



PRODUCTION PERFORMANCE OF WEANED RABBIT IN HOUSEHOLD FARMING AT DIFFERENT WEANING AGE

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Abstract
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Production Performance of Weaned Rabbit in Household Farming at Different Weaning Age

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ABSTRACT

In any production system, rabbit productivity will be uniquely influenced by complex interaction of environmental, biological and socio economic variables. Many New Zealand White crossbred rabbits are raised by many farmers in Indonesia with the main purpose as a meat producer, so that it needs a good management. One of them is an appropriate weaning age. The purpose of this research was to obtain the production performance of kids in different weaning age which are breeding in household farming. The research was conducted in Desa Kertawangi, Kecamatan Cisarua, Lembang toward 120 kids of New Zealand White breed from 18 rabbit parents, parity two and three. The kids production trait evaluated are litter size, mortality, weaning weight, growth rate, and slaughter weight till weaning 8 week. The result shows that the best production performance of kids was obtained when weaned at 7 weeks with mortality before weaning (15.00%) and after weaning (23.37%), litter size 6-8 kids, weaning weight 850.90 g, growth rate 181.17 g, and slaughter weight 1.02 kg.

Key Words: Production Performance, Rabbits, Weaning Age



PRODUCTION PERFORMANCE OF WEANED RABBIT IN HOUSEHOLD FARMING AT DIFFERENT WEANING AGE.

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ABSTRACT

In any production system, rabbit productivity will be uniquely influenced by complex interaction of environmental, biological and socio economic variables. Many New Zealand White crossbred rabbits are developed by many farmers in Indonesia, the main purpose is as a meat producer, so that in its development need good management, one of them is weaning age. The purpose of this research is to know production performance of kids in different weaning age which are breeding in household farming. This research us descriptive method in Desa Kertawangi, Kecamatan Cisarua, Lembang toward 120 kids of New Zealand White breed from 18 rabbit parents, parity two and three. The kids production trait evaluated are litter size, mortality, weaning weight, growth rate, and slaughter weight till weaning 8 week. The result of this research is the best production performance of kids which are breed in traditional farm is showed in 7 weeks of weaning age with mortality before weaning (15.00%) and after weaning (23.37%), litter size 6-8 kids, weaning weight 850.90 g, growth rate 181.17 g, and slaughter weight 1.02 kg.

Keywords: production performance, rabbits, weaning age.

INTRODUCTION

New Zealand White rabbits breed has been developed by farmers in Indonesia. Its main purpose is as a producer of meat, so that the development needs good management. One is the age of weaning, because weaning age will affect the growth and development of the rabbit and reduce the risk of high mortality. Weaning age difference will affect the mortality and the ideal slaughter weight. While at this time the ideal slaughter weight is eight weeks old with weighing two kilograms, and it has not met in the community, so it is becoming a problem in marketing rabbits. Yet today many people who want the ideal slaughter weight as this will affect the economic value.

The growth traits are important factors influencing profitability in any meat production enterprise. Rapid growth during the early period can minimize the cost of rearing and thus provide more profit to the farmer. The birth weight and early growth rate of animals are determined not only by genetic potential but also by maternal and environmental factors (Mandal et al., 2006). One of the economically important traits, as started by Afzal et al. (2004) is mass of kids at birth, which is influenced by breed, but also under significant influence of year, season, kid sex, type of birth as well as age of mothers.

Any production system, rabbit productivity will be uniquely influenced by complex interaction of environmental, biological and socio economic variables. Therefore, the main objectives of this study were to assess the influence of environmental factors on kid production trait of weaning rabbit under small holders production system

RESULT AND DISCUSSION

Production performance from the results of research on the different weaning age to rabbit children up to the age of 8 weeks which were kept in traditional breeding rabbits can be seen in Table 1.

VARIABLES	WEANING AGE (WEEK)		
	5	6	7
Litter size (tail)	5 - 9	5 - 9	6 - 8
Mortality before weaning (%)	25.00	31.25	15.00
Mortality after weaning (%)	43.75	37.50	23.27
Weaning weight (g)	657.42	748.14	850.90
Daily gain (g)	127.51	141.64	181.17
Slaughter weight (g)*	1046.75	1039.00	1018.00

Description: * Slaughter weight of 8 weeks.

