THE USE OF MINERAL DETERMINATION OF MICRO ORGANIC MATERIALS DIGESTIBILITY AND DIGESTIBILITY DRY ORGANIC MATERIALS TO BEEFCATTLE

By

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The research objective is to: (1) determine the effect of the provision of micro-organic minerals in the ration on dry matter digestibility and organic matter digestibility in cattle; (2) to determine the best use of micro-organic mineral digestibility of dry matter and organic matter in beef cattle.

This study uses four beef tails. The design used is a Latin Square design (RBSL) 4x4 with four head of cattle as fourth period as the columns and rows. The treatment that is given is

R0: basal ration (20% + 80% concentrate forage); R1: basal ration + organic micro-minerals (Zn, Cu, Se, and Cr) * 0.5 times (Zn 20ppm, 5ppm Cu, 0.15 ppm Se, Cr 0.05 ppm); R2: + basal ration of organic micro-minerals (Zn, Cu, Se, and Cr)* 1 time (Zn 40ppm, 10ppm Cu, 0.30 ppm Se, Cr 0.10 ppm); R3: basal ration + organic micro-minerals (Zn, Cu, Se, and Cr) * 1.5 times (Zn 60ppm, 15ppm Cu, 0.40 ppm Se, 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 organic micro-minerals.

The results showed that: (1) the effect of adding organic micro-minerals in the ration was not significantly different (P> 0.05) on digestibility of dry matter and organic matter in beef cattle rations: (2) the addition of organic micro-minerals (Zn, Cu, Cr, Se) in the ration dry matter yield and digestibility of the organic material is higher compared with rations rations without the provision of micro-organic mineral: (3) the digestibility of dry matter and organic matter present in the highest ration of treatment with the addition of organic micro-minerals from recommendation 1 time in the ration.

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