



Feeding of grass cutters (*Thryonomys swinderianus*) with the diets of dolich tuberous (*Pachyrhizus erosus*) in Benin

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Introduction: Grass cutters raised in captivity by engaged communities in rural and urban area, illustrate an example of the minilivestock in Africa subSahara. Bred grass cutters need to be fed with well balance diets. To feed the animals daily with green forages is the main constraint for grass cutter breeding (Mensah *et al.*, 2013). This explains the development of feeding strategies which is able to facilitate the grass cutter's feeding and to reduce feed wastes. *Pachyrhizus erosus* (AHIPA), a legume seeds can be produced in any season and has more than 18% of crude proteins (Zanklan, 2003) can be used in the complement diets of grass cutter breeding.

Main objective: to find the best well balance diet based tubers of *Pachyrhizus erosus* (EC Kew) for feeding bred grass cutters.

Specific objectives :

- to formulate diets based on de *Pachyrhizus erosus* (EC Kew) tubers for feeding bred grass cutters;
- to determine the apparent feed digestibility and the feed conversion ratio.

Table. Experimental diets

Feedstuff Composition	R ₀	R ₂₀	R ₄₀	R ₆₀	R ₈₀	R ₁₀₀
Complement (%)	30	30	30	30	30	30
Fodders (%)	70	58	42	28	14	0
AHIPA (%)	0	14	28	42	58	70

Materials:

- **Animal:** 18 grass cutters of 6 months old with average live weight of 1,175 g;
- **Fodders:** *Paspalum vaginatum*, *Cynodon dactylon*, *Panicum maximum* C1 and tubers of *Pachyrhizus erosus* (EC Kew).



Photo 1. Bred grass cutters

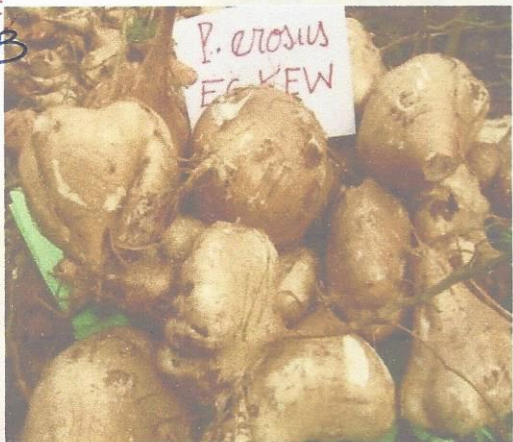


Photo 2. *Pachyrhizus erosus* (EC Kew)

Results: The results showed that the average individual daily feed intakes of the grass cutters were highly significantly different ($P = 0.000$). The highest daily feed intake of 46.43 ± 7.67 g DM (dry matter) was obtained with grass cutters fed on diet containing 40% of dolich tuberous roots. The average values of the Dry Matter Digestibility (DMD), the Daily Weight Gain (DWG) and the Feed Conversion Ratio (FCR) recorded in the six experimental groups were statistically the same. Highly significant correlations were obtained between the DWG and the DMD (0.625 for $P = 0.009$), but also between the DWG and the FCR (-0.813 for $P = 0.000$). Grass cutters fed with diets containing 60% and 100% of dolich tuberous roots showed the best technical performances.

References

- Mensah G.A., Pomalegni S.C.B., Ahoyo Adjovi N.R., Mensah E.R., Guedou M.S.E. & Koudande O.D., 2013. Aulacoculture : une alternative pour la sécurité alimentaire et la préservation de la faune sauvage en Afrique de l'Ouest. RASPA Vol.11 N0S, pp. 113-128. © 2013 E.I.S.M.V. de Dakar.
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Conclusion: Grass cutters fed with diets containing 60% and 100% of dolich tubers have the best feed consumption and digestibility, and the highest live weight. Thus, diet contained 60% of dolich tubers has the advantage of providing a feed ballast to grass cutter.

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