

## **Prophylactic Effect of Dietary Garlic (*Allium sativum*) Inclusion in Feed of Commercial Broilers with Coccidiosis Raised at the Experimental Animal Unit of the Department of Veterinary Medicine, University of Ibadan, Oyo State, Nigeria**

**Authors :** Ogunlesi Olufunso, John Ogunsola, Omolade Oladele, Benjamin Emikpe

**Abstract :** Context: Coccidiosis is a parasitic disease that affects poultry production, leading to economic losses. Garlic is known for medicinal properties and has been used as a natural remedy for various diseases. This study aims to investigate the prophylactic effect of garlic inclusion in the feed of commercial broilers with coccidiosis. Research Aim: The aim of this study is to determine the possible effect of garlic meal inclusion in poultry feed on the body weight gain of commercial broilers and to investigate its therapeutic effect on broilers with coccidiosis. Methodology: The study conducted a case-control study for eight weeks with One hundred Arbor acre commercial broilers separated into five (5) groups from day-old, where 6,000 *Eimeria* oocysts were orally inoculated into each broiler in the different groups. Feed intake, body weight gain, feed conversion ratio, oocyst shedding rate, histopathology and erythrocyte indices were assessed. Findings: The inclusion of garlic meal in the broilers' diet resulted in an improved feed conversion ratio, decreased oocyst counts, reduced diarrhoeic fecal spots, decreased susceptibility to coccidial infection, and increased packed cell volume (PCV). Theoretical Importance: This study contributes to the understanding of the prophylactic effect of garlic supplementation, including its antiparasitic properties on commercial broilers with coccidiosis. It highlights the potential use of non-conventional feed additives or ayurvedic herb and spices in the treatment of poultry diseases. Data Collection and Analysis Procedures: The study collected data on feed intake, body weight gain, oocyst shedding rate, histopathological observations, and erythrocyte indices. Data were analyzed using Analysis of Variance and Duncan's Multiple range Test. Questions Addressed: The study addressed the possible effect of garlic meal inclusion in poultry feed on the body weight gain of broilers and its therapeutic effect on broilers with coccidiosis. Conclusion: The study concludes that garlic inclusion in the feed of broilers has a prophylactic effect, including antiparasitic properties, resulting in improved feed conversion ratio, reduced oocyst counts and increased PCV.

**Keywords :** broilers, *eimeria* spp, garlic, Ibadan

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