round is no doubt a coccidial. Dr. Hadley of the Rhode Island Experiment Station, in a recent contribution claims that in several cases of the disease, he found parasites (coccidia) present on all the mucous membranes in sufficient numbers and stages to produce nearly all the diseased conditions. Just as Morse claimed that white diarrhea is caused by a Coccidium in the digestive organs, and blackhead is a coccidiosis of a special part of the intestines and the liver in turkeys, so this writer believes that many of the cases of round, the disease popularly called "croup" are instances of an infection by those parasites of the mucous membranes of the head region with or without intestinal complication.

PREVENTIVE MEASURES

Here again, as with most of the diseases, the measure to be followed out is one of prevention. Healthy birds should be removed to clean quarters. Antiseptic solutions should be injected into the nostrils and the roof of the mouth. The pus like or cheesy deposits should be removed and the cavities carefully washed with antiseptic solutions. The following solutions have been recommended by several writers:

1. Two per cent. solution of creoline.
2. Two per cent. solution of carbolic acid.
3. Per cent. of Hydrogen Peroxide.
4. Potassium permanganate of potash to the color of water.
5. Kerosene oil.
6. A mixture of equal parts of lard or olive oil.

White spots usually accompany the development of diphtheritic roup seen scattered about on the roof of the mouth and on the connecting air passages. Dr. Salmon recommends that a two per cent. solution of creoline be applied to the diphtheritic spots in the nostrils and eyes. A mixture of iodine has been applied to the diseased parts successfully. Boric acid, 15 grains to an ounce of water, may be applied to the mouth, nostrils and eyes.

Everything about the poultry houses should be thoroughly disinfected. The feeding troughs should be washed with a solution of carbolic acid, one and two per cent. solutions of carbolic acid to one quart of water. The following from Watson's Farm Poultry may be mixed with the food several hours before feeding as a curative and a preventive agent. A pinch of the following mixture for each fowl:

Hyposulphite of soda, 50 grains;
Salicylate of soda, 50 grains;
Pulverized ginger, 250 grains;
Pulverized yellow gentian, 200 grains;
Pulverized sulphate of iron, 100 grains.

Sulphate of iron should be given in the drinking water, 11-2 grains to a quart of water.

The Full Crop.—It is a good plan to visit the poultry house after the birds are on the roost and feel of their crops. You may be surprised to find now and then one with a crop nearly empty. When this condition exists you may be sure that there is something wrong; she may not be getting her share of the food, or may have been so well fed during the early part of the season that she did not eat much of the night meal. It is a good plan to examine the crop now and then. They should be full at night and empty in the morning. If you find one or two in the flock that does not seem to be doing as well as the others, just examine the crop night and morning, and if you find that she is not right take her away from the rest and feed separately.

The feeding of sprouted oats, as well as cut clover, should begin now, if the green food supply is cut off.

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Poultry Pointer

If breeders would learn to cull closer, success would come much quicker.

No flock of fowls, regardless of breed will bring a profit to their owners unless they are properly cared for.

Clover is a tonic for the fowls and promotes digestion and largely assists the elements for egg production.

Grit is necessary. Keep a box of grit before your fowls now and do not neglect it. It is their teeth.

Most hens prefer the trap nest to lay in; as a rule they are semi-dark, and this just suits biddy.

Eggs are now higher in price and you can well afford to spare a little extra time now with the poultry, in feeding and care.

There is a way to realize a profit from your poultry during the winter months, but it is not the way of the average farmer.

Don't close up everything tight, just because cold weather is here; fresh air and sunshine are two necessities for perfect health of the fowls, but drafts must be avoided.

New resolutions will soon be in order and why not begin now to think what new ones you will make in the poultry yard? If you begin to consider now, your new resolutions will contain no mistake, but will be for future advancement.

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