

Abstract

# Cassava-Based Diets Increase Live Weight Gain of Cross Bred Bulls in Small Fattening Systems in Malang, East Java <sup>†</sup>

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<sup>†</sup> Presented at the third International Tropical Agriculture Conference (TROPAG 2019), Brisbane, Australia, 11–13 November 2019.

Published: 10 April 2020

**Abstract:** Traditional farmers usually use local feed ingredient based on cheapest ingredients without considering the importance of feed conversion ratio to maximise cattle growth. The experiment was conducted to determine the growth of crossbred bulls fed on a cassava by-product based diet and a local concentrate. Fifty cross bred bulls aged 1.5–2 years were used in this study. The bulls were divided into five groups and offered 1% and 2% local concentrate (T1 and T2), 1% and 2% cassava-based diet (T3 and T4) and the current feeding system (CFS) by farmers (T0) as the control. Local concentrate was bought from Blitar while cassava-based diets contained 50% cassava, 25% copra meal and 25% palm kernel cake. No interventions were made to the CFS, however, some farmers in T0 used local forages and agricultural by-products such as rice bran and pollard bran as a feed, and adopted the supplementation of local concentrates as used by T1 and T2 farmers. The average daily gain were 1.13 kg/head/day (T0), 1.09 kg/head/day (T1), 1.38 kg/head/day (T2), 0.8 kg/head/day (T3) and 1.23 kg/head/day (T4). The study found that local concentrates promoted high average daily gain and that traditional feeding systems (CFS) performed well when farmers saw other farmers feeding better diets.

**Keywords:** smallholders farmer; cross bred; fattening; cassava; concentrate



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