Data in Table 1 show, rabbits which born from parent parity two and three on the weaning age of 5 weeks, 6 weeks and 7 weeks ranged from 5 to 9 kids. This is due to different genetic, in addition there are many other factors, such as management and less attention of feed quality of the parent when mated to delivery, environmental conditions and cage system. According to Rathor et al. (2000), that the litter size is strongly influenced by parent factors, environmental temperature, feed and purity of the nation is still in question.

The study of mortality (Table 1), indicating that the lowest mortality (15%) at the age of 7 weeks compared to weaning age 5 weeks (25%) and 6 weeks (31.25%). This is because the rabbit are still heavily influenced by the mother's milk, even though they have learned eating rabbit feed. But the quality of the feed given to young rabbits on the household farming does not meet requirements according to the period of production. In addition, there are environmental less attention factor affect the health of livestock.

Weaning weight which obtained from the results of this research indicates that the 5 weeks weaning age give the smallest weight (657.42 g), and the highest shown by weaned rabbits weaned at the age of 7 weeks (850.90 g). This indicates that mother's factor is very influential in the growth of their kid period up to 7 weeks age, rabbits still in the phase of accelerating growth, digestion has begun perfectly, even though the feed is the same as the

parent. Cheeke et al. (1987) stated that the most efficient feed given to the child is special feed rather than the feed consumed by the parent. Memisi et al., (2009) that the force and presentation of shock at weaning depend on several factors, especially on the age and body weight of kids at the time of weaning, as well as on their nutrition prior to weaning.

Daily gain in rabbit kids who were weaned at aged 5 weeks (127.51 g), daily gain at weaning age of 6 weeks (141.64 g) and the highest daily gain is in young rabbits weaned at the age of 7 weeks (181.17 g), this case shows that Rabbit's growth before weaning is dependent upon the mother's milk production and daily gain after weaning is highly dependent on the quality of the feed, so the older weaned rabbits will get more milk from the parent, although its production has begun to decline, while the rabbit kids which are weaned earlier will get a little more parent's milk, and just get a feed which is dedicated to the parent, so that does not comply with its need, slaughter weight of New Zealand White breed rabbit is lower with the increasing of weaned age. It is 1046.75 g in 5 weeks of weaned age, 1039.00 g 6 weeks of weaned age and the lowest is at 7 weeks of weaned age rabbit (1018.00 g). This is because maintaining rabbit until 8 weeks, rabbit is still stress and need adjustment, so that the result has not optimum yet.

Slaughter weight results were low, if as-

sociated with the opinion of Rao et al. (1978), that the weight cut New Zealand White rabbits at the age of 8 weeks ranged from 1.39 to 2.12 kg.

However from the reserach, when seen from its mortality, the number of kid who produced until weaning age 7 weeks, still higher than the rabbit kids which are weaned at the age of 5 and 6 weeks, so that the total slaughter weight that produced at weaning age of 7 weeks will be higher.

MATERIALS AND METHODS

Research conducted as descriptive in Desa Kertawangi, Kecamatan Cisarua, Lembang. Data collection was done by purposive sampling of 120 offspring of New Zealand White rabbits breed from 18 mothers born two and three. In this research, different weaning is done. It is the weaning at the age of 5 weeks, 6 weeks and 7 weeks and each is maintained until the age of 8 weeks. The parameters measured were the number of litter size (tail), weaning weight (g), mortality after and before weaning (%), weight gain until 8 week (g) and slaughter weight at 8 weeks. Rations are given in the form of pellets with a protein content of 15% and 16% crude fiber, ration and drink given ad libitum.

Results of this study showed that feed management on traditional farming has not been adjusted to the needs of the production period, so that the desired communities target to produce fryer age of 2 months with a weight of 2 kg has not been achieved, because due to many factors, including genetics, the quality and quantity of feed for each stage of the production has not been done properly, health management, environmental hygiene, so the efficiency of production and the production of the desired performance can not be achieved.

CONCLUSION

The result of this research is the best production performance of kids which are breed in traditional farm is showed in 7 weeks of weaning age with mortality before weaning (15.00%) and after weaning (23.37%), litter size 6-8 kids, weaning weight 850.90 g, growth rate 181.17 g, and slaughter weight 1.02 kg.

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