

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

CARCASS CHEMICAL COMPOSITION OF BROILERS FED DIETS WITH DIFFERENT VALINE CONCENTRATIONS AND RAISED IN HOT CLIMATE FROM 22-42 DAYS

Guilherme Resende de ALMEIDA*¹, Marcelo Lopes NÉVOA¹, Flávio Medeiros VIEITES²,
Thuani Venâncio da Silva PEREIRA¹, Henrique Carvalho de OLIVEIRA, Bruno Serpa
VIEIRA¹, André Brito CORRÊA¹, Cleber Franklin Santos de OLIVEIRA¹

*Corresponding author: guilhermezootecnista2015@gmail.com

¹Universidade Federal de Mato Grosso, Cuiabá, Mato Grosso, Brasil

²Universidade Federal de Juiz de Fora, Juiz de Fora, Minas Gerais, Brasil

High environmental temperatures significantly impair broilers' productive performance in Brazil. To minimize this negative effect, there is a need for research to determine the actual nutritional requirement of broilers raised in hot-climate regions. This study aimed to determine the best dietary concentration of valine to improve carcass chemical composition traits of broilers raised in hot climate. Two experiments were carried out in the poultry sector of the Experimental Farm of UFMT, using Cobb male broilers from 22-33 days (trial 1) and 34-42 days (trial 2). In each trial, a total of 720 broilers were distributed in a completely randomized design with six treatments and eight replications of 15 birds. Treatments consisted of diets supplemented with different levels of digestible valine: 7.32, 7.82, 8.32, 8.82, 9.32 and 9.82 g/kg in trial 1; 6.77, 7.27, 7.77, 8.27, 8.77 and 9.27 g/Kg in trial 2. Carcass chemical composition of 3 birds per pen was evaluated in the end of experimental periods. Data were regressed against dietary valine concentrations using a linear regression model. Significance was set at $p \leq 0.05$. In the end of trial 1, at 33 days, positive linear effect of valine concentrations was detected on carcass ash, crude protein and fat. In the end of trial 2, at 42 days, negative linear effect was detected on carcass ash. In conclusion, dietary concentrations of digestible valine to improve carcass chemical composition of broilers raised in hot climate are 9.82 and 6.77 g/kg for 22-33 and 34-43 days, respectively.

Keywords: amino acid, poultry, heat stress, requirement

Promoção e Realização:



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