

Effect of different treatment on the proximate and antinutritional content of Nigerian cashew apple residueFaith Iguodala AKINNIBOSUN^a and Adedayo Michael OYETAYO^{*b}^a*Department of Microbiology, Faculty of Life Sciences, University of Benin, Benin City, Nigeria*^b*Department of Science Laboratory Technology, Faculty of Applied Sciences, Rufus Giwa Polytechnic, P.M.B. 1019, Owo, Nigeria*

Abstract. In this study, cashew apple residue (CAR) was subjected to various treatments (boiling, soaking and fermentation), thereafter, proximate composition and anti-nutrient content were determined. Fermentation significantly ($p < 0.05$) increased the protein content of the CAR by 56.07% and reduced the carbohydrate content to 42.49%. Moreover, soaking and fermentation significantly reduced phytate content of the CAR from 0.4123% to 0.2504% and 0.1106% respectively; all the treatments significantly reduced the oxalate content while boiling and soaking had a significant reducing effect on the tannin content of the CAR. These suggest that pre-treated cashew apple residue may be used for animal feed formulation.

Keywords: cashew apple residue (CAR), soaking, boiling, fermentation, proximate, anti-nutrient.

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