ABSTRACT

Feed Cost Analysis and Beef Cattle Performance supplemented Lerak extract (*Sapindus rarak*) meal in high forage

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An *in vivo* feeding trial was conducted to investigate the effect of saponin from lerak extract (*Sapindus rarak*) whole fruit for beef cattle supplement in the high forage diet. Twelve of beef cattle with initial body weight of 171 ± 12.51 kg were used in this experiment. Basal ration consist of native grass and concentrate with ratio 70:30. The treatments were basal ration (R1), basal ration + lerak extract 100 mg/kg Body Weight (BW) (R2) and basal ration + lerak extract 200 mg/kg BW (R3). The experiment used completely randomized design with 3 treatments and 4 replications. The parameters measured were feed efficiency, feed cost, livestock maintenance revenue analysis and sensitivity analysis. Data were analyzed using ANOVA and the different mean value among treatment analyzed using Duncan multiple range test. The result showed that feed efficiency on suplementation of lerak extract 200 mg/kg BW are 0.11 and the livestock maintenance revenue are Rp. 4,208,444,- for 90 days. The sensitivity analysis showed that local cattle farm were not feasible any longer if the increasing price of forage and concentrate higher than 40%.

Keywords: *Sapindus rarak*, locale cattle, feed cost, feed efficiency, sensitivity analysis