

## News &amp; Comments

***Pleurotus ostreatus*: A Supplement Without Negative Effects on the Growth of the Broiler Birds***Tanveer Ahmad*

In the world, poultry meat is a significant source of high-quality animal protein. The use of rice husk as an unconventional feed ingredient, particularly in broiler chicken feed, is constrained by several variables. Fibre content, poor nutritional value, and bulkiness are a few of these drawbacks. To lower the fibre content, numerous processing methods have been reported and used. It has been shown that fungi, like mushrooms, are very helpful in the recycling of organic wastes and have a high potential to replenish the ecosystem with nutrients. Due to the extracellular enzymes secreted by *Pleurotus ostreatus*, also known as the oyster mushroom, lignocellulosic materials have been observed to be bioconverted. Therefore, this research investigated how broiler chickens responded to diets containing fermented rice husk from the *Pleurotus ostreatus* fungus (PFFRH).

The study was carried out at the Poultry Research Unit of the Teaching and Research Farm, Faculty of Agricultural Sciences, Ekiti State University. The Department of Applied Biological Science at the Ladoké Akintola University of Technology in Ogbomoso, Oyo State, Nigeria provided the pure culture of *P. ostreatus*. Each treatment group had 30 birds, which were divided among three replicates, each of which contained 10 birds. Throughout the various phases, food and water were given twice daily at 7:00 a.m. and 14:00 p.m. and the Average Daily Feed Intake (ADFI) in grams was kept track of. Using the techniques outlined by AOAC, the proximate composition of native rice husk, *Pleurotus ostreatus* Fermented Rice Husk (PFFRH), experimental diets, and faecal samples were determined. Analysis of variance (ANOVA) was performed on the collected data at a level of 5% probability.

The broiler chickens' average feed consumption was unaffected by the treatment groups. According to growth performance, broiler chickens given native *Pleurotus ostreatus*-fermented rice husk gained more weight than those fed Brozyme-supplemented diets comprising the identical test meal during the starter and finisher phases as well as the entire feeding trial. Though the parameters observed for the haematological indices such as PCV, RBC, WBC and haemoglobin concentration, MCHC, MCH and MCV indicated substantial differences, the values were all within the range for broiler chicken. A fungus called *Pleurotus ostreatus* is highly effective in breaking down the lignin found in the majority of fibrous agricultural wastes. Alkaline phosphatase values were not significantly changed, which was consistent with the findings from other serum enzymes indicating there was no liver damage and no



bone calcification or osteoblast, which is a sign that the diet is getting enough calcium.

To improve growth performance and nutrient utilization, *Pleurotus ostreatus* fungus fermented rice husk can be utilized as a feed ingredient for broiler chicken diets for 7 days. This could replace the maize source. To achieve the best growth performance, PFFRH should make up 10% of the broiler diets.

#### **JOURNAL REFERENCE**

F.A.S. Dairo and S. W. Ogunlade, 2022. Growth performance and haematological indices of broiler chickens fed on rice husk supplemented with oyster mushroom (*Pleurotus ostreatus*) and brozyme enzyme. *Int. J. Poult. Sci.*, 21: 18-27.

#### **KEYWORDS**

Poultry feed, rice husk, serum chemistry of broilers, maize, fungus, enzyme

