

## INTISARI

### **Efek Infeksi Cacing *Ascaridia galli* Terhadap Gambaran Histopatologi Organ Duodenum dan Berat Badan Ayam Broiler**

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Infeksi cacing *A. galli* biasanya menimbulkan kerusakan yang parah pada intestinum selama bermigrasi pada fase jaringan di lapisan mukosa intestinum sehingga berpengaruh terhadap gambaran perubahan histopatologi di duodenum ayam dan berat badan ayam menurun karena tidak mampu menyerap nutrisi dengan baik. Berdasarkan hal tersebut diatas, perlu diadakan penelitian untuk mengevaluasi pengaruh infeksi cacing *A. galli* terhadap gambaran histopatologi pada epitel duodenum *broiler* serta perbandingan bobot ayam *broiler* yang terinfeksi. Pada penelitian ini digunakan DOC ayam broiler *strain* Cobb Kode CP 707 dari PT Charoen Pokphand Jaya Farm yang berjumlah 16 ekor. Cacing *A. galli* yang digunakan pada penelitian ini diperoleh dari Tempat Pemotongan Ayam (TPA) Pasar Terban Yogyakarta diinokulasikan telurnya hingga stadium L2 dan diinfeksi sebanyak 5000 telur/ekor ayam. Pengambilan sampel duodenum setelah ayam berumur 6 minggu, dilakukan pewarnaan *Periodic Acid Schiff* (PAS) dan hasil dianalisis dengan *student t-test* serta analisis deskriptif. Data menunjukkan bahwa infeksi cacing *A. galli* berpengaruh terhadap gambaran histopatologi adanya peningkatan peradangan dan nekrosis pada epitel duodenum serta penurunan berat badan ayam *broiler*.

**Kata kunci: *Ascaridia galli*, Broiler, Histopatologi Duodenum, Berat Badan, Pewarnaan PAS**

## ABSTRACT

### **The Effect of *Ascaridia galli* Infection on the Duodenum Histopathologic Images and Weight Gain of Broiler Chickens**

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Infection of *Ascaridia galli* (*A. galli*) on chickens causes slow growth and decrease of weight gain. The infection of *A. galli* usually causes severe damage to the intestine of the infected chicken during the migration on the mucosal layer of the intestine. In that case, the infection takes effect on the duodenum histopathologic images changes and the weight decrease of the chickens that are unable to absorb nutrients well. Based on what's discussed above, a research to evaluate the *A. galli* infection on the duodenum epithel histopathologic of broiler chickens and weight comparison of the infected chickens needs to be held. The DOC used for this research are strain Cobb code CP 707 from PT Charoen Pokphand Jaya Farm with the total of 16 chicks. The *A. galli* helminthes used on this research are from Terban Market's Poultry Slaughter, Yogyakarta. The helminth's eggs were inoculated after stadium L2 and are infected as much as 5000 eggs per chicken. The duodenum samples pick up was done after the chickens aged 6 weeks, a coloring with Periodic Acid Schiff (PAS) was conducted, then the samples were being analyzed with student t-test and descriptive analysis. The data obtained shows that *A. galli* infection took effects on broiler chicken's duodenum epithel histopathologic images.

**Key words: *Ascaridia galli*, Broiler, Duodenum Histopathology, Weight Gain, PAS coloring**