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A Preliminary Breed Evaluation of Savanna-sired Doe Performance Compared with Kiko-sired and Spanish-sired Does in a Meat Goat Herd.

Abstract

Savanna-sired does were evaluated to determine if incorporating the Savanna breed for maternal performance would be consequential when compared with Spanish-sired or Kiko-sired does. Data were evaluated to aid in determining doe fitness based on fertility rates, doe weaning rates, and doe survivability. Data were evaluated in two separate diallels: A. Savanna-sired (n = 111) and Kiko-sired doe observations (n = 269) and B. Savanna-sired (n = 87) and Spanish-sired doe observations (n = 188). Does were managed semi-intensely in a subtropical environment. During the seven-year study, does were bred to Savanna (n = 12), Kiko (n = 10), or Spanish (n = 8) bucks. Does kidded from March to May. Weaning occurred when the kids were about 90 days of age on average. Survivability was determined by if does were still alive and avoided being culled. Preliminary chi-square analyses were conducted to evaluate the data. Fertility rate for Savanna-sired does was lower ($p < 0.01$) than for Kiko-sired does (52% vs. 72%) and lower ($p < 0.01$) than for Spanish-sired does (47% vs 73%) in their respective diallels. The weaning rate of Savanna-sired does was lower ($p < 0.01$) than for Kiko-sired does (50% vs. 61%) and lower ($p < 0.01$) than for Spanish-sired does (40% vs. 63%). Spanish-sired does (79%) had a greater survival rate ($p < 0.01$) than Savanna-sired does (59%). However, Savanna-sired does (76%) were similar ($p = 0.11$) to the Kiko-sired does (78%) for survival rate. The preliminary results suggested that Spanish- sired and Kiko-sired does were a better fit for this production system than the Savanna-sired does.

According to these findings, it seems counterproductive to use the Savanna breed on the maternal side of a commercial meat goat breeding program in a subtropical environment.

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