

The Pattern of Growth on Broiler's Digestive Organs (*Proventriculus*, *Ventriculus*, *Intestinum tenue*, *Intestinum crassum*)

Siti Faidatul Masruroh

ABSTRACT

The aim of this research was to investigate the growth anatomy of broiler digestive organs at different age and the pattern of broiler growth. Research design used was Complete Random Design (RAL). The total sample used in this study was 24 day old chick (DOC) which will be divided into 4 groups. Each group raised and slaughtered at the age of 7, 14, 21 and 28 days. The observed variables are weight of *proventriculus*, *ventriculus*, small intestine and large intestine. All data were analyzed by Multivariate Adaptive Regression Splines (MARS) method. The Results of this research showed different growth patterns on the digestive organs which indicated by added weight of the organ. The growth pattern of *proventriculus*, *intestinum tenue*, and *intestinum* have a starting point at the age of 21 days. After 21 days, the speed of added weight organ is higher than before 21 days. *Ventriculus* showed linier growth pattern against the value of weight organ. The difference in the pattern of this growth is influenced by the different functions of each organ.

Keywords: Age, Digestive organ, Growth pattern, Broiler