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**Enhancing Growth and Morphological Traits in Dong Tao Broilers: A Study of Raising Practices from 8 to 18 Weeks of Age**

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**Abstract:**

**Background/Objective**: This study aimed to assess the impact of various raising practices on the morphological characteristics and growth parameters of Dong Tao chickens aged 8 to 18 weeks, utilizing a sample of 270 chickens.

**Methods**: Employing a completely randomized design, the experiment included three raising models (bioyeast-based floor, caging, and semi-scavenge) across three replications, with each replication comprising 15 male and 15 female chickens. All groups received the same diet and had unrestricted access to feed and water. At the end of the study, six birds per treatment, (equally in sex), were selected for slaughter to measure carcass ratio, while meat breast samples were collected for chemical composition analysis.

**Results**: Findings revealed that chickens raised in the semi-scavenge and bioyeast-based floor models exhibited greater diversity in feather colors and faster feather growth compared to those in the caging model. Most Dong Tao chickens displayed feathers with brown, black, and yellow hues, often with black and white spots. All models exhibited yellow, black, and black mixed with yellow beak colors. Dong Tao chickens in the semi-scavenge model demonstrated higher breast length (13.8 cm) and depth (12.1 cm) compared to other models as (12.3 cm in the bioyeast-based floor and 12 cm in the semi-scavenge models) and (10.1 cm in the bioyeast-based floor and 10.2 cm in the semi-scavenge models) respectively. While the caging model resulted in improved feed conversion ratio and body weight gain (3.23 and 1,598 g/bird) compared to the bioyeast-based floor (3.36 and 1,462 g/bird) and the semi-scavenge (3.47 and 1,330 g/bird). However, there were no significant differences in carcass, breast, thigh ratio, or chemical composition of breast meat among the groups.

**Conclusion**: In summary, the semi-scavenge model exhibited favorable performance in terms of growth parameters and Dong Tao's morphological traits.

**Keywords:** Dong Tao chickens, raising model, morphological characteristics, growth.