

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

CHARACTERIZATION OF REPRODUCTIVE PARAMETERS OF LIONHEAD BREED

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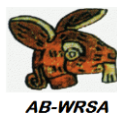
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Abstract: Among the most commercialized pet rabbit breeds in Brazil, mini Lionhead stands out. This breed is highly sought after for its characteristic breed standard. Proper management of matrices before, during, and after gestation will reflect in the development of the litter. To that end, zootechnical control using files is advisable. This research aimed to evaluate a database with reproductive parameters of Lionhead does. Information was collected from two rabbit breeders in the Brazilian states of Pernambuco and Paraíba. The files of 51 Lionhead does were evaluated. Data collection was done through zootechnical control spreadsheets from the breeding stocks. The quantitative variables of age of first mating, age of first parturition, gestation time, number of bunnies born, and number of bunnies weaned were measured. Descriptive statistics was adopted using means and standard deviation and calculating minimum and maximum points. It was found that Lionhead does have differentiated reproductive characteristics, thus the management of these individuals must be adequated to such specificities.

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Introduction

Among the most commercialized pet rabbit breeds in Brazil, mini Lionhead stands out. This breed is quite popular for its characteristics and, in order to maintain the breed's standard, good breeders must be selected. That occurs at three months of age, when the animals show inherent characteristics of the breed that are desirable to be spread in the farm.

Smaller breeds reach fertile age starting at four months old, unlike females of larger breeds, which become fertile at around seven months old (Barbado, 2006).

Proper management of mothers before, during, and after gestation will reflect in the development of the litter. To that end, zootechnical control using files is advisable, which will even allow for the creation of a database of the breeding stock. This way, the producer will have all information required on each animal in the farm and, therefore, will be able to increasingly optimize the production system.

This research aimed to characterize the reproductive parameters of Lionhead does.

Material and Methods

The data were collected at two rabbit farms in the Northeast region of Brazil, one in the state of Pernambuco, where the temperature ranges from 25 °C to 32 °C, and the other in the state of Paraíba, with temperatures between 19 °C and 31 °C.

51 Lionhead does were evaluated, 30 in the farm in Pernambuco and 21 from Paraíba. Both nurseries had masonry structure and fiber cement roofs with climate controlled by a negative pressure system using exhaust fans on the ceiling. The animals were housed in individual 80x60x40 cm galvanized wire cages.

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All cages had feeding and drinking troughs with water provided *ad libitum*. The animals were fed ramie (*Boehmeria nivea*) as roughage and commercial concentrate. Data collection was done through zootechnical control spreadsheets from the breeding stocks. The quantitative variables of age of first mating, age of the first parturition, gestation time, number of bunnies born, and number of bunnies weaned were measured. Descriptive statistics was adopted using means and standard deviation and calculating minimum and maximum points.

Results and Discussion

Mini Lionhead rabbits begin their reproductive lives at around six months old. The females have gestation time around 32 days (Table 1). Crespi (2012), when evaluating White New Zealand rabbits, pointed out that the gestation of this breed on average lasts for 30 ± 2 days. Therefore, Lionhead rabbits have a longer gestation period.

Table 1 – Reproductive parameters Lionhead rabbit at diferente farms in Brazilian Northeast

| Pernambuco Farm | | | | |
|-------------------------------------|--------|--------------------|---------|---------|
| Parameters | Media | Standard deviation | Minimum | Maximum |
| Age of first mating (days) | 200,89 | 48,02 | 147 | 331 |
| Age of the first parturition (days) | 233,83 | 41,64 | 178 | 304 |
| Gestation time | 32,13 | 1,13 | 30 | 36 |
| Number of bunnies born | 4,99 | 0,82 | 3 | 6 |
| Weaning (days) | 42,78 | 2,31 | 41 | 51,2 |
| Number of bunnies weaned | 3,18 | 1,20 | 1 | 5 |
| Paraíba Farm | | | | |

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| | | | | |
|-------------------------------------|-------|------|------|------|
| Age of first mating (days) | 167,6 | 49,7 | 68 | 309 |
| Age of the first parturition (days) | 197,6 | 40,2 | 104 | 243 |
| Gestation time | 32,27 | 1,97 | 30 | 36 |
| Number of bunnies born | 4,76 | 1,05 | 3,25 | 7 |
| Weaning (days) | 52,96 | 3,27 | 46 | 56,6 |
| Number of bunnies weaned | 4,01 | 1,18 | 3 | 7 |

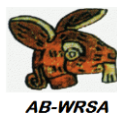
In more simplified breeding systems, reproduction occurs more slowly and the interpartum interval is longer. Even in intensive systems, Lionhead does will have longer interpartum intervals, which can be explained by the longer gestation time and later weaning in this breed.

The present research observed that, on average, five bunnies are born from each gestation regardless of the rearing system. These findings contradict those reported for medium-sized breeds, which, on average, have eight bunnies per litter. Jaruche (2013) reported that, in extreme and not very rare cases, the number of bunnies born may vary between one and 14 and that the higher the number of bunnies per pregnancy, the shorter the gestation will be. That confirms the longer gestation of Lionhead does is due to the smaller number of bunnies born.

Unlike medium-sized breeds whose weaning occurs at around 30 days of age (Mathias et al., 2015), Lionhead bunnies have late weaning. In both farms, weaning time follows the same pattern, i.e., the bunnies are weaned at around 46 days of age, when they have already acquired immunity and can handle sudden changes in environment. Moreover, by being weaned later, mortality rates decrease considerably.

Conclusion

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Lionhead does have differentiated reproductive characteristics compared with medium-sized breeds commonly mentioned in the literature; thus, the management of these individuals must be adequated to such specificities.

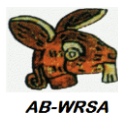
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