

## INTISARI

### PERBANDINGAN HISTOMORFOMETRI INTESTINUM TENUE AYAM BROILER YANG DIBERI PERLAKUAN PREBIOTIK MULTI VIT<sup>®</sup>, PROBIOTIK EM4<sup>®</sup>, DAN AGP STAMIX-20<sup>®</sup> SELAMA 31 HARI

Oleh  
**Khoirotul Amalia Putri**  
**17/412427/KH/09323**

Penggunaan *Antibiotic Growth Promoter* (AGP) sebagai imbuhan pakan ayam sudah dilakukan sejak lama untuk meningkatkan performans ayam. Penggunaan AGP telah dilarang dan sebagai alternatif pengganti AGP digunakan probiotik, prebiotik, dan sinbiotik. Penelitian ini bertujuan untuk mengetahui perbandingan histomorfometri panjang, lebar, dan tebal mukosa intestinum tenue ayam yang diberi MultiVit<sup>®</sup>, EM-4<sup>®</sup>, dan AGP Stamix-20<sup>®</sup> dengan kontrol.

Ayam dikelompokkan berdasarkan perlakuan : kontrol, MultiVit<sup>®</sup> mulai hari ke-7, EM-4<sup>®</sup> dan AGP Stamix-20<sup>®</sup> mulai hari ke-0 hingga panen. Ayam dinekropsi untuk diambil bagian duodenum, jejunum, dan ileum, kemudian dibuat preparat histologi. Data pengukuran berupa panjang vili, lebar vili atas, lebar vili bawah, dan tebal mukosa vili dianalisis menggunakan SPSS Uji Kruskal-Wallis.

Hasil statistika pada semua parameter tidak menunjukkan perbedaan yang nyata ( $P > 0,05$ ) pada kelompok perlakuan MultiVit<sup>®</sup>, EM-4<sup>®</sup>, AGP Stamix-20<sup>®</sup> terhadap kontrol. Grafik rerata panjang dan tebal mukosa vili kelompok MultiVit<sup>®</sup> lebih tinggi dibandingkan kelompok kontrol, perlakuan EM-4<sup>®</sup> dan AGP Stamix-20<sup>®</sup>. MultiVit<sup>®</sup> mampu meningkatkan panjang vili setara dengan EM-4<sup>®</sup>, dan lebih panjang dibandingkan kontrol serta AGP Stamix-20<sup>®</sup>.

Kata kunci : prebiotik, AGP, broiler, MultiVit<sup>®</sup>

## ABSTRACT

### COMPARISON OF INTESTINUM TENUE CHICKEN BROILER HISTOMORPHOMETRY THAT PROVIDED MULTI VIT<sup>®</sup>, PROBIOTIC EM4<sup>®</sup>, AND AGP STAMIX-20<sup>®</sup> FOR 31 DAYS

Khoirotul Amalia Putri  
17/412427 /KH/09323

The use of *Antibiotic Growth Promoter (AGP)* as feed additive for chicken has been applied to improve chicken performance of chicken. Antibiotic Growth Promoter in feed has now prohibited and probiotics, prebiotics and synbiotics were introduced as alternative. This study aimed to determine the histomorphometric from the length, width, and thickness of the intestinal tenue mucose of chicken treated with MultiVit<sup>®</sup>, EM-4<sup>®</sup>, and AGP Stamix-20<sup>®</sup>.

Chickens were grouped according to treatment: control, MultiVit<sup>®</sup> from day 7, EM-4<sup>®</sup> and AGP Stamix-20<sup>®</sup> from day 0 to harvest. Chickens were sacrificed and part of duodenum, jejunum, and ileum were collected for histology. Datas of the length, upper width, lower width, and mucosal thickness villus was analyzed by Kruskal-Walis SPSS test.

Statistical results of all parameters did not show significant differences ( $P > 0.05$ ) in the treatment groups compared to control. However the mean length and thickness of villus mucose in the MultiVit<sup>®</sup> group was higher than control, EM-4<sup>®</sup> and AGP Stamix-20<sup>®</sup> group. MultiVit<sup>®</sup> were able to increase villus length equivalent to EM-4<sup>®</sup>, and longer than control and AGP Stamix-20<sup>®</sup>.

Key words: prebiotic, AGP, broiler, MultiVit<sup>®</sup>