

**COMPARATIVE AND COMBINED FLY CONTROL EFFECT OF
NEEM PRODUCTS WITH CYROMAZINE IN POULTRY**

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CERTIFICATE

This is to certify that the thesis entitled "Comparative and combined fly control effect of neem products with cyromazine in poultry" submitted in partial fulfilment of the requirements for the degree of Master of Veterinary Science in Veterinary Pharmacology and Toxicology to the Tamil Nadu Veterinary and Animal Sciences University, Chennai is a record of *bona fide* research work carried out by S. Ilavarasan, MVN 11026 (VPT), under my supervision and guidance and that no part of this thesis has been submitted for the award of any other degree, diploma, fellowship or other similar titles or prizes and that the work has not been published in part or full in any scientific or popular journal or magazine.

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Place: Namakkal


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Date: 04/08/2013

Place: Pookode

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ABSTRACT

: Comparative and combined fly control effect of neem products with cyromazine in poultry.

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The present study was conducted to explore the house fly control efficacy of neem products with cyromazine in poultry since fly menace is a serious problem in modern poultry industry.

One hundred and ninety two layer birds of twenty four week were randomly divided into eight groups of twelve each with two replicates and the study was conducted for a period of six weeks. Cyromazine (1%) and neem seed were mixed in

incorporated at a rate of 500 gm and 1 Kg per tonne of feed, respectively and fed during the experimental period and neem oil (5%) was sprayed twice a week until the end of the study. Various combinations of these treatments were also used in individual treatments.

Production parameters such as egg production, feed consumption and feed conversion efficiency were recorded at weekly interval in all treatment groups. Larvicidal activity was observed on 0, 1, 3, 5, 14, 28 and 42nd day and fly density was measured on 14th and 42nd day in all the treatment. Pupicidal activity was observed on 5th day by the method after spraying neem oil on 3rd day.

There was no significant change in production parameters in layers due to dietary inclusion of neem products and cyromazine.

All the feed incorporated treatments possessed good larvicidal activity on 14, 28 and 42nd day. Mere spraying of neem oil possessed good larvicidal effect only on 28 and 42nd day. Reduction in fly density was observed on 28 and 42nd day in all treatments. Mere spraying of neem oil showed significant reduction in fly density on 42nd day of treatment. Pupicidal activity was significant in neem oil sprayed group compared to that of control on 5th day of treatment.

It may be reasonably concluded that dietary inclusion of neem seed and neem oil spray in litter material showed good fly control effect without affecting production parameters and it was very economical to the poultry farmers. The efficacy of neem products was comparable with that of cyromazine and their combinations were synergistic.