The objective of this experiment was to evaluate the ruminal degradability of the fruit fractions in the bocaiúva (Acrocomia aculeata), being these bark, pulp, chestnut and almond. Two animals of the Girolando breed were used, weighing on average 400 kg, ruminally cannulated. The animals were kept in pasture with mombaça grass (Panicum maximum) and were supplemented with 1 kg of bocaiuva pie and 1 kg of concentrated ration, based on corn and soybean meal. After 7 days of adaptation, the ruminal degradability assay was started, which was determined by incubating the samples of the bocaiúva fractions in bags made with TNT, containing approximately 5 g of previously dried and ground samples. Subsequently the bags were placed in nylon bags measuring 15x30 cm and introduced directly into the rumen, in descending order of 96, 72, 48, 24, 12, 8, 6, 4 and 2 hours. At 0 h the sachets containing the feeds were preincubated in a vessel with water. The TNT bags were all removed at the same time and washed in running water. Residues remaining in the incubations were oven dried at 65 ºC. The disappearance of dry matter and its potential and effective degradability were determined. In the bromatological analysis, the bark presented: 96.6% MS; 6.21% PB and 8.15% EE; the pulp had: 86% MS; 3.9% PB and 23.1% EE; the chestnut: 98% MS; 2.88% PB and 2.92% EE and the almond: 69.3% MS; 15.9% PB and 36.3% EE. Both the pulp and the almond have a high disappearance rate in the 96-hour period, being 79.9% and 72% respectively. On the other hand, bark and chestnuts presented a low disappearance rate, with values of 33.8% and 21.2% in the 96-hour period. As a consequence, the pulp and the almond presented the highest values of the coefficients for the potentially degradable fractions "b", being 75.35 and 85.63 respectively. However, the pulp presented the highest values for effective degradability, followed by the almond, bark and chestnut (56.6, 45.4, 38.4, and 19.3 respectively) at the rate of passage of 2% h⁻¹. Thus, it can be concluded that among the fractions of the bocaiúva, the pulp has the highest values of potential and effective degradability coefficients, followed by the almond, bark and chestnut, and can therefore be included in the diet of the animals with good ruminal use.

**Keywords:** cannula, incubation, macaúba