EARLY STAGE IDENTIFICATION OF RUMEN MICROORGANISMS FROM SELECTED NIGERIANBreeds of Cattle

Introduction
Domestic Cattle are ungulates (Grob, 2005) with a complex stomach system (Kudo et al., 1995). They are raised for meat production except in major parts of India and Thailand (http://www.cows.com), milk production and as draft animals. Their byproducts also serve as valuable raw materials for manufacturing industries such as: ceramic, feed mills, leather and Where & dung cattle. Species from the germplasm systems (both ex-situ and in-situ) have been reported to yield various products of livestock and meat products (Kudo et al., 1995). 

In this study, the rumen flora of different breeds of cattle were identified, with a view to understanding their potential for early identification of rumen microorganisms. The identification was carried out using the methods described in the Materials and Methods section.

Materials and Methods
Identification of breeds of cattle. Male and female sexes of Bawo (white, black, and brown), Akikoy (Futere), Badu (Blended) and Dyel (Blended Dyel) cattle were used in this study. The methods described in the Materials and Methods section were used to identify the rumen microorganisms from each of the breeds.

Results and Discussion
The rumen microorganisms associated with the early stage of rumen development are critical in understanding the various functions of the rumen. These microorganisms play a key role in the digestion of feed and the production of bioactive compounds such as bioactive peptides, anti-inflammatory compounds, and probiotics.

Conclusions and Recommendations
Microbiota research in the rumen is critical as it provides insights into the mechanisms of feed digestion and assimilation. Understanding the early stage of rumen development will aid in the development of strategies to enhance rumen health and productivity. Further research is needed to understand the roles of individual rumen microorganisms in the early stages of rumen development and how to manipulate these microorganisms to improve rumen function.

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References

