

# 2025 Spring Undergraduate Research Symposium

## Second Kiko Buck Performance Test in Mississippi

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Kikos are a meat goat breed growing in popularity in the Southeast due to their hardiness and resistance to parasites. The objective of this test was to collect data on weaned Kiko bucks grazing under commercial farm conditions in Mississippi from June 2024 to August 2024 (IACUC-24-232). Thirty-five farmers co-signed for 66 bucks from 13 different states. Measurements including body weight for average daily gain (ADG), body condition score (BCS), FAMACHA®, fecal egg count of nematodes (FEC) in eggs per gram of feces (EPG), and Coccidias (OPG, oocysts per gram of feces) were taken every two weeks. Loin eye area (LA) and USDA grading were measured via ultrasound at the beginning and end of the grazing period. The LA was used to calculate the ratio of LA/BW. The herd was rotated between three paddocks every two weeks, and forage samples were analyzed prior to the test. The average crude protein and fiber were 10.55% and 41.23%, respectively. The bucks were dewormed with three classes of anthelmintics upon arrival at the testing site. The 10-week grazing period started after a two-week quarantine period. The data was analyzed using a Proc Mixed Analysis (SAS). The overall averages for the variables resulted: BW  $24.7 \pm 4.6$  kg; ADG 19.4 g/d; FAMACHA® 2.5; BCS 2.4; and nematodes 1291.2 EPG. FAMACHA® did not affect BW ( $P=0.5651$ ); BCS affected BW ( $P<0.0001$ ). FEC did not affect BW ( $P=0.8974$ ). The overall winning buck was from MS with an ADG of 52 g/day and an avg. FEC of 416.67 EPG. In 2024, MS experienced a very harsh summer with little rain and low grass availability, which restricted normal growth. In the future, commercial concentrate supplementation (approx. 250g/animal/day) will be used for the animal to express their growth potential better.