A Promising Insecticide for Controlling Chicken Body Louse

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VAPONA as 2 percent granules shows promise of becoming a good insecticide for controlling the chicken body louse. This insecticide is similar to nicotine sulfate (Black Leaf 40), which was used for many years in poultry houses to control parasites, in that it has a vaporizing action. Because of this, Vapona gives control wherever the vapors are present, normally up to one foot above the treated area. In addition, Vapona kills on contact. An insecticide possessing both properties is ideal for treating litter and nests for control of the chicken body louse.

In addition to Vapona 2 percent granules, emulsifiable Vapona at 1 percent spray has given satisfactory louse control when applied to the litter and nests. One-half gallon of 1% spray applied to 1,700 square feet of litter gave complete control for 28 days when applied twice at a two-week interval.

Emulsifiable Vapona 1 percent spray also has given good control of common red mite. The common red mite’s habit of hiding in crevices and cracks gives the liquid an advantage over the granules because it can reach the source of infestation. Twelve gallons of 1% spray applied once to 8,000 square feet provided 20 weeks’ control of the common mite.

Less Effective at Low Temperatures

In earlier tests, Vapona appeared to be less effective at low than at high temperatures. Tests were conducted to determine the effectiveness of 2 percent Vapona granules when applied to litter and nests at different temperatures. Results are reported in the table. Lice populations were rated on the basis of the average number observed per feather parting (as was discussed in Arkansas Farm Research, Volume XI, Number 2).

Vapona appeared less effective at low temperatures than at high temperatures. This may be due to the fact that low temperatures cause the material to be released at a sub-lethal dose.

The 2 percent granular formulation at rates of 2 and 4 pounds per 100 square feet of litter and nests appears to have good potential as a control chemical for the chicken body louse. In some instances, repeated applications may need to be made, depending on the degree of infestation at time of application.

Approval Being Sought

Residue samples are now being analyzed to determine the amount of Vapona in tissues and eggs following application of 2 percent granules or 1 percent spray to litter and nests. If this analysis reveals that no residue problem exists, it is anticipated that Vapona will become a recommended material for controlling poultry parasites.

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