APRW -53

Reproductive Performance and Husbandry Practices of West African Dwarf Goats in Yagba East Local Government Area of Kogi State, Nigeria

P.O. Atte[1], E.Opoola[2], O. Olaniyan[1] andO.L.Olayinka[1]
[1]Kabba College of Agriculture, Ahmadu Bello University, Zaria; [2]Department of Animal Science, Ahmadu Bello University, Zaria.
Corresponding author: P.O. Atte; olaiyanikemi@yahoo.com

Abstract
The study evaluated the reproductive performance and husbandry practices of West African Dwarf Goats in Yagba East Local Government Area (LGA) of Kogi State, Nigeria. One hundred respondents were randomly selected from the four major axis of the LGA (Ijowa, Makutu, Idofin and Ilafin) while 94 questionnaires were retrieved. Majority of the goats (72.34%) were does, (60. 64%) of the respondents indicated twinning ability and (78.72%) started breeding from 1 – 20 months. 68.09% respondents had between 3 to 5 adult goats and 60.64% had 3rdparity of the dam. The result from this present study also showed that (74.47%) have housing for their goats. It was revealed from this study that (53.19%) recorded cases of disease outbreak, (42.55%) were affected by trypanosomiasis and (79.79%) of the respondents called on veterinary doctors.It was concluded that WAD goats have great potentials however, the management practices being adopted in the study area do not allow them to show their maximum potentials It is therefore recommended that the government should employ more veterinary personnel for easy contact and prompt treatment against the major diseases ravaging the study area. Also the farmers should purchase more male breeder goats in order to improve the productive performance of West African dwarf goats in the study area.

Keywords: WAD goats,reproductive performance, husbandry practices

Introduction

Livestock plays a very important role in Nigeria agriculture. The livestock population comprised about 28 million goats (FAO, 2005). Small ruminants are found almost everywhere in Nigeria, they are estimated to be a total of 56.6 million heads with goats outnumbering sheep two to three times (Yahuza, 2001). Success of goat operation depends on the number of goat's weaned aand the number marketed each year. The percentage of doe that conceived n breeding season, kidding and weaning percentage are some of the most important factors influencing productivity in goat breeding. In other word production is equal to reproduction Management of goats also has impact on the success of out – season breeding as they must be in good health condition and body condition (Diego and Soren, 2007). The West African Dwarf (WAD) goats are exposed to extreme weather, diseases and parasites, which partly accounts for their poor productive performance. Baseline information on the WAD goats will enable its compares with improved breeds when production is improved.

The objective of this study is to determine the reproductive performance and husbandry practices of WAD goats in Yagba East Area of Kogi State, Nigeria.

Materials and Methods

This survey was carried out in Yagba East Local Government Area of Kogi State. The state is located in north central part of Nigeria between Latitude 7°09N and Longitude 3° 13E of the world. This area lies within the savannah vegetation belt of the country. The Local government has an area of 1,396km and a population of 140,150 at the 2006 census. It also has humid climate with a temperature between 26 -28^{0}C with an annual rainfall of about 1017-1528mm. The people live in various rural villages and their major occupation being farming and trading which they practice at subsistence level. The study cut across three major axis in Yagba East local Government which are Isanlu axis, Ponyan/ Ejuku axis and Ife - olukotun/Igbagun axis. A purposive sampling technique was adopted in choosing the villages within the three axes of the LGA, hence Ijowa, Makutu, Idofin and Ilafin were selected in Isanlu axis and ten questionnaires were randomly administered in each of the town. In Ponyan/ Ejuku axis three villages were selected; Ponyan, Jege and Takete and ten questionnaires were administered in each of the three villages, while at Ife Olukotun/ Igbaruku axis, three villages were selected; Ife - olukotun, Alu and Igbagun and ten questionnaires were randomly administered in each of the three villages in the study area.

