

The effect of using different cassava flour and cassava wastes on cassava based concentrate on nutrient content and *in vitro* gas production

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Abstract. This study was conducted to evaluate the effect of using different cassava flour and cassava flour in cassava-based concentrates on nutrient content and *in vitro* gas production. P1 = CF 5% + CW 5%, P2 = CF 10% + CW 10%, P3 = CF 15% + CW 15%, P4 = CF 20% + CW 20%, P5 = CF 25% + CW 25%, P6 = CF 30% + CW 30%, P7 = CF 35% + CW 35% with 3 replications arranged in a randomized block design (RBD). The use of cassava flour and cassava west which is higher tends to reduce the content of dry matter, organic matter, crude fat, crude protein and crude fiber. Meanwhile, the higher use of cassava flour and cassava pulp increased the total gas production and gas production rate ($P < 0.01$) but did not have a significant effect ($P > 0.05$) on the gas production potential. The conclution for this study is used of cassava flour and cassava westes as much as 20% is most effective because it has the highest gas production rate (c value) 0.049 ml/hour with a gas production value (143.15 ml/500 mg DM) and ideal gas production potential (173.15 ml /500 mg DM).

Keywords: based concentrate, cassava flour, cassava wastes, *in vitro*, gas production, gas production potential, gas production rate.