A COMPARISON OF SIX GOAT GENOTYPES FROM BIRTH TO CAPRETTO LIVE WEIGHT

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The Australian goat meat industry is currently based principally on meat from slaughtered feral goats, but there has been inconsistency in both quality and supply for both the domestic and export goat meat markets. The South African Boer goat, a breed selectively bred for meat production (Casey and van Niekerk 1988), has been introduced into Australia for the purpose of crossbreeding with feral does as well as fibre producing and dairy goats. We believe that crossbreeding with the Boer goat will produce a genotype with high growth rates and carcass characteristics suitable for Capretto meat market specifications (Casey and van Niekerk 1988). Capretto specifications are a milk fed female or entire male kid with a preferred carcass weight between six and ten kilograms and meat that is pale pink in colour.

In this study Boer bucks (n = 10) were mated to Feral, Angora and Saanen does (n = 47 per group) and Saanen bucks (n = 6) were mated to Feral and Angora does (n = 47 per group). Feral bucks (n = 6) were mated to Feral does as the control group. Does were randomly allocated to the mating groups based on live weight and age. All does were naturally mated for six weeks beginning on the 3 September 1996. Within hours of birth each kid was tagged, its dam identified and kid birth weight, birth date and sex were recorded. Kid live weights were recorded fortnightly.

The kids produced from Boer bucks mated to Angora does (Boer x Angora) grew significantly slower than the Boer x Saanen, Boer x Feral and Saanen x Feral kids (Table 1). When Boer or Saanen bucks were mated to Feral does, average weight gain was significantly (P < 0.05) higher than when mated to Angora does (Table 1). Average weight gain for entire males was significantly (P < 0.05) higher than females and castrated males. Castrated males had significantly (P < 0.03) higher average daily gain than females. Twin born kids grew significantly (P < 0.05) slower than single born kids and kids that were born as twins but raised as single kids.

For every extra kilogram in birth weight an extra 8.2 g/day live weight increase was achieved.

Feral does when mated to Boer bucks produced kids that grew at the same rate as kids produced from Saanen bucks or does. However Saanens, a breed recognised for high milk production in favorable nutritional conditions, may have lower survivability in pastoral areas. The use of Saanen does may be more appropriate in areas where high rainfall supports the production of improved pastures or cropping. The results suggest that Angoras are not a suitable dam for Capretto meat production. To ensure that high growth rates are achieved to reach Capretto live weight earlier, males should be left entire. The advantage of greater numbers of progeny from twins was compromised due to the slower growth rate of twins compared to single kids. This may be overcome if there are no nutritional restrictions on the does. We anticipate that our conclusions will be confirmed by our continuing studies of these goat genotypes.