



**EFFECT OF *MORINGA OLEIFERA* SEEDS ON  
IMMUNITY AND PERFORMANCE OF BROILERS  
IN EGYPT AND SUDAN**

**By**

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## **ABSTRACT**

This study aims to investigate the effect of feeding different dietary levels of *Moringa oleifera* seeds powder (MOSP) and phytase (500 FTY/kg diet) on some productive performance, immune response, and blood constituents of broiler chicks. A total of 240, 1-day old unsexed Cobb 500 chicks were individually weighed and randomly distributed into 6 equal groups.

Each group had 40 birds in 5 replicates of 8 chicks. Groups were allocated to different six experimental diets; 1- A control basal, 2- A control plus phytase enzyme, 3- A control plus 0.75% MOSP, 4- A control plus 0.75% MOSP and phytase, 5- A control plus 1% MOSP and 6- A control plus 1% MOSP with phytase). The growth trial lasted for 38 days.

The results show that birds fed MOSP at 0.75% with phytase had significantly the highest values of live body weight gain, lowest feed intake and best feed conversion ratio.

Blood serum of total cholesterol and LDL were lower in chicken fed 0.75% MOSP (with and without) enzyme compared to the control and the other dietary levels of MOSP. Values of AST were lower in broilers fed MOSP at 0.75% with enzyme and those at 1% without enzyme, compared to control and other dietary treatments. However, no significant differences were observed in the ALT values between dietary treatments.

A better antibody titer against Newcastle disease and immune response was observed in broilers received MOSP at 0.75% with phytase supplementation. It could be concluded that using MOSP at 0.75% plus phytase gave better values of growth, immune organs, blood constituents, and the general health of broilers.

**Keywords:** *Moringa oleifera* seeds; immunity; newcastle disease; growth performance; broiler; blood constituents

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