(SEF) were found in the atrium ruminis and site 2 of the ventral wall, 14.75 and 13.8 respectively, during the peak growing season, whereas at the peak of the dry season (October 1985) the values were 6.2 and 5.8. The lowest values were found in the dorsal ruminal wall (.75) at the peak of the dry season and 2.75 during the growing season. At two discreet pasture conditions. the peak of the growing season and the end of the dry season groups of six animals each were slaughtered. The group means of the SEF for the different slaughter dates were significantly different (P<.05) for three out of five sites in the rumen. Similar differences were observed, when results from the monthly slaughter program were pooled according to the pasture condition prevalent at slaughter, using four pasture condition classes. This indicates that goats increase absorptive surfaces to allow maximum absorption of short chain fatty acids when pasture quality is good and consequently retention times of food particles are short.

KEY WORDS: Rumen, surface enlargement, goat, forage quality,

thornbush savannah, Kenya.

BLOOD BIOCHEMICAL VALUES OF DOES AND KIDS OF THE SEMI-ARID NORTHEAST REGION

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This research was carried out at the Brazilian National Goat Research Center in Sobral, Ceara, with the objective of determining normal biochemical values in the blood serum of local goats, maintained in native caatinga. The concentration of total protein, albumin, globulin, glucose, magnesium and copper were estimated in the blood serum of 43 does from different breeds and their 62 kids born from 19 multiple and 24 single pregnancies. The blood biochemical values were analyzed at parturition and during lactation at 3, 5, 15, 30 and 45 days after parturition and in relation to type of pregnancy and sex of the kids. All the blood parameters of the does and their kids were influenced by physiological states of parturition and lactation (P < 0.001)but were not generally related to day of gestation, values at parturition, day 3 postpartum and day 45 postpartum for does were respectively; total protein 5.98, 6.17, 6.24 g/100 ml; albumin 3.49, 3.50, 3.31 g/100 ml; total gobulin 2.49, 2.68, 2.93 g/100 ml; glucose 206.86, 36.37, 55.99 mg/100 ml; magnesium 2.17, 2.05, 2.23 mg/100 ml; copper 0.90, 1.13, 0.96 mcg/ml. Values for kids at the same periods, respectively, were: total protein 4.24, 7.29, 6.06 g/100 ml; albumin 2.92, 2.24, 3.38 g/100 ml; total globulin 1.33, 5.04, 2.72 g/100 ml; glucose 32.38, 96.87, 60.72 mg/100 ml, magnesium 1.58, 1.68, 2.90 mg/100 ml, copper 0.48, 0.64, 0.88 mcg/ml. In does a variation of the total protein, albumin and globulin with the sex of kids was observed. The