

RESEARCHES REGARDING THE AGE INFLUENCE ON CHINCHILA FEMALE RABBITS BREEDING PERFORMANCES

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Abstract

Our researches were made on 3 groups of Chinchila female rabbits with ages between 7 and 12 months old. We had in view their age on their breeding performances as well as on the breeding of young rabbits after 2 bringing in succession. We also computed the correlation coefficient between the characters we had in view. We noticed differences among the experimental groups, although they were not significant. Good results were noticed at the 7 month-old female rabbits and at the second bringing. The correlation between the age of the females and their characters noticed by us had negative values for the weight of the nest at the moment of bringing forth ($r = 0.453$) and positive for the number of the weaned young rabbits ($r = +0.657$).

Key words: rabbits, age, performances, bringing

INTRODUCTION

Characteristics of reproductive age females breed of chinchilla influence their performance and the growth of young rabbits, constituting an important criterion for selection.

The reproductive age use a female rabbits formed a ground for discussion contradictory in speciality literature, considering the fact that selection is working to decrease it.

MATERIAL AND METHODS

Researches were conducted in a private farm in Iasi, in the period March-July 2008.

The biological material was composed of three lots of chinchilla breed of female aged

between 7 and 12 months. The reproductive performance obtained at birth were followed during two consecutive parturition. It were pursued reproductive performance and growth process during the whole period of lactation. In the final we calculated the coefficient of variance for each indicator pursued.

RESULTS AND DISCUSSION

The results showed that reproductive performance is influenced by age, although differences are not significant results.

The data obtained after the research are presented in table 1.

Table 1

The performs of reproduction of the females depending of age for the first bringing

Specification	Lot one the age of 7 month		Lot two the age of 10 month		Lot thre the age of 12 month	
	$\bar{X} \pm s_{\bar{x}}$	V%	$\bar{X} \pm s_{\bar{x}}$	V%	$\bar{X} \pm s_{\bar{x}}$	V%
Body weight at the first mount	4372.8±21,80	14,9	4316,2±30,20	17,8	4433,0±41,21	19,1
Age of te females of the first mount (days)	214.6±10,70	11,2	304,2±17,10	15,8	365,7±21,22	17,1
The weight of the nest	336,8±2,44	15,9	315,6±12,11	19,2	242,8±9,12	13,2
The prolificity (number)	6,4±0,48	9,2	6,3±0,18	7,7	5,1±0,25	5,2
The numbers of the young rabbit	5,1±0,29	7,4	5,0±0,23	5,9	3,60±0,33	7,7
	351,6±16,80	10,6	315,6±25,3	17,1	291,7±14,20	11,6

Analyzed the data presented in table 1 that is found, the age used in reproductive females, in the 3 groups, was between 7 and 12 months. Body weight in the first month was different, with values that have oscillated between 4433g and 4316.2 g, but the differences are statistically insignificant registered.

It noted differences in the number of offspring birth and wean. It was 6.4 in female offspring that had the age of 7 months, and 5.1 female offspring at age 12 months.

Differences between the two lots are a young rabbits. At weaning (30 days) between the two groups the differences become more apparent, so the first lot of young rabbits was 5.1 and in the third 3.6 wean offspring.

Average weight at weaning, even between different lots, but they are specific breed chinchilla.

The results of growth are presented in table 2.

Table 2
 The growth performances of the young rabbits

Specication	The weight of the young rabbit	The weight of the rabbit weaned	The medium of the growth	The medium of weight to the rabbit weaned
The lot one the first bringing the age of 7 month	52,63	3793,10	24,13	351,65
The lot one the first bringing the age of 10 month	50,06**	3373,51	22,49	315,64
The lot one the first bringing the age of 12 month	47,61***	1204,22	11,15	219,73
The lot one the second bringing	53,25	4719,36	24,58	389,32
The lot two the second bringing	53,01n.s.	4252,56	24,44	332,10
The lot three second bringing	52,63**	1528,21	14,15	312,56

Average weight of young rabbits at birth was different from the three lot had the smallest weight, 47.61 g, there is between it and the first lot of significant differences. At second parturition weight of young rabbits was higher and the differences recorded were not significant.

Increase average growth was different, the lowest was recorded in the third group, 11.15 g of the first calving and 14.15 g at second parturition.

Was calculated by the correlation coefficient between the characters pursued.

Data are presented in table 3.

Table 3
 The corelatins between of the caracters

The corelation	The value	The value of \hat{r}
The weight of the females x the prolificity	0,08	2,008
The weight of the females x the weight of the nest	0,778	2,047
The weight of the females x the numers of the young rabbit weaned	0,607	2,005
The age of the females x prolificity	-0,353	3,19
The age of the females x the weight of the nest	-0,453	2,73
The age of the females x the numers of the young rabbit weaned	-0,435	1,19

It noted that there is strong positive correlation between female weight and the

weight of of young rabbits, the value of „r” is 0.778. Also the weight of the female and the

young rabbits wean, the value coefficient of the correlation de 0,607.

Correlations between age and prolificity weight at farrowing nest and the number of young rabbits wean are negative and significant middle. These pairs of characters are influenced by different genes and their effect is negative.

CONCLUSIONS:

By the made researched have resulted some practic observation regarding the using at reproduction of female rabbits from Chinchila breed:

- A. belonging to the medium breeds the first pairing is at 7 mounths, the exceeding of this age creates reproductive problems.
- B. The reproductive performance were different in function of the age and weight of the females. The obtained results were unregistrated at the first lot and in the first and second observed periods.
- C. The positive corelatin between the weight, prolificity and the number of

cubs evidentiate the pleiotropic effect of the involved females in the exprimated of the rememberd characters.

- D. Making the females selection after the corporal weight we manage to ameliorate the number of ablactated cubs and the weight of the nest.
- E. The age of the females influences negatively the prolificity, the nest's weight at the birth an the number of ablactated cubs, the effect of the involved females is antagonistic.

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