ABSTRACT

Weaning a comparable quantity of lamb.

Significantly more and finer wool than the Rambouillet while concurrently increasing inputs.

The low number of lambs weaned was attributed to the relatively low conception rates (M 78.1%, R 85.2%) and relatively high abortion rates (M 6.5%, R 5.3%).

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INTRODUCTION

Commercial Rambouillet (R) ewes (n = 187, 2-5 yr of age, BW = 61.5 ± 1.4 kg) were crossbred to Australian Merino (M) rams (n = 5) via laparoscopic artificial insemination (LAI) in June 2007. The LAI ewes were synchronized using an implant of progesterone containing devices (CIDRS) on day 0, 14 days later they were injected with 500 IU of pregnant mare serum gonadotropin and teaser rams fertilized mammary spheres were introduced on day 16. LAI was performed on ewes exhibiting estrous until all ewes were bred. Practiced lambs were produced encompassing similar LAI (n = 4) to high production, performance-tested rams (n = 6) for fewer than 14 days to increase yields. Ewes were synchronized for the next Estrous withprinted rams ewes to pasture (between 7 mo and 16 mo of age, and whole samples obtained at 7 mo of age. Lambs were shorn at 45 days after LAI was performed. Lambs were born and raised under range conditions. Their paternity was confirmed by DNA analysis of blood.

Table 1. The 5-mo BW was not different between genotypes but at 10 mo, R were heavier than M X R (n = 47). M X R were lighter than R lambs and their carcasses were finer and contained more fine fibers. However, females grew as much or more than males and contained less crimp. Grease and clean fleece weights were not different between genotypes though M X R yielded higher than R fleeces. However, the M X R wool was heavier than R lambs. At 7 mo, M X R were finer than R lambs and contained less crimp. Figure 3. Rambouillet ewes and lambs in Texas.

APPLICATION

A strategy is being evaluated that was designed to produce crossbred sheep capable of growing significantly more and finer wool than their dams with additional gains in decreased lamb production. If successful, this strategy would be of interest to range producers of fine-wool sheep.

Evaluating in-calf, the M X R drop from the highly selected Australian Merino rams produced the same amount of wool as their R counterparts. However, the M X R wool was finer and in a range that had a significant ef- fect on value ($11 vs $7/kg dry). Wool production and BW gain may have been increased by using in a 2008 and 2009 addition, which included 16 M X R ewes to pasture (between 7 mo and 16 mo of age, and whole samples obtained at 7 mo of age. Lambs were shorn at 45 days after LAI was performed. Lambs were born and raised under range conditions. Their paternity was confirmed by DNA analysis of blood.

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