GROWTH, CARCASS TRAITS AND FATTY ACID PROFILES OF PERCENTAGE BOER WETHER GOAT KIDS RAISED UNDER DIFFERENT PRODUCTION SYSTEMS

C. E. Shoemaker*^a, S. G. Solaiman^c, C. R. Kerth^a, W. R. Jones^a, D. I. Bransby^b and K. R. Willian^c

^a Department of Animal Sciences, Auburn University 210 Upchurch Hall, Auburn, AL 36849, USA

^b Department of Agronomy and Soils, Auburn University 202 Funchess Hall, Auburn, AL 36849, USA

Key Words: Goat; production systems; carcass traits; fatty acid profile; cholesterol

Objectives

The objectives of this study were to compare growth performance, carcass traits and longissimus fatty acid composition and cholesterol content from high percentage and low percentage Boer goat kids finished on pasture, browse or concentrate-based diets.

References

- Beserra, F. J., Madruga, M. S., Leite, A. M., da Silva, E. M. C., & Maia, E. L., (2004). Effect of age at slaughter on chemical composition of meat from Moxoto' goats and their crosses. Small Ruminant Research. 55, 177–181.
- Cosenza, G. H., Williams, S. K., Johnson D. D., Sims C. & McGowan C. H. (2003). Development and evaluation of a fermented cabrito snack stick product. Meat Science. 64, 51–57.
- Department of Health (1994). Report on Health and Social Subjects No. 46. Nutritional Aspects of Cardiovascular Disease. London: Her Majesty's Stationery Office.
- Folch, J., Lees, M., & Stanley, G. H. S. (1957). A simple method for the isolation and purification of total lipids from animal tissues. Journal of Biological Chemistry. 226, 497–509.
- Foreign Agricultural Service. 1998. Import and export data.
- Johnson, D. D. & McGowan, C. H. (1998). Diet/management effects on carcass attributes and meat quality of young goats. Small Ruminant Research. 28, 93–98.
- Mahgoub, O., Khan, A. J., Al-Maqbaly, R. S., Al-Sabahi, J. N., Annamalai, K., & Al-Sakry, N. M. (2002). Fatty acid composition of muscle and fat tissues of Omani Jebel Akhdar goats of different sexes and weights. Meat Science. 61, 381–387.
- Oman, J. S., Waldron, D. F., Griffin, D. B. & Savell, J. W. (1999). Effect of Breed-Type and Feeding Regimen on Goat Carcass Traits. Journal of Animal Science. 77, 3215–3218.

^c Department of Animal and Poultry Sciences, Tuskegee University 105 Milbank Hall, Tuskegee, AL 36088, USA

- Park, P. W. & Goins, R. E. (1994) In Situ Preparation of FAME for analysis of fatty acid composition in foods. Journal of Food Science. 59, 1262–1266.
- Rule, D. C., Broughton, K. S., Shellito, S. M., & Maiorano G. (2002). Comparison of muscle fatty acid profiles and cholesterol concentrations of bison, beef cattle, elk, and chicken. Journal of Animal Science. 80, 1202–1211.
- SAS. (1990). SAS User's Guide: Statistics (Version 5 Ed.). SAS Institute Inc. Cary, North Carolina, USA.
- USDA. 2001. Institutional meat purchased specifications for fresh goat. Series 11. USDA, MRP, AMF, Livestock and Seed Program, Washington D.C. Meat Grading Certification Branch.
- Young, W. P. Marcel, A. K., & Chin, K. B. (1991). Moisture, Total Fat and Cholesterol in Goat Organ and Muscle Meat. Journal of Food Science. 56 (5), 1191–1193.