

# **PENGARUH KANDUNGAN GAS AMONIA TERHADAP KINERJA PRODUKSI AYAM BROILER DI KEMITRAAN PT. CEMERLANG UNGGAS LESTARI**

ILHAM HANDIKA YULY SYAH PUTRA NIM : 200220058

## **INTISARI\***

Penelitian ini dilakukan bertujuan untuk mengetahui pengaruh kadar amonia terhadap kinerja ayam broiler di kandang *closed house*. Penelitian ini dilaksanakan pada bulan Februari – Maret 2022 di kandang mitra PT. Cemerlang Unggas Lestari yang berlokasi di Bantul, Purworejo, dan Klaten. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) pola searah yang terdiri dari 3 perlakuan dengan 4 kali pengulangan. Perlakuan yang diberikan berupa manajemen pengelolaan sekam yaitu penaburan, pembalikan dan tabur, dan penyesrekan dan tabur. Variabel yang diamati meliputi *Body Weight* (BW), konsumsi pakan, *Average Weekly Gain* (AWG), mortalitas, morbiditas, *Feed Conversion Ratio* (FCR), dan *Index Performance* (IP). Data yang diperoleh ditabulasi dan dilanjutkan dengan uji *Descriptive* dan *Regression Curve Estimation* menggunakan SPSS 25. Hasil penelitian menunjukkan dengan perlakuan T1, T2, dan T3 berturut-turut yaitu gas amonia 9, 7,75, dan 7,5 ppm. Bobot badan yaitu 2285,3 gr, 2320,3 gr, dan 2455 gr. Konsumsi pakan yaitu 26118,8 gr, 27877,5 gr, dan 27317,5 gr. AWG yaitu 719,75 gr, 703 gr, dan 755,5 gr. Mortalitas yaitu 0,3725%, 0,3675%, dan 0,355%. Morbiditas yaitu 0,3475%, 0,3225%, dan 0,325%. FCR yaitu 1,4718, 1,4813, dan 1,466. IP dengan perlakuan 427,75, 444, dan 451,5. Berdasarkan hasil penelitian dapat disimpulkan bahwa amonia tidak mempengaruhi kinerja produksi ayam broiler dikarenakan kadar gas amonia masih diambang batas normal yaitu kurang dari 25 ppm.

**Kata kunci** : Ayam broiler, perlakuan *litter*, gas amonia

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**ABSTRACT\***

This research was aimed to determine the effect of ammonia levels on broiler performance in closed house cage. This research was conducted in February - March 2022 in partner cages of PT Cemerlang Unggas Lestari located in Bantul, Purworejo, and Klaten. This study used a completely randomized design (CRD) unidirectional pattern consisting of 3 treatments with 4 repetitions. The treatments were chaff management, namely sowing, turning and sowing, and brushing and sowing. The observed variables included Body Weight (BW), feed consumption, Average Weekly Gain (AWG), mortality, morbidity, Feed Conversion Ratio (FCR), and Performance Index (IP). The data obtained were tabulated and continued with Descriptive and Regression Curve Estimation tests using SPSS 25. The results showed that the T1, T2, and T3 treatments were 9, 7.75, and 7.5 ppm ammonia gas, respectively. Body weight were 2285.3 gr, 2320.3 gr, and 2455 gr. Feed consumption were 26118.8 gr, 27877.5 gr, and 27317.5 gr. AWG were 719.75 gr, 703 gr, and 755.5 gr. Mortality were 0.3725%, 0.3675%, and 0.355%. Morbidity were 0.3475%, 0.3225%, and 0.325%. FCR were 1.4718, 1.4813, and 1.466. IP with treatments were 427.75, 444, and 451.5. Based on the results of the study, it can be concluded that ammonia does not affect the performance of broiler production because ammonia gas levels are still at the normal threshold of less than 25 ppm.

**Keywords :** Broilers, litter treatment, ammonia gas