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Submission date: 23-Jun-2020 03:03PM (UTC+0900)
Submission ID: 1311926007
File name: file_991_93_UMBANG.pdf (108.55K)
Word count: 1524
Character count: 7553

Artech Journal of Innovative Research of Animal Veterinary Sciences (AJIRAVS)
Volume, 1, Issue 1, 2020, Pages: 1-3
ISSN: 2523-5419

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Abstract: *The study aims to determine body weight gain and feed conversion. This research was carried out in June 2019-July 2019. The location of the study was conducted in Paris Village, Mootilango District, Gorontalo District. The study used 20 female ettawa with 2-3 years of age by providing seeds feed and adding 50% coconut male. While processing the data using the t-test. The results showed that the addition of coconut male was significantly different (p>0.05) to the weight gain of the value of the ettawa goat crossbreed where the average body weight of is 33 g/head/day. For feed conversion in crossbreed ettawa given additional feeds goats, coconut meal shows a feed conversion of 0.18% and etawa goats crossbreed given seeds only have a feed conversion value of 0.27%.*

Key words: Ettawa Goat Crossbreed (PE), seeds, coconut meal, Gorontalo, Indonesia

INTRODUCTION

Goats are livestock small ruminants which have a high economic value, especially in the supply of animal protein source compared to type livestock other ruminants. This is because the rapid goat breed, the number of children per birth more than a tail and the distance between short birth. In addition, the goat has high adaptability as to survive in bad neighborhood with utilizing the feed (especially green) is low nutritional content. Feed is a major component in the economy of effort since it is estimated to contribute 50-60% of the cost total production cost (Devendra and Sevilla, 2002). Woof constitute factor most that influence productivity livestock. Feed conditions (quality and quantity) insufficient needs, cause productivity livestock becomes low, among others, indicated by a slow growth rate and low body weight. According to Treacher (2006), goats during growth requires more nutrients than the goats that are not producing. Although cattle have a high genetic potential, without the support of appropriate feeding, the animal production can not be optimal. Agricultural land that more and more narrow led to the availability of forage that is still reduced, in terms of both quality and quantity, so that a solution to overcome these problems battle through the addition of concentrate. One of the efforts to increase productivity by utilizing coconut cake as animal feed protein sources. In because society is not many people know that coconut meal can be made fodder. This is the reason for background author take eight gain title goat body to provide an additional feed of how coconut male and body weight gain derived from the addition of crossbreed goat ettawa coconut meal.

MATERIALS AND METHODS

The research was conducted in July 2019, located in the village of Paris District of Mootilango, Gorontalo regency. The number of animals used in this study amounted to 20 birds with an average age of between 23 years old and have a body weight of 3040 kg. Where 10 cows given forage alone (kale, grass and Gliricidia), while 10 other tail given forage (kale, grass and Gliricidia) and added to the rice bran 2% of body weight/tail mixed with coconut meal as much as 50 g/fish.

RESULTS AND DISCUSSION

Feed consumption: A large amount of feed consumed by an animal is one of the important factors that directly affect the productivity of livestock such as weight gain. Ettawa crossbreed goats feed consumption (PE) were obtained from feed given minus the remaining feed. Data feed consumption seen in **Fig. 1**. Consumption of feed for crossbreed goats ettawa (PE) given green feed and concentrate mouth plus coconut meal. From **Fig. 1** shows that treatment of P1, consumption feed had the highest average compared with treatment P0. The high consumption of feed on the treatment P1 accompanied by

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Citation: Rokhayati, A.U., 2020. Coconut meal use as a source of protein vegetable for livestock goat. Artech J. Innovative Res. Anim. Vet. Sci., 1: 1-3.

