

In vitro Fermentation Characteristics of Palm Oil Byproducts Which is Supplemented with Growth Factor Rumen Microbes

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Abstract : The aim of this experiment was to study the use of palm oil by products (oil palm fronds (OPF), palm oil sludge (POS) and palm kernel cake (PKC)), that supplemented with growth factor rumen microbes (Sapindus rarak and Sacharomyces cerevisiae) on digestibility and fermentation in vitro. Oil Palm Fronds was previously treated with 3% urea. The treatments consist of 50% OPF+ 30% POS+ 20% PKC as a control diet (A), B = A + 4% Sapindus rarak, C = A + 0.5 % Sacharomyces cerevisiae and D = A + 4% Sapindus rarak + 0.5% Sacharomyces cerevisiae. Digestibility of DM, OM, ADF, NDF, cellulose and rumen parameters (NH₃ and VFA) of all treatments were significantly different (P < 0.05). Fermentation and digestibility treatment A were significantly lower than treatments B, C, and D. The result indicated that supplementation Sapindus rarak and S. cerevisiae were able to improve fermentability and digestibility of palm oil by product.

Keywords : palm oil by product, Sapindus rarak, Sacharomyces cerevisiae, fermentability, OPF ammoniated

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