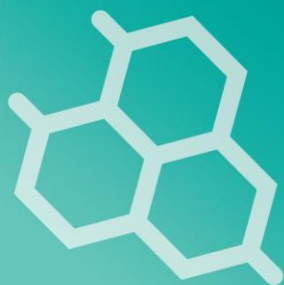


ISSN: 2663-9513 (Online)

ISSN: 2663-9505 (Print)



South Asian Journal of **BIOLOGICAL RESEARCH**



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To cite the article: J.A.Ityavyar, J.O.Bukie, G.O. Yager and O. A. Jaiyeola (2019) Hematology and minerals characteristics of nile rats fed different diets in captivity, *South Asian Journal of Biological Research*, 2(2): 68-75.

Link to this article: <http://aiipub.com/journals/sajbr-191118-031140/>

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HEMATOLOGY AND MINERALS CHARACTERISTICS OF NILE RATS FED DIFFERENT DIETS IN CAPTIVITY

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ARTICLE INFO

Article Type: Research

Received: 13, Nov. 2019.

Accepted: 28, Nov. 2019.

Published: 30, Nov. 2019.

Keywords:

Nile rats, Captivity,

Hemoglobin, Minerals and

Metabolites.

ABSTRACT

Nile rat (*Arvicanthis niloticus*) is a wildlife species with potential for domestication. This study investigated the hematological and mineral characteristics of Nile rat, in captivity fed different diets. Four hundred Nile rats, obtained from the wild in Benue State, Nigeria, were subjected to different feeding trials. The different feeds were: grower's mash, Sorghum seeds; Guinea grass; Yam peels and Cassava tubers. Parameters investigated were: red blood cell count, white blood cell count, and hemoglobin, pack cell volume, mean corpuscular volume, mean corpuscular hemoglobin, mean corpuscular hemoglobin Concentration as well as minerals and metabolites composition. The results obtained indicated that the Levels of Pack cell volume and hemoglobin were significantly higher ($\alpha 0.05$) in the rats fed with growers mash while white blood cells were highest in those fed with sorghum seeds while minerals and metabolites composition was observed not to be significantly different ($\alpha 0.05$). This study concluded that Nile rat can be reared in captivity, having preference for sorghum seeds and growers mash feeds respectively. Investment in Nile rat domestication is recommended as a complementary measure for ensuring food security and conservation of biological resources in Nigeria.



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