Abstract

The experiment tried to make benefits of rumen content of slaughtered cattle in abatoir as feed substitution against king grass for ruminant.

The measured parameters were the body weight gain, carcass, meat, bone and fat weight, meat – bone ratio, total nutrition digested, nitrogen retention, pH, total volatile fatty acid, ammonia – nitrogen and protozoa status of rumen fluid.

There were two stages in the experiment, the preliminary experiment was to decrease the water of rumen content and the technology to produce the *dodol* (delicacy) of rumen content, proximity analyses were done in the Animal Nutrition Science Laboratory, while the microbiological and fungal tests were done in the Bacteriology and Micology Laboratory, Veterinary Medicine Faculty, Airlangga University. The main experiment was done at the Agriculture and Farm Project of the Association for the Education of Blind Children, Surabaya, which was done on January up to April 2001.

The experiment animals were, 24 male goats, aged 1,5 year with an average weight of 25 Kg, divided in six groups. Six different food mixtures were, P0 was 80% king grass and 20% Urea Mineral Molasses Block, P1 was 70% king grass and 30% dodol of rumen content, P2 was 60% king grass and 40% dodol of rumen content, P3 was 50% king grass and 50% dodol of rumen content, P4 was 40% king grass and 60% dodol of rumen content, P5 was 30% king grass and 70% dodol of rumen content.

Experimental design used was completely randomized design with six treatments and four replicates. The data were analyzed using the analysis of variance statistic method and if there were differences among the treatments, the Duncan's multiple range test was used.

The result indicated that there were no significant difference (P > 0.05) in carcass quality, rumen ecosystem, protein digested and fat digested. But highly significant difference (P < 0.01) in intervention on animal performance. Significant difference (P < 0.05) were found in dry matter digested and crude fiber digested.

The conclusion showed that the use of *dodol* rumen content as subtitution of king grass up to 70% of total feed could be used in the daily ration for ettawa cross goat.

Keywords: Rumen content, Abatoir waste, Feed substitute, Productivity, Carcass quality.