Growth of goats for meat production: effect of breed and castration

PJ Murray, J Sumarmono, NMW Pratiwi, DG Taylor

School of Animal Studies, University of Queensland Gatton Campus, QLD. 4343

Growth is a very important characteristic of animals for meat production and it depends on factors such as breed, sex, nutrition and environmental conditions. The improved Boer goat has been reported to have superior growth rates in South Africa (1). This breed was imported into Australia to improve goat meat production to meet goat meat demand (2). However, there is very limited information on the growth of full blood Improved Boer goats under Australian conditions.

This study was conducted to compare the growth rates of entire and castrated Improved Boer and feral goat bucks. Sixty full blood Improved Boer and 60 Australian feral goat bucks of similar age (six months) were reared under paddock condition during winter for 96 days. Half of each group were castrated using elastrator rubber rings at the beginning of the experiment and all goats had free access to commercial goat pellets (ME = 12.3 MJ/kg DM, CP = 18% DM), grassy lucerne hay and abundant pasture.

The growth rates of entire Boer bucks were significantly higher than those of castrated and feral bucks (215; 193; 84 and 47 g/d, respectively). Irrespective of breed, entire bucks achieved faster growth rates than castrated bucks. At approximately nine month of age, the average live weight of castrated Boer and feral bucks was 47.5 and 27.3 kg, respectively and entire Boer and feral bucks were 53.7 and 31.5 kg, respectively. Although many causal factors may explain the differences between the two breeds, it seems that Boer bucks grow better than ferals during Australian winter.