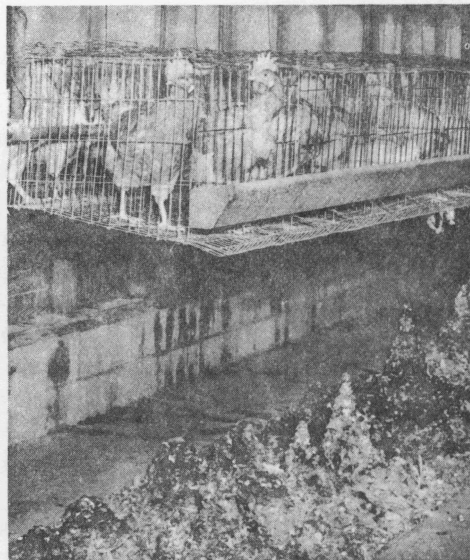


Fly Control in the Laying Cage House

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Flies in a laying cage house must be controlled because they are a nuisance, unsanitary and help cause dirty eggs.

Good control for flies in cage houses seems to lie in a combination of management spraying and poison baits.

Management

Management in fly control means depriving flies of moisture they need for development. Flies normally do not breed in dry droppings; if moisture is eliminated, the breeding will decrease.

Waterers

All watering devices must be constructed and managed in a way that they will not leak and a minimum of water from the birds' beak and wattle will fall on the droppings.

Cones

Droppings must be allowed to build up into cones so that air currents passing over the larger surface of the cones will permit them to dry.

Litter

The floor under the cages should be built higher than the surrounding area so that water drainage will be away from the cage house. A suitable litter should be placed on top of the ground or floor directly under the cages so that the first droppings will dry out prior to the time that the cones form. Shavings, coarse saw dust, bagasse, cotton burrs, peanut hulls and crushed corn cobs make suitable litter.

Cleaning

Clean the house only once or twice a year. One cleaning is recommended in the winter months when it is too cold for fly breeding. Most people in Texas, especially on the Gulf Coast, prefer cleaning the house only once a year. If a second cleaning is desired, it should be done in the driest part of the summer when the weather is so



dry that there will be rapid drying of the droppings thereby preventing fly breeding until the cones can be rebuilt. If one cleaning is used and cones become too tall, the tops may be removed leaving a substantial base on which new cones can build.

A cage house must be constructed to allow maximum ventilation during the summer, not only to keep the hens cool but to keep a continuous air movement on the droppings to aid their drying. Some air movement is essential during all seasons of the year.

Phosphate and Lime

Superphosphate or lime may be sprinkled over the droppings to aid their drying. Superphosphate will help hold the nitrogen in the droppings, thereby making them a better fertilizer. These substances will not kill fly larvae but will reduce odors in the cage house.

Sprays and Poison Bait

For adequate fly control in most cage plants, the best management will have to be accompanied by the use of sprays and poison baits. Because it is economical, DDT in a kerosene solution (1% DDT) still has a place in killing fly larvae in the droppings. Because of resistance which is built up by survival of the more tolerant individuals, new poisons constantly are being developed and tested.

Malathion, as a residual insecticide, has given good results. It is a safe insecticide and the indications so far are that flies do not build up resistance to this product. Malathion is on the market as an emulsifiable concentrate, usually at 57 percent strength. It may be applied as a residual spray to the droppings, walls and other surfaces about the cage house, but the material must not be allowed to come in contact with the feed or birds. Persons applying malathion should prevent the spray from coming in contact with their bodies. Malathion gives good fly reduction for three weeks as a 1.25 percent spray or for seven to eight weeks with 2.5 percent spray.

The following amounts are recommended convenient measurements. To make one gallon of 1.25 percent malathion spray, mix 5 tablespoons of 57 percent concentrate in 1 gallon of water. Twenty-five gallons of 1.25 percent spray can be made by adding one-half gallon of 57 percent concentrate to 24 1/2 gallons of water. One gallon of 2.5 percent spray may be prepared by mixing 10 tablespoons of 57 percent concentrate in one gallon of water. Add one gallon of 57 percent concentrate to 24 gallons of water to make 25 gallons of 2.5 percent malathion spray.

Fly Bait

Fly baits are prepared containing malathion at 5 percent and 25 percent strengths with sugar concentrations of 2.5 percent and 25 percent plus 10 percent dried whey as an attractant. The sugar and dried whey are not necessary but the sugar retards evaporation of the bait mixture and the dried whey attracts flies. A good method of applying the material is to use old mop strings, about 18 inches long, tied at about 2 foot intervals on mason's cord, soaked in the solution, and suspended below and just outside the edge of the cages. This method of applying malathion gives good fly reduction for 7 to 8 weeks.

Residual Sprays

The following figures, while not exact, represent convenient measurements. A 5 percent malathion bait may be prepared by mixing 5 tablespoons of 57 percent malathion emulsifiable concentrate in 1 quart of water. This amount usually is sufficient for saturating enough strings to treat the average cage house. Use 1 1/2 cups or 24 tablespoons of 57 percent malathion emulsifiable concentrate in 1 quart of water to make 25 percent malathion bait.

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