

## ABSTRAK

### EFFECT OF THE USE OF ORGANIC MICRO MINERALS AND FAT DIGESTIBILITY TDN (TOTAL DIGESTIBLE NUTRIENT) TO BEEF CATTLE

The aim of this research are: (1) To determine the effect of giving mineral micro organic in the ration against fat digestibility and TDN (*Total Digestible Nutrient*) on beef cattle; (2) To determine the best use of mineral micro organic against fat digestibility and TDN in beef cattle.

This research uses 4 beef cattle tails male post-weaning . The design used is a Latin Square design (RBSL) 4x4 with 4 beef cattle tails as the columns and 4 period as rows. The treatment are R0: basal ration (20% forages + 80% concentrate); R1: basal ration + mineral micro organic 0,5 times NRC recommendation (Zn 20 ppm, Cu 5 ppm, Se 0,15 ppm, Cr 0,05 ppm); R2: basal ration + mineral micro organic 1 times NRC recommendation (Zn 40 ppm, Cu 10 ppm, Se 0,30 ppm, Cr 0,10 ppm); R3: basal ration + mineral micro organic 1,5 times NRC recommendation (Zn 60 ppm, Cu 15 ppm, Se 0,40 ppm , Cr 0,15 ppm). The data obtained were tested by analysis of variance (ANOVA), followed by an orthogonal polynomial tests to determine the best level of use of mineral micro organic.

The result showed that: (1) Effect of addition of mineral micro organic in the ration was not significantly different ( $P>0,05$ ) on fat digestibility and TDN in beef cattle rations; (2) The value of the highest digestibility of fat ration contained to treatment with the addition of mineral micro organic 0,5 times from the NRC recommendations in the ration, while the digestibility of TDN the highest ration of the treatment with the addition of mineral micro organic of 1,5 times from the NRC recommendation.