

## **Analysis of Body Weight of Kacang Goats in the Soropia Subdistrict, Konawe Regency**

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### **ABSTRACT**

*This study aims to analyze the body weight characteristics of Kacang goats based on sex and to determine the level of body weight variation in Kacang goats in Soropia Subdistrict, Konawe Regency. The study was conducted from September to October 2025 using a quantitative approach with a descriptive-analytical method. The study sample consisted of 74 male and female Kacang goats ranging in age from 6 months to over 24 months. Data collection was performed through direct body weight measurements using a digital scale with a precision of 0.1 kg. Data analysis was performed descriptively to obtain the mean, standard deviation, and coefficient of variation, while differences in body weight between male and female goats were analyzed using a t-test with the assistance of SPSS version 20. The results of the study showed that the average body weight of male Kacang goats was  $16.41 \pm 1.31$  kg with a coefficient of variation of 7.97%, while female Kacang goats had an average body weight of  $15.89 \pm 1.19$  kg with a coefficient of variation of 7.46%. Statistical test results indicate a significant difference ( $P < 0.05$ ) between the body weights of male and female Kacang goats. Male goats tend to have higher body weights compared to female goats due to physiological and hormonal factors, particularly testosterone, which supports muscle and body growth. The low coefficient of variation indicates that the Kacang goat population exhibits a fairly high level of growth uniformity. This study concludes that sex has a significant effect on the body weight of Kacang goats in Soropia Subdistrict and that the livestock population exhibits relatively homogeneous growth characteristics.*

**Keywords:** *Body Weight, Kacang Goats, Sex, Coefficient of Variation, Soropia Subdistrict*

## **INTRODUCTION**

Goats are one of the small ruminant livestock species with significant potential for development as a meat producer to support the fulfillment of the Indonesian population's animal protein needs. The continuously rising national demand for meat presents the goat farming sector with strategic opportunities in the development of sustainable livestock farming. Goat productivity is influenced by genetic and environmental factors; therefore, livestock performance can be improved through better feed quality, management practices, and breeding programs. According to Sarwono (2009), goats have excellent adaptability to tropical environments and can thrive under simple husbandry conditions. Breeding programs such as selection and crossbreeding are crucial efforts to enhance genetic quality, resulting in individuals with superior growth and production capabilities. Consequently, the development of local goat breeds must be supported by scientific approaches and proper husbandry management to optimally and sustainably boost livestock productivity.

The Kacang goat (*Capra hircus*) is one of Indonesia's local livestock genetic resources widely raised by rural communities due to its high adaptability to tropical environments and satisfactory reproductive capacity. This goat is known to thrive under limited feed conditions and traditional husbandry systems, making it the primary choice for smallholder farmers. According to Budisatria et al. (2009), the Kacang goat holds significant economic value as a source of meat, a family savings asset, and a supplement to the household income of small-scale farmers. Additionally, the Kacang goat possesses the advantage of rapid reproductive capacity and relatively low management costs compared to other large livestock. The presence of Kacang goats also plays a role in supporting food security and the economic empowerment of rural communities. Therefore, the development of Kacang goats requires serious attention through improvements in rearing quality and reproductive management to enhance livestock productivity sustainably at the smallholder level.

The productivity of Kacang goats is significantly influenced by the quality and availability of feed provided during the rearing process. Feed with a balanced nutritional content can optimally support growth, health, and production efficiency in livestock. Abdullah and Padang (2024) reported that the use of ground corn as an energy source in the diet can

improve the physiological performance and growth of Kacang goats compared to feeding a standard diet without additional energy sources. Additionally, the use of fermented agricultural waste as an alternative feed ingredient has also been shown to improve nutrient digestibility and the carcass percentage of Kacang goats. These findings indicate that innovations in ration formulation based on local resources can serve as a solution to enhance the productivity of smallholder goat herds. The availability of high-quality forage and appropriate feeding strategies will significantly determine the growth performance of Java goats, particularly within semi-intensive and intensive husbandry systems widely adopted by rural communities.

In addition to feed factors, reproductive aspects also play a crucial role in supporting the success of Kacang goat development. Reproductive characteristics such as age at first mating, calving interval, fertility rate, and litter size significantly determine the population growth rate of livestock at the smallholder level. Fauzy et al. (2024) state that the reproductive performance of Kacang goats in smallholder farms can serve as a foundation for planning breeding programs and the sustainable development of livestock populations. Good reproductive performance increases the number of goat kid births, thereby enhancing livestock business productivity over time. Additionally, high reproductive capacity is one of the advantages of Kacang goats compared to other large ruminants. Therefore, proper reproductive management must be implemented through controlled breeding, improved feed quality for breeding stock, and livestock health maintenance to support optimal population growth and genetic quality of Kacang goats in the community.

