

## 182 MIXED GRAZING BY GOATS AND SHEEP IN THE BRAZILIAN CAATINGA

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The research was conducted in the Fazenda Pau Preto, Taua, Ceara, Brazil, and extended from the dry season of 1983 to the end of 1985 rainy season, with the objective of evaluating the effects of stocking rate and animal combination on goat and sheep production. One area of native caatinga was divided into ten hectare paddocks that were assigned to treatments represented by four stocking rates and three animal species combinations (including cattle). Castrated weaned animals were used and were replaced each year by the beginning of each dry season (May). The weight gains of the goats (kg/head) decreased from 14.4 with 2.5 ha/head to 7.6 with 0.6 ha/head in the period 1983/1984, and from 16.8 to 14.0 for the same stocking rate order in the period 1984/1985. Sheep had weight gains decreasing from 12.5 kg/head to 7.6 kg/head when the stocking rate increased from 4.0 to 16.0 head per paddock in 1983/1984 period, and from 20.7 kg/head to 7.9 kg/head for the same stocking rates 1984/1985. The combinations did not seem to affect the performance of the two small ruminant species. The live weight production per ha increased with increasing stocking rate, independently of combination level. However the two year average seemed to indicate that better results were obtained with mixed grazing of goats and sheep (14.5 kg/ha/year for the sheep and goat combination, 12.3 kg/ha/year for goats alone and 11.4 kg/ha/year for sheep alone). The results suggest that the best stocking rate was 0.83 ha/head with a combination of eight goats to four sheep.

KEY WORDS: Combination, stocking rate, weight gain.

*cross grazing, taua, caatinga, goats, sheep*

## 183 GOAT PRODUCTION IN MANIPULATED BRAZILIAN CAATINGA

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The experiment was conducted at Fazenda Pau Preto, Taua, Ceara, Brazil and lasted for a period of five years, beginning in the 1980 dry season. The vegetation treatments were: A-native, B-lowered (reduced height), and C-thinning. The paddocks were 10.0 ha in size for treatment A and 7.0 ha for treatments B and C. Young weaned castrated male goats formed the experimental groups that were replaced annually. The animals were weighed five times a year and the stocking rate adjusted according to the biomass production of herbaceous cover by the end of the rainy season