

Harisudin, Yusril, 2019. **Pengaruh Pemberian Probiotik *Lactobacillus plantarum* Terhadap Kadar *Aspartate Aminotransferase* (AST) Dan *Alanine Aminotransferase* (ALT) Pada Ayam Broiler Di Peternakan Di Kabupaten Jombang.** Tugas Akhir ini dibawah bimbingan Shelly Wulandari, drh., M. Si., Program Studi D3 Paramedik Veteriner, Departemen Kesehatan, Fakultas Vokasi, Universitas Airlangga, Surabaya.

A B S T R A K

Ayam pedaging (broiler) mempunyai peranan yang sangat penting sebagai sumber protein hewani asal ternak. Harga yang dapat dijangkau oleh semua kalangan masyarakat dengan rasa daging yang enak menjadikan ayam pedaging (broiler) ini digemari masyarakat sehingga permintaan daging ayam broiler tahunnya meningkat. Agar produksi bisa optimal, diperlukan perbaikan gizi terhadap bahan pakan yang berkualitas. Permasalahan umum yang sering terjadi dilingkungan peternak ayam adalah larangan penggunaan Anti Growth Promotor (AGP) sebagai pakan tambahan yang jika digunakan terus menerus akan menimbulkan efek negatif berupa residu dalam karkas ayam pedaging dan juga dapat menyebabkan kerusakan metabolisme dari ayam broiler salah satunya kerusakan hati yang nantinya akan mempengaruhi kadar dari enzim *Aspartate Aminotransferase* (AST) dan *Alanine Aminotransferase* (ALT). Sehubungan dengan hal tersebut maka diperlukan manipulasi nutrisi untuk mengoptimalkan biaya pakan dengan memaksimalkan produksi. Salah satu solusi untuk meningkatkan dan menjaga produktivitas, yaitu dengan menambahkan bahan pakan tambahan (*feed additive*) berupa probiotik. Observasi ini berujuan untuk mengetahui pengaruh pemberian probiotik *Lactobacillus plantarum* terhadap kadar *Aspartate Aminotransferase* (AST) dan *Alanine Aminotransferase* (ALT) pada serum ayam broiler. Metode yang digunakan untuk pengambilan data dengan metode survei, data yang diambil adalah data primer dan data sekunder. Data primer diperoleh secara langsung (wawancara), sedangkan data sekunder diperoleh dari literature – literature, dan data dari pemeriksaan serum di laboratorium. Hasil observasi menunjukkan bahwa pemberian probiotik *Lactobacillus plantarum* dalam campuran pakan yang diberikan sampai fase finisher pada ayam broiler menunjukkan adanya kecenderungan mempengaruhi kadar enzim *Aspartate Aminotransferase* (AST) dan *Alanine Aminotransferase* (ALT). Hasil observasi juga mengalami pembiasan dari pembacaan kadar enzim *Aspartate Aminotransferase* (AST) dan *Alanine Aminotransferase* (ALT) pada setiap perlakuan dan setiap minggunya.

Kata kunci : Broiler, *Antibiotic Growth Promotor* (AGP), Probiotik, Enzim *Aspartate Aminotransferase* (AST) dan *Alanine Aminotransferase* (ALT), *Lactobacillus plantarum*.

Harisudin, Yusril, 2019. **Effect of Probiotic *Lactobacillus plantarum* on the levels of Aspartate Aminotransferase (AST) and Alanine Aminotransferase (ALT) in Broiler Chickens in Livestock in Jombang Regency.** This Final Project is under the guidance of Shelly Wulandari, drh., M. Si., D3 Veterinary Paramedics Study Program, Department of Health, Vocational Faculty, Airlangga University, Surabaya.

A B S T R A C T

Broilers have a very important role as a source of animal protein from livestock. The price that can be reached by all people with a good taste of meat makes this broiler popular with the community so that the demand for broiler chicken is increasing. In order for production to be optimal, nutritional improvements to quality feed ingredients are needed. Common problems that often occur in chicken breeders are the prohibition on the use of Anti Growth Promoter (AGP) as additional feed which if used continuously will cause negative effects in the form of residues in broiler carcasses and can also cause damage to metabolism of broiler chickens, one of which is liver damage. will affect the levels of the Aspartate Aminotransferase (AST) and Alanine Aminotransferase (ALT) enzymes. In connection with this, nutritional manipulation is needed to optimize feed costs by maximizing production. One solution to improve and maintain productivity, namely by adding additional feed ingredients (feed additive) in the form of probiotics. This observation aims to determine the effect of probiotic *Lactobacillus plantarum* on levels of Aspartate Aminotransferase (AST) and Alanine Aminotransferase (ALT) in broiler chicken serum. The method used for data collection using the survey method, the data taken is primary data and secondary data. Primary data is obtained directly (interview), while secondary data is obtained from the literature, and data from serum examination in the laboratory. Observations showed that administration of probiotic *Lactobacillus plantarum* in feed mixtures given to the finisher phase in broiler chickens showed a tendency to affect the levels of Aspartate Aminotransferase (AST) and Alanine Aminotransferase (ALT) enzymes. The observation results also experienced refraction from reading the levels of Aspartate Aminotransferase (AST) and Alanine Aminotransferase (ALT) enzymes at each treatment and every week.

Keywords: Broiler, Antibiotic Growth Promoter (AGP), Probiotics, *Aspartate Aminotransferase* (AST) and *Alanine Aminotransferase* (ALT) enzymes, *Lactobacillus plantarum*.