

PENGARUH PEMBERIAN PROBIOTIK MAROLIS™ TERHADAP MORFOMETRI DAN KUALITAS DAGING AYAM BROILER (*Gallus gallus domesticus* Linnaeus, 1758)

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Marolis™ merupakan produk probiotik komersial berbentuk cair yang digunakan dalam bidang peternakan. Pemberian probiotik pada hewan ternak seperti unggas dapat meningkatkan hasil produktivitas unggas, melalui peningkatan performa pertumbuhan, daya tahan tubuh serta meningkatkan reproduksi ternak. Oleh karena itu, penelitian ini dilakukan bertujuan untuk mengetahui pengaruh pemberian probiotik Marolis™ terhadap performa dan kualitas daging ayam pedaging. Sebanyak 40 ekor ayam DOC (*Day Old Chicken*) ras pedaging dibagi secara acak menjadi 4 kelompok perlakuan, meliputi : kontrol, perlakuan pemberian Marolis 0,5 mL/ekor, perlakuan pemberian Marolis 1,0 mL/ekor, dan perlakuan pemberian Marolis 1,5 mL/ekor. Studi pertumbuhan dilakukan melalui pengukuran berat badan dan morfometri ayam secara langsung serta pengukuran kadar IGF-1 menggunakan metode ELISA, sedangkan kualitas daging diuji melalui pengukuran kadar air menggunakan metode Gravimetri, pengukuran kadar abu menggunakan metode Gravimetri, pengukuran lemak total menggunakan metode Gravimetri, dan pengukuran protein menggunakan metode Kjeldahl. Data yang diperoleh selanjutnya dianalisis secara statistik menggunakan IBM SPSS *Statistics* 20 melalui uji *general linear model univariate* dan *compare means one-way Anova* ($\alpha=5\%$).

Hasil yang diperoleh menunjukkan pemberian Marolis memberikan pengaruh nyata terhadap performa ayam Broiler meliputi peningkatan berat badan, panjang badan, panjang sayap, panjang tibia dan panjang tarsus metatarsus, serta peningkatan kadar IGF-1 dibandingkan dengan kontrol. Pemberian Marolis dengan dosis 1,5 mL/ekor dapat meningkatkan kualitas daging ayam broiler melalui peningkatan persentase protein total secara signifikan. Sehingga dapat disimpulkan bahwa pemberian probiotik marolis dapat meningkatkan performa serta kualitas daging ayam Broiler.

Kata kunci : Probiotik, pertumbuhan, morfometri, kandungan gizi, *Broiler*.

**EFFECTS OF MAROLIS™ PROBIOTIC ADMINISTRATION ON THE
MORPHOMETRY AND MEAT QUALITY OF BROILER CHICKEN
(*Gallus gallus domesticus* Linnaeus, 1758)**

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ABSTRACT

Marolis™ is one of liquid probiotic product which commercially used in animal husbandry. Probiotics addition in diet of livestock such as poultry may increase productivity of poultry, improve its performance, immunity and reproductivity. This research was conducted to determine the effect of Marolis™ probiotics on broiler performance and meat quality. Fourty DOC (Day Old Chiken) broilers were divided randomly into four groups. First group was control. Second group, third group and fourth group were treated with Marolis probiotic each different concentrations (0.5 mL, 1.0 mL and 1, 5 mL). Growth studies included measurements of body weight, and morphometry. IGF-1 concentration was tested using ELISA method. Meat quality was tested by measurements of water content using the Gravimetric method, measurement of ash content using the Gravimetric method, measurement of total fat using the Gravimetric method, and protein measurement using Kjeldahl method. The datas were obtained and statistically analyzed using IBM SPSS Statistics 20 by general linear model univariate test and compare means one-way Annova ($\alpha = 5\%$).

The results indicated that Marolis had significantly affected Broiler performance including increasing body weight, body length, wings length, tibia length, shank length and IGF-1 concentration. And Marolis at a dose of 1.5 mL can improve the quality of broiler chicken meat, significantly increasing the percentage of total protein. So it can be concluded that broiler which treatment by probiotic marolis had improve the performance and meat quality of Broiler.

Keywords: Probiotics, growth, morphometry, nutrient content, *Broiler*.