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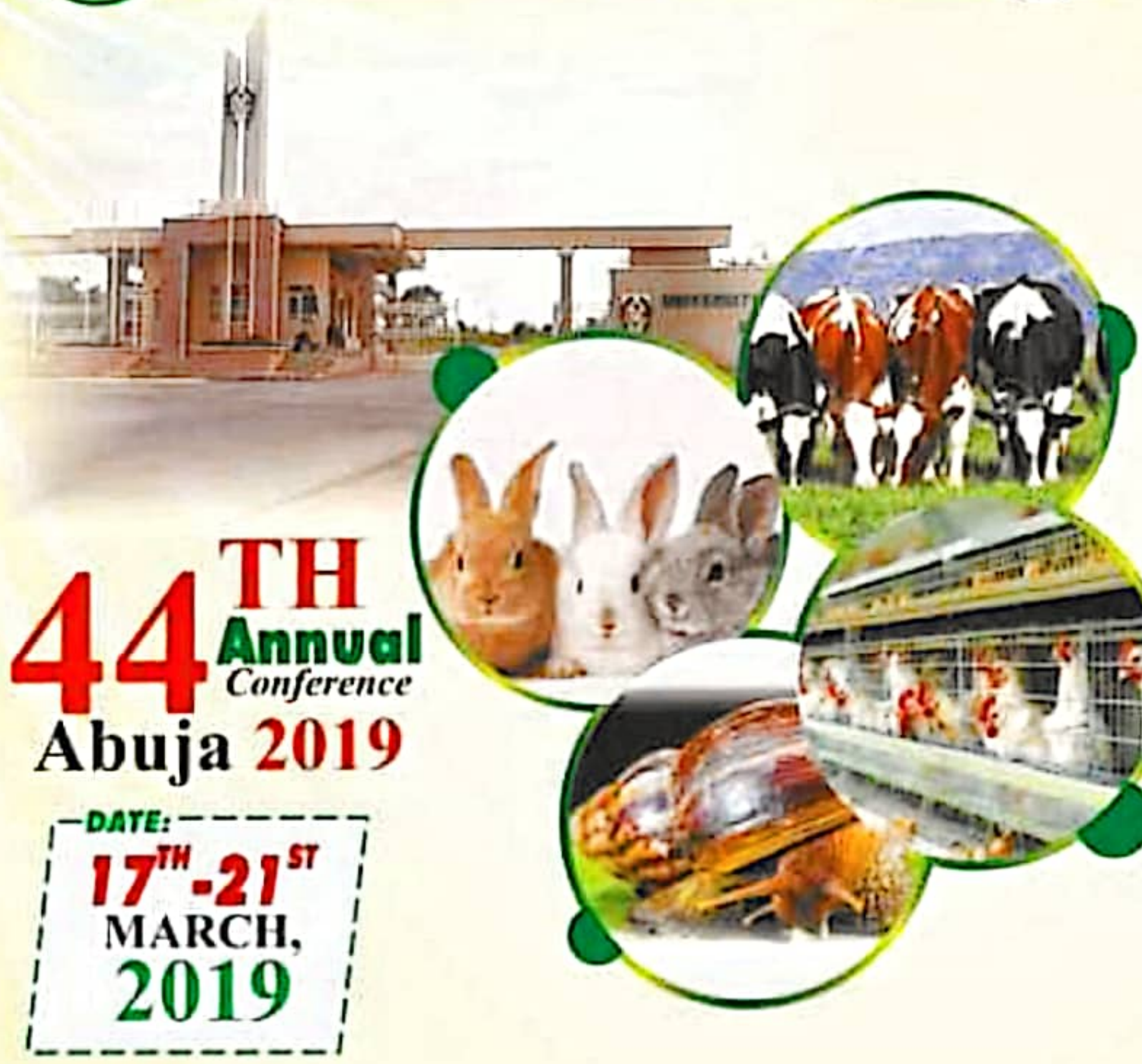

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Nigerian Society of Animal Production

National Animal Production Research Institute (NAPRI),

Ahmadu Bello University PMB 1096, Shika, Zaria, Kaduna State, Nigeria

E-mail: info@nsap.org.ng

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Moringa oleifera: A MULTIPURPOSE BROWSE PLANT FOR FEEDING RABBITS