The needed primary data for this study were obtained through administration of structured questionnaires that enabled easy collection of information on reproductive performance as well as husbandry practices of WAD goats in the study area. The data collected were analysis using descriptive statistic such as mean, mode and percentage

Results and Discussion

Table 1 shows the reproductive performance of West African Dwarf goats in the study area. Majority of the West African Dwarf goats in the study area were female (72.34%) while (27.66%) were male. This may imply that the rate of

reproduction will be high in the study area. Results on the type of birth shows that majority (60.64%) of the respondents indicated that the doe gave birth to twins most often, (31.91%) claimed that they gave birth to singles while (7.45%) agreed to triplets. This is in line with the findings of Mamabolo and Webb (2005), they reported that the most frequent litter size was twins 76% and 24% of kids were born single, however 64.89% of the respondents had less than two kids weaned per kidding while 35.11% had more than two kids weaned per kidding. The age at first kidding showed that 15.95% started kidding in less than 10 months of age while most of the doe (78.72%) kidded between 11-20 months and few of them (5.32%) kidded after 20 months reported similar results (13- 15 %) for age at first kidding for WAD goats. The number of adult goats owned by the respondents showed that (7.45%) of the respondents had less than 2 adult goats, (68.09%) had between 3 to 5 goats while (24.46%) had more than 5 goats. However, 28.72% of the respondents had less than two kids, 54.26% had between 3 – 5 kids while 17.05% had more than 5 kids. Results on the parity of dam indicate that majority of the dam (50.64%) were in their third parity, while 28.72% in their second parity while 10.64% were primiparous. Results from the study area showed that 90.43% of the population lost less than two kids while 9.57% lost more than two kids.

Table 1: Reproductive Performance of West African Dwarf Goat

Variables	Frequency	Percentage
Sex		
Female	26	27.66
Male	68	72.34
Litters size		
Single	30	31.91
Twin	57	60.64
Triplet	7	7.45
Age at first breeding		
Less than 10 month	15	15.95
11-20 month	74	78.73
Greater than 20	5	5.32
No of adult goat		
Less than 2	7	7.45
3-5	64	68.09
Greater than 5	23	24.46
No of kids owns		
Less than 2	27	28.72
3 – 5	51	54.26
Greater than 5	16	17.02
Parity of dam		
1st	10	10.64
2nd	27	28.72
3rd	57	50.64
Kid mortality		
Greater than 2	85	90.43
Less than 2	9	9.57
Total	94	

Table 2 shows the husbandry practices of WAD goats by the respondents. Majority of the respondents had housing for their goats (74.47%) while (25.53%) had not. This implies that majority of the goats were well protected from dangers, inclement weather, diseases and thieves. Majority of the houses were made with concrete (67.14%) while few houses were made of wood (32.86 %). This might imply dependable as well as lasting housing system for the goats in the study area. This finding is in line with Mamabolo and Webb (2005) who reported that goats were provided with sketchy shelter to protect them from theft and predation.

Table 2 Management Practices of West African Dwarf Goat

Variables	Frequency	Percentage
Housing		
Yes	70	74.47
No	24	25.53

Type of housing		
Concrete	23	32.86
Wooden	47	67.14
Frequency of feeding		
Once	43	45.74
Twice	32	34.04
Thrice	19	20.22
Diseases outbreak		
Yes	50	53.19
No	44	46.81
Types of diseases		
Coccidiosis	30	31.82
Trypanosomosis	40	42.55
Pneumonia	24	25.53
Treatment of diseases		
Veterinary doctor	75	79.79
Self	19	20.21

The result from the finding showed that the farmers mostly fed their goats once in a day (45.74%), while about (34.04%) fed their goats twice and fewer numbers (20.22%) of household fed heir goats thrice a day. Result from this present study showed the response of the respondents according to disease outbreak, type of disease and methods of treating the disease among West African dwarf goat. It was revealed from the study that (53.19%) recorded cases of disease outbreak while (46.81%) did not have cases of disease outbreak. Most of the goats (42.55%) were affected by coccidiosis while (25.53%) were affected by Trypanosomiasis and (31.92%) were affected by pneumonia. The result agrees with the findings of Okoli*et al*.(2000) noted that the major mortality rates of WAD sheep and goats emanated mainly from poor hygiene, coccidiosis, trypanosomosis, peste des petit ruminants (PPR), theft and predation. It was also observed that (79.79%) of the respondents call on veterinary doctors to treat their goats when infected with disease while (20.21%) treated their goats by themselves.

Conclusion and Recommendations

It was concluded that WAD goats had great potentials however, the management practices being adopted in the study area do not allow them to show their maximum potential. It is therefore recommended that the government should employ more veterinary personnel for easy contact and prompt treatments against the major diseases ravaging the study area and also the farmer should purchase more male breeder goats in other to improve the productive performance of West Dwarf Goat in the study area.

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