ABSTRACT

Dwinanda Budiwardani. 24020120140055. Liver Histomorphometry of Peking Ducks (*Anas platyrhynchos*) After Addition of Spirulina (*Spirulina* sp.) Flour Feed Additive. Supervised by Sunarno and Sri Isdadiyanto.

Providing standard feed to support and improve growth, productivity, health, and digestibility of livestock still requires feed additives, one of which is the natural feed additive spirulina flour. Spirulina flour was one of the natural feed additive chosen because it contained bioactive compounds, had no side effects on livestock, and substitute for antibiotics for livestock, so it could increased the growth, productivity, health, and digestibility of peking ducks. The aim of this study was to analyzed the effect of spirulina flour feed additive on peking duck liver histomorphometry. This research used a Completely Randomized Design (CRD) with 5 types of spirulina flour concentration treatments (0%, 2.5%, 5%, 7.5%, and 10%) and 5 replications inclueded 5 ducks in each replications. The treatment groups included P0, P1, P2, P3, and P4. Measurement variables included liver weight, hepatosomatic index, hepatocyte and central vein diameter, and sinusoid width. The data obtained were analyzed by Analysis of Variance (ANOVA) test with a confidence level of 95%. The results showed that the addition of spirulina flour as a feed additive had no effect on liver weight, hepatosomatic index, hepatocyte diameter, central vein diameter, and sinusoid width. The conclusion of this research was that added spirulina flour (*Spirulin*a sp.) feed additive potentially maintained the histomorphometry of the peking duck liver organ.

Keywords : *sinusoid, hepatocyte, hepatosomatic index, antioxidant, binucleate cell*