K. E. Akande

Livestock Nutrition and Management Consultancy, Minna, Niger State, Nigeria

Email: kemi777akande@gmail.com

Abstract

This paper provides an overview of the role of dietary *Moringa oleifera* in rabbit production. The high cost of conventional feedstuffs presents a major challenge to agriculturalists, animal scientists and livestock farmers, particularly in developing countries. There are many browse plants of tropical origin that have great potential for use in the livestock feed industry. The utilization of the leaf meal from browse plants as a good source of cheap protein for feeding animals has been generating research interest. One of such browse plants is *Moringa oleifera*, which belongs to the family *Moringaceae*. It is the most popularly grown species in the genus *Moringa*. It is a multipurpose plant with high nutritive quality that has been recommended by many researchers for feeding farm animals. It can serve as a feed additive/supplement or feedstuff in the diet of rabbits. Generally, *Moringa oleifera* has been reported to support the growth, reproductive performance, normal haematological profile and physiology of rabbits. *Moringa oleifera* is a promising browse plant with exceptional qualities for future use in the production of commercial rabbit feeds.

Keywords: Rabbit, *Moringa oleifera*, performance, multipurpose

Introduction

Moringa oleifera is a unique browse plant with multiple benefits and uses. It is a fast-growing perennial tree that has high adaptability to different environmental conditions. *Moringa oleifera* is a non-legume tree commonly referred to as horseradish tree, drumstick tree and ben oil tree with every part being useful. Okiki *et al.* (2015) described *Moringa oleifera* as a multipurpose plant that is capable of contributing significantly to the nutritional needs of both livestock and humans. It has been successfully used for compounding livestock feeds. Livestock farmers are encouraged to incorporate *Moringa oleifera* in the diets of their animals. *Moringa oleifera* is a cheap plant protein source which can be utilized to improve feed nutritive quality as well as enhance the digestibility (Moreki and Gabanakgosi, 2014). The rich nutrient content of the dried leaves of *Moringa oleifera* suggests its crucial role as a potential feed resource in the near future (Moyo *et al*., 2011). The inclusion of *Moringa oleifera* in animal diets has resulted in improved feed efficiency (Mahmoud, 2013; Briones *et al*., 2017). The aim of this review is to present a summary of the information and findings on the use of *Moringa oleifera* in rabbit production.

Discussion

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Fresh leaves of *Moringa oleifera* are readily consumed by rabbits and other farm animals. Researchers have recommended the use of *Moringa oleifera* for feeding rabbits and other livestock. Okeke *et al*. (2009) posited that *Moringa oleifera* leaf meal is a nutritive protein source that can be utilized as a supplement in feeding adult rabbits, without negatively affecting performance characteristics of the animals. Ahemen *et al*. (2015) in their experiment included up to 15% of *Moringa oleifera* leaf meal in the diets of weaner rabbits and did not record any adverse effect on their blood profile. Ewuola *et al*. (2012) substituted soybean meal with 15% *Moringa* leaf meal in the diets of growing rabbits and achieved significant increase ($P<0.05$) in apparent nutrient digestibility. The dietary replacement of *Centrosema pubescens* with *Moringa oleifera* had no negative effect on the reproductive performance of rabbits (Odeyinka *et al*., 2008). According to Nuhu (2010), *Moringa oleifera* leaf meal is naturally very nutritive and can efficiently serve as a replacement for soybean meal in the diet of weaner rabbits with no detrimental effect on blood indices and productive performance. This author also suggested that *Moringa* leaf meal can be incorporated up to 20% in the diets of weaner rabbits. It is worth noting from all these aforementioned research reports that *Moringa oleifera* can be successfully incorporated in diets of rabbits at different growth stages (weaners, growers and adults).

Conclusion and Recommendations

Moringa oleifera is an excellent source of many nutrients and antioxidants, and has been shown to support reproductive performance, growth, physiology and normal haematological profile of rabbits. The feeding of *Moringa oleifera* to rabbits is less popular when compared with feeding it to other livestock. Rabbit producers and farmers should be encouraged to include *Moringa oleifera* leaf meal in rabbit feeds. Also, available literature is scanty on the utilization of *Moringa oleifera* in rabbit production. It is, therefore, necessary for research efforts to be geared towards exploring the great potentials of the use of *Moringa oleifera* in rabbit nutrition and welfare.

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