

TECHNICAL INFORMATION



Effect of dietary Formi® NDF on the immune status of broiler in environmentally controlled housing systems

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INTRODUCTION

The trial was conducted at a veterinary college in Tamil Nadu, India. The aim of the trial was to test the impact of the acidifier Formi® NDF against a commercial broiler diet containing no acidifier or a positive control containing antibiotics on their immune stimulating effects.

MATERIAL AND METHODS

300 birds were randomly allocated into 6 groups, with 50 broilers each. The trial was terminated after 35 days. Blood samples were collected and checked on their antibody titre against Newcastle Disease. Data were analysed using the t-test and a confidence level of 95% defined for these analyses.

Experimental period: 35 days

Negative control: no acidifier

Positive control: 0.2% Oxytetracycline OTC

4 Trial groups: 0.05% - 0.10% - 0.15% and 0.20% Formi® NDF per t of feed

RESULTS AND DISCUSSION

During the 35-day trial the following data have been recorded (Tab.1):

Table 1: Comparison of broiler immune status against Newcastle Disease between Formi NDF, OTC and a negative control after 35 days (antibody titre assay)

| | Haemagglutination inhibition test |
|------------------------------|-----------------------------------|
| Negative Control | 2.71±0.52a |
| 0.05% Formi NDF | 2.71±0.36a |
| 0.10% Formi NDF | 2.43±0.30a |
| 0.15% Formi NDF | 3.43±0.53ab |
| 0.20% Formi NDF | 4.14±0.14b |
| Positive Control (0.02% OTC) | 3.71±0.52ab |

As it can be seen from the table, the authors of the study commented that dietary supplementation of sodium diformate (Formi® NDF) at 0.15% and above had significantly improved the antibody titre against Ranikhet disease (Newcastle Disease) in broilers, even if compared to an antibiotic. It can therefore be stated that especially the inclusion of Formi® NDF to broiler diets positively affects the immune status of the birds.