ABSTRACT

DAMARYANTO WIDHARTO H4A 003 006 Performance of Indigenous Sheep Fed on Diet Consisting of alcohol industrial Sludge as Concentrate Components (Advisor: Agung purnomoadi and Edy Rianto)

A research was aimed to determine the effect of sludge utilization as component of concentrate in ration on feed consumption, body weight gain, feed conversion, body composition and quality of carcasse in sheep.

Research was conducted in 6 month from Augst 2004 to January 2005 at Meat and draught Animal Laboartory, Facultty of Aniamal Agriculture, Diponegoro University, semarang. Twelve indigenous rams were divided randomly into 3 groups of treatment, and each group consisted 4 replications. The treatment given was substitution of concentrate with different levels of sludge, namely:

T-0 : Concentrate 2% and sludge 0%
T-1 : Concentrate 1,6% and sludge 0,4%
T-2 : Concentrate 1,2% and sludge 0,8%

The result indicated that experiment had no significant effect on feed consumption, average daily gain (ADG), feed conversion, body composition and characteristic of carcasse. The average of feed consumption were 890 (T-0), 815(T-1) and 809 g/day (T-2). The average of ADG were 17,68 (T-0), 12,79 (T-1) and 16,75 (T-2). The average of body water contents were 65,47% (T-0), 66,11% (T-1) and 67,51% (T-2). The average of body protein contents were 16,88% (T-0), 17,05% (T-1) and 17,42% (T-2). The average of body fat contents were 11,59% (T-0), 10,73% (T-1) and 8,88% (T-2). The average of carcasse percentage were 37,64% (T-0), 33,96% (T-1) and 31,86% (T-2).

Keywords : Sheep, Sludge, Productivity and body composition.