The aim of this study was to evaluate the performance of Santa Inês female lambs fed different sources of forage. The lambs received one of four diets which were isoproteic and isoenergetic with fixed levels of forage (60%) and concentrate (40%). The forages per diet differed: Coast cross hay (FCC), Cassava hay (PAM), dehydrated subproduct of pea crop (ERV) and Saccharine (SAC). The concentrate was made up of corn and soyabean meal as well as bicalcium phosphate. Feed and water were offered twice a day and the diet was balanced according to the National Research Council (NRC-2006), calculated at 3% of the live weight.

We analyzed the quantitative aspects of carcass and body constituents of lambs. The design was completely randomized. The lambs were confined for 45 days in individual stalls. Half-carcass (PMC) rights were weighed and sectioned into retail cuts, rib, loin, shoulder, diaper, neck and leg, which were weighed individually. Treatment ERV got hot carcass weight (14.36 kg) and cold (14.01 kg) than the other groups. The hot carcass yield (HCY) was higher for animals fed with ERV and ham weight, diaper and neck circumference and ham. The weight of the abdominal viscera (%) for lambs fed on PAM was greater (P < 0.05) than those fed the SAC and ERV. The full weight of the rumen was higher for animals on diet PAM (4.30 kg) than for other treatments. The weights of the thoracic viscera (PVT) as well as the liver, for lambs fed with ERV were higher (P < 0.05) The liver was heaviest for ERV (0.51 kg), differing from the other treatments. This may be due to differences in the production of volatile fatty acids in the diets which may result in hyperplastic and hypertrophy of cellular organelles (Cullen e McLachlan, 2000). This may be due to the skinning process used in the abattoir, as these animals were fatter and a notable amount of fat was removed with the skin of these animals. The subproduct of pea yielded better results followed by saccharina can replace traditional forage sources in the region, providing similar results to income cuts and body components, could be an alternative in the dry season for sheep with no quantitative housing depreciation.

Keywords: Carcass, cassava, forage, hay, pea, sugar cane