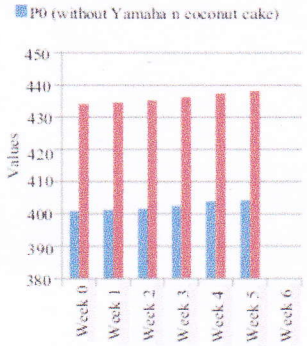

Fig. 1: Added body weight

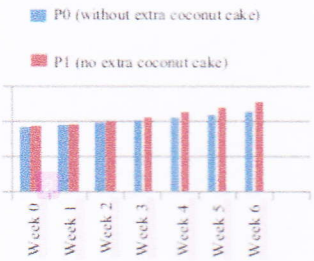

Fig. 2: Weight gain

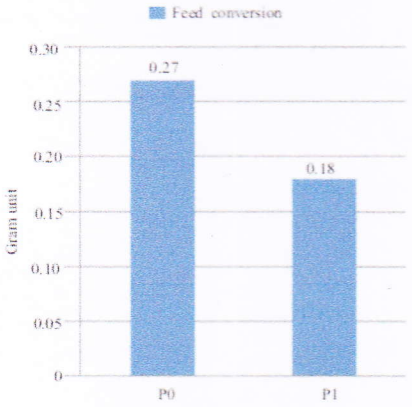

Fig. 3: Feed conversion

the increasing weight of livestock. Kartadisastra states that the body weight of cattle is always proportional to feed consumption, the higher the body weight, the higher also level to ration their consumption. Besides, the maximum feed intake is highly dependent on the balance of nutrients in the digestive tract.

Weight gain body goats crossbreed ettawa (PE) were obtained from the results of the final body weight minus weighing initial body weight and divided by the interval weighing. Weight gain, weight can be seen in the following figure. Ettawa goat crossbreed for research Treatment P0 the average weight gain body weight of 21 g/head/day treatment P1 while the average body weight gain.

Figure 2 added weight ettawa goats crossbreed (PE) given green feed and concentrate mouth plus coconut meal result test t show, giving concentrate plus coconut meal in feed for ettawa goat crossbreed significantly different ($p>0.05$) compared with the goats were just given forage alone. Accretion weight the highest body in P1 treatment with PBBH 33 g/head/day (2.5 kg/head/week). Results this study is higher than the research done, in goats pepper of 22.52 g/head/day with provide forage (grass) of 3% and add a complete feed g/head/day. This is consistent with the statement Nursasih (2005). Ruminant animal body weight gain is strongly influenced by the quality and quantity of feed, it is intended to appraisal livestock body weight gain compared to the rations consumed.

Feed conversion: Feed conversion is one way to determine how much feed needs to be consumed to raise 1 kg of meat or PBBH (Martawidjaja *et al*., 1999). The average conversion feed for ettawa goat crossbreed (PE) with feeding forage and concentrate mouth plus coconut cake during the research can be seen in **Fig. 3** as much 10%, then treatment P0 PBBH 21 g/head/day (1.5 kg/head/week). The results of this study are lower than that obtained in ettawa goat crossbreed female 46.55 g/head/day in the form of green feed as much 500 g/head/day before grazing. Goat body weight gain (**Fig. 2**). Ettawa goat crossbreed feed conversion (PE) given green feed and concentrate mouth plus coconut cake.

Based on **Fig. 2**, it can be seen that the conversion of animal feed ettawa goat crossbreed (PE) given forages have been lower than the ettawa goats crossbreed given t concentrate mouth plus coconut male. **Figure 3** shows that treatment with the average conversion value P0 highest feed at 0.27 g have body weight gain (21 g/day), while the average value of convection P1 with the lowest feed 0.18 g have body weight (33 g/day). Feed conversion in this study was lower than Alwi research Muh. Arfan in 2015 in ettawa goats is 5.05% male P1, P2 and P3 4.05, 5.65%. According to National Research Council (2007), suggested that the 3.00 feed conversion means feed used in this study has been efficient in the use of feed to be converted into meat. The addition of coconut male provides the conversion value small.

CONCLUSION

The results showed that the addition of coconut meal was significantly different ($p>0.05$) to the weight gain

of the value of the ettawa goat crossbreed where the average body weight of is 33 g/head/day. For feed conversion crossbreed ettawa given additional feed goars, coconut meal shows a feed conversion of 0.18% and ettawa goats crossbreed given seeds only have a feed conversion value of 0.2 %.

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