

## **PENGARUH PENAMBAHAN TEPUNG KUNYIT (*Curcuma domestica* Val.) DAN TEPUNG CABAI (*Capsicum annuum* L.) DALAM RANSUM TERHADAP KUALITAS EKSTERNAL DAN INTERNAL TELUR AYAM PETELUR STRAIN LOHMANN BROWN**

**Najwa Maulidka**  
**22/499381/PT/09401**

### **INTISARI**

Kunyit dan cabai merah memiliki fungsi utama yang hampir mirip yaitu antimikroba dan antioksidan. Diharapkan kedua herbal tersebut mampu memberikan efek sinergis melalui optimalisasi metabolisme dan penyerapan nutrisi sehingga dapat meningkatkan kualitas telur sebagai produk utama ayam petelur. Penelitian ini memiliki tujuan untuk mengetahui efek penambahan tepung kunyit dan tepung cabai merah serta kombinasi keduanya dalam ransum ayam petelur terhadap kualitas eksternal dan internal telur. Sebanyak 100 ekor ayam petelur betina strain *Lohmann Brown* berumur 49 minggu dipelihara dalam kandang baterai individual dan diberikan 4 perlakuan pakan, yaitu PO = 100% pakan basal; PK = 99,5% pakan basal + 0,5% tepung kunyit; PC = 99,5% pakan basal + 0,5% tepung cabai; PKC = 99% pakan basal + 0,5% tepung kunyit + 0,5% tepung cabai, dengan 5 replikasi. Data yang diambil adalah berat telur, berat jenis telur, berat kerabang yang diuji dengan uji ANOVA Welch (homogenitas  $P < 0,05$ ) dan uji lanjutan Games-Howell, sedangkan ketebalan kerabang, indeks telur, indeks *albumen*, indeks *yolk*, warna *yolk*, dan nilai *Haugh Unit* diuji dengan uji ANOVA dan uji lanjutan DMRT. Hasil penelitian dan analisis data menunjukkan ketiga perlakuan meningkatkan warna *yolk* dan perlakuan tepung cabai meningkatkan indeks telur secara signifikan. Kesimpulannya, penambahan tepung kunyit dan tepung cabai merah serta kombinasi keduanya meningkatkan indeks telur dan warna *yolk*, namun belum memberi perbedaan nyata terhadap berat telur, berat jenis telur, berat kerabang, ketebalan kerabang, indeks *albumen*, indeks *yolk*, dan *Haugh Unit*.

Kata kunci: ayam petelur, cabai merah, kualitas eksternal telur, kualitas internal telur, kunyit, strain *lohmann brown*

**EFFECT OF ADDITION OF TURMERIC FLOUR (*Curcuma domestica* Val.) AND RED CHILLI FLOUR (*Capsicum annuum* L.) IN THE RATION TOWARDS THE EXTERNAL AND INTERNAL EGG QUALITY OF LOHMANN BROWN STRAIN LAYING HENS**

**Najwa Maulidka**  
**22/499381/PT/09401**

**ABSTRACT**

Turmeric and red chili have almost similar main functions, antimicrobial and antioxidant. It is hoped that these two herbs can provide synergistic effects through the optimization of metabolism and nutrient absorption, thereby improving the quality of eggs as the main product of laying hens. This study aims to determine the effect of adding turmeric powder and red chili powder, as well as a combination of both, to the feed of laying hens on the external and internal quality of eggs. A total of 100 Lohmann Brown laying hens aged 49 weeks were kept in individual battery cages and given four feed treatments: PO = 100% basal feed, PK = 99.5% basal feed + 0.5% turmeric powder, PC = 99.5% basal feed + 0.5% chili powder, PKC = 99% basal feed + 0.5% turmeric powder + 0.5% chili powder, with 5 replicates. The data collected were egg weight, egg specific gravity, and shell weight, which were tested using Welch's ANOVA (homogeneity  $P < 0.05$ ) and Games-Howell follow-up test, while shell thickness, egg index, albumen index, yolk index, yolk color, and Haugh Unit value were tested using ANOVA and DMRT follow-up test. The results show that all three treatments improved yolk color, and the chili powder treatment significantly improved the egg index. In conclusion, the addition of turmeric powder and red chili powder, as well as a combination of both, improved the egg index and yolk color, but did not make a significant difference to egg weight, egg specific gravity, shell weight, shell thickness, albumen index, yolk index, and Haugh Unit.

Keyword: laying hens, red chilli, external egg quality, internal egg quality, turmeric, strain lohmann brown