

THE UTILIZATION OF AGRO – WASTE AS ALTERNATIVE SOURCE OF FIBRE/ ENERGY FOR PIG PRODUCTION

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ABSTRACT

A seven –week feeding trial was conducted to evaluate the potential of utilizing selected agro-industrial wastes as economically viable alternative dietary fibre and energy sources for the production of weaner pig. Twenty four weaner pigs comprising of 12 males and 12 females were randomly assigned to four dietary treatments in a completely randomized design. Each diet was assigned six pigs in three replicates of two pigs per replicate. The different proportion of BDG and PKC were 20% in treatments II and III respectively while, treatment IV had equal weights (10%) of PKC and BDG. However, Diet I (control) contained 20% of wheat bran. During feeding, Parameters such as weekly weight gain (WWG), final weight gain (FWG), feed intake (FI), feed conversion ratio (FCR) and total production cost per pig (naira) were determined. The result showed that average weekly weight gained by the pigs ranged from 2.90 to 3.50kg, final weight gain ranged from 29.80 to 31.40kg, feed intake ranged from 9.0 to 9.19kg and feed conversion ratio ranged from 2.77 to 3.27kg across the treatments respectively. Diet III which contained palm kernel cake performed significantly ($p < 0.05$) better than other treatments in terms of dietary fibre and energy source for weaner pigs. A combination of equal proportion of PKC and BDG in diet IV supported better weight gain in the pigs. Finally, diet IV gave the highest return on investment in terms of total revenue/pig.

Keywords: agro- industrial wastes, weaner pig, dietary fibre.