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Influence of Chinese breeds on pork quality of commercial pig lines

A.S.M. Cesar[1], A.C.P. Silveira[1], P.F.A. Freitas[1], E.C. Guimarães[1], D.F.A. Batista[1], L.C. Torido[1], F.V. Meirelles[2] and R.C. Antunes[1]

[1]Programa de Pós-Graduação em Ciências Veterinárias, Faculdade de Medicina Veterinária, Universidade Federal de Uberlândia, Uberlândia, MG, Brasil
[2]Departamento de Ciências Básicas, Faculdade de Zootecnia e Engenharia de Alimentos, Universidade de São Paulo, Pirassununga, SP, Brasil

Corresponding author: A.S.M. Cesar
E-mail: aline_cesar@yahoo.com.br

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ABSTRACT. We compared carcass and meat quality of pigs from the same sire line and two different dam lines, one that included Chinese breeds and one that did not. Line A consisted of 1/4 Landrace, 1/2 Large White, 1/8 Chinese breeds (Meishan, Fengjing, Jiaxing), and 1/8 Large White, Duroc and Pietrain, and line B consisted of 1/2 Large White and 1/2 Pietrain. The animals (N = 144) were slaughtered at a live weight of 108 kg. Backfat thickness, percentage of lean meat, pH 24 h after slaughter, meat color, percentage of drip loss, and percentage of intramuscular fat were measured and compared using analysis of variance in a completely randomized design; the BioEstat 5.0 test was applied for the comparison of means at a significance level of 5% for all analyses. Backfat was significantly lower for line A (12.78 mm) than for line B (15.90 mm). The pH measured 24 h after slaughter was significantly lower in line A (5.68) compared to line B (5.84). Percent lean meat was significantly higher for line A (61.21%) compared to line B (59.72%). Percentage drip loss was significantly higher in line A (2.73%) than in line B (2.23%). Percentage intramuscular fat and meat color were not significantly different between the lines. The inclusion of Chinese breeds produced a higher percentage of lean meat and

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reduced fat thickness, along with increased heterosis, which are important characteristics for breeding programs.

Key words: Pork; Breed; pH; Muscle; Drip loss

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