ORIGINAL ARTICLE

Effects of ruminally undegradable protein levels on nitrogen and phosphorus balance and their excretion in Saanen goats fed oil palm fronds

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Abstract

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Twelve Saanen goats 3-4 months old with initial live weight (mean±SD) of 18.8±2.2 kg were used in a 4×4 Latin square design. Diets were isonitrogenous (15% CP) and isocaloric (3.6 Mcal/kg DM) and were fed *ad libitum*. Total mixed diets were composed of steamed oil palm fronds (OPF) and concentrate [urea, soybean meal (SBM), cassava waste, molasses, sulphur and commercial mineral and vitamin mix]. The treatments were four levels of ruminally undegradable protein (RUP) supplementation viz, 0, 2, 4 or 6% (0%RUP, 2%RUP, 4%RUP or 6%RUP, respectively). Nitrogen (N) and phosphorus (P) intakes tended to be increased linearly (p=0.08 and p=0.09) as a consequence of additional of RUP supplementation. Similarly, %N absorption and retention, dry matter intake (DMI) and crude protein digestibility increased linearly (p>0.05) as a consequence of the additional of RUP supplementation. There were no effects of dietary treat-

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