The health and production performance of Kacang goats are also influenced by the quality of forage provided during rearing. Sulistijo et al. (2024) explain that the use of forage enriched with compost can improve nutrient intake, rumen fermentation, and blood metabolites in Kacang goats, thereby positively impacting livestock health and productivity. Good physiological condition in livestock enhances growth potential and feed utilization efficiency. In smallholder farms, the utilization of local forage such as gamal leaves, jackfruit leaves, and wild grasses serves as the primary feed source, which is easily accessible and inexpensive. However, the inconsistent quality of forage often poses a challenge in smallholder goat farming. Therefore, innovations in the utilization of local feed and simple technologies for providing high-quality forage are needed to ensure that the nutritional needs of goats are met

year-round and to sustainably improve livestock production performance at the smallholder level.

Support from local statistical data is crucial for understanding the actual conditions of goat farming development in a region. According to a publication by the Konawe Regency Central Statistics Agency (2024), the goat population in Soropia Subdistrict showed fluctuations during the 2022–2024 period. The goat population was recorded at approximately 1,583 head in 2022, increased to 1,585 head in 2023, and then decreased to 1,437 head in 2024. These data indicate that goats are one of the dominant livestock species in the Soropia Subdistrict. These population fluctuations are believed to be influenced by husbandry systems, feed availability, livestock health conditions, and economic factors affecting farmers. This situation reflects the dynamics of smallholder goat farming, which requires attention in terms of management practices and livestock productivity improvement. Therefore, livestock population data can serve as a basis for formulating more targeted and sustainable goat farming development policies in Konawe Regency.

Body weight is a key indicator for assessing the growth performance and productivity of local goats. Body weight is influenced by genetic factors, age, sex, feed quality, and the management systems implemented by farmers. Information regarding the body weight of local goats in Soropia Subdistrict remains very limited, necessitating research to obtain scientific data on the performance of these local livestock. According to Putra et al. (2023), the body weight of local goats can serve as a basis for breeding selection and livestock productivity evaluation. Additionally, the level of body weight variation is important to determine the uniformity of the local goat population in a given area. Based on the above, research on the body weight analysis of Kacang goats in Soropia Subdistrict, Konawe Regency, is necessary to obtain baseline information that can support future programs for the development, conservation of genetic resources, and improvement of Kacang goat productivity.

Based on the background described above, the objective of this study is to determine the body weight characteristics of Kacang goats by sex in Soropia Subdistrict, Konawe Regency, and to analyze the level of body weight variation in Kacang goats as a basis for information on the development and conservation of local livestock genetic resources.

## **METHODS**

This study employed a quantitative approach using a descriptive-analytical research design. A quantitative approach was chosen because the study focused on measuring the body weight of Kacang goats using numerical data analyzed statistically. According to Sugiyono (2022) quantitative research aims to test relationships between variables through objective and measurable data analysis. Descriptive-analytical research was conducted to describe the characteristics of Kacang goat body weight while analyzing differences in body weight based on sex. The study was conducted from September to October 2025 in Soropia Subdistrict, Konawe Regency, Southeast Sulawesi Province. The research location was selected purposively because Soropia Subdistrict is one of the areas with a relatively high population of Kacang goats, which are still raised traditionally and semi-intensively by the local community.

The study sample consisted of 74 Kacang goats raised by smallholder farmers in Soropia Subdistrict. The sample included both male and female goats ranging in age from 6 to over 24 months. The tools used in this study included a measuring tape, calipers, a 120 kg digital scale with a precision of 0.1 kg, a digital camera, and data recording forms. Widodo (2021) explains that the use of standardized measuring tools is crucial in livestock research to obtain valid and reliable data. Digital scales were used to accurately measure the body weight of the livestock, while measuring tapes and calipers were used to support the measurement of the livestock's body dimensions. A digital camera was used as a documentation tool throughout the study to ensure that the entire data collection process was properly documented.

The population in this study consists of all Kacang goats found in Soropia Subdistrict, Konawe Regency. Sampling was conducted using purposive sampling, a technique where samples are selected based on specific criteria aligned with the research objectives. Sugiyono (2022) states that purposive sampling is employed when researchers select samples based on specific characteristics relevant to the study. The selection of sample villages was based on areas with the highest goat populations in Soropia Subdistrict. Livestock samples were selected based on the criteria that the Kacang goats were raised intensively or semi-intensively, were either male or female, and were in the 6–12-month age group. The purposive sampling technique was chosen to ensure that the data obtained were more representative in describing

the body weight characteristics of Kacang goats at the study site.

The data used in this study consist of primary and secondary data. Primary data were obtained through direct measurement of the body weight of Kacang goats in the field using a digital scale. Additionally, observations were conducted on the livestock management systems implemented by the farmers. Secondary data were obtained from the Village Office, Subdistrict Office, Livestock Service, Konawe Regency Central Statistics Agency, as well as scientific journals and previous research results relevant to this study. According to Widodo (2021), primary data is the main data obtained directly from the research subjects, while secondary data is used as supporting data to strengthen the research findings. The main variable observed in this study was the body weight of Kacang goats, obtained through direct weighing using a digital scale with a precision of 0.1 kg.

Data analysis was conducted using descriptive and inferential methods. The body weight data of the Kacang goats were first corrected to a standard age of 6–12 months using the correction formula by Salamena et al. (2007) to minimize the influence of age variation on the observed results. Subsequently, the data were analyzed to obtain the mean, standard deviation, and coefficient of variation based on the formula by Steel and Torrie (1995). The coefficient of variation was used to determine the level of uniformity in body weight within the livestock population. The comparison of average body weights between male and female Kacang goats was analyzed using a t-test to determine the presence of significant differences between the sex groups. According to Steel and Torrie (1995), the t-test is used to compare the means of two different sample groups. The entire statistical analysis process was conducted using SPSS version 20 so that the research results could be analyzed systematically and scientifically.

## **RESULTS AND DISCUSSION**

### **RESULTS**

#### **4.1 General Description of the Study Location**

##### **4.1.1 Geographic Location and Area**

Soropia Subdistrict is a coastal area located in Konawe Regency, Southeast Sulawesi Province. This area features varied topography ranging from lowlands to hilly terrain, supporting various community activities such as agriculture, livestock farming, and fisheries.

Soropia Subdistrict borders the Banda Sea directly to the east and shares borders with several other subdistricts, namely Lalonggasumeeto Subdistrict, Bondoala Subdistrict, and Kapoiala Subdistrict. These geographical conditions make Soropia Subdistrict a region with significant natural resources that can support the development of the livestock sector, particularly the raising of Java goats, which is widely practiced by rural communities.

In addition to its coastal areas, Soropia Subdistrict also features plantation zones, shrublands, agricultural lands, and natural forests that can be utilized as sources of forage for livestock. The tropical climate, with sufficient rainfall, supports year-round forage growth, making the availability of natural feed relatively easy for livestock farmers to access. According to the Konawe Regency Central Statistics Agency (2023), the area of Soropia Subdistrict spans approximately 62.73 km<sup>2</sup> or 6,273 hectares. Atowatu Village is the village with the largest area in Soropia Subdistrict, while Bajo Indah Village and Leppe Village are the villages with the smallest areas. This land area and geographical conditions are highly conducive to goat farming due to the availability of grazing areas and abundant forage sources.

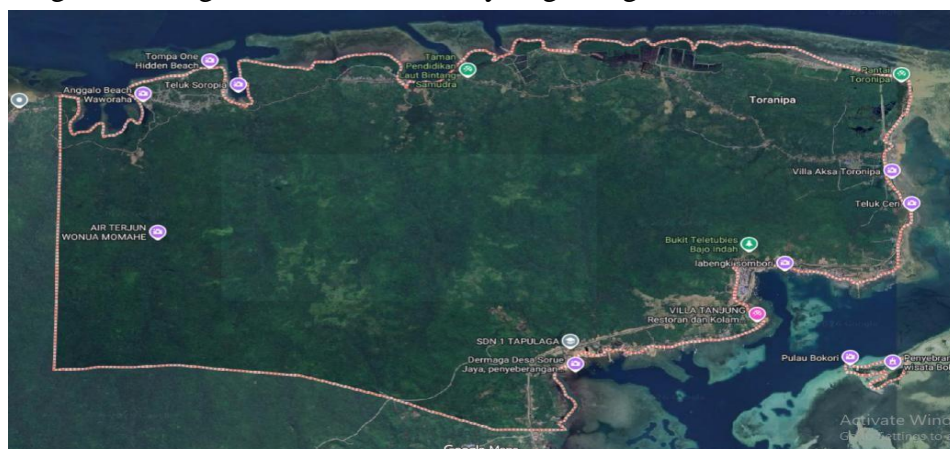


Figure 4.1 Map of Soropia Subdistrict, Konawe Regency

#### **4.1.2 Peanut Goat Rearing Systems**

Goat farming in Soropia Subdistrict is generally conducted using a semi-intensive system, with a small portion practiced intensively. The semi-intensive system is the most widely adopted by farmers as it is considered easier and more economical. In this system, goats are allowed to forage around gardens, thickets, vacant lots, and coastal areas from morning until afternoon, and are then brought into the pen at night. Meanwhile, in the intensive system, the livestock are kept entirely in pens, and their feed requirements are provided directly by the

farmers every day.

The majority of goat farmers in Soropia Subdistrict are small-scale household farmers with relatively few animals and limited capital. These conditions lead farmers to prefer the semi-intensive system over the intensive system because maintenance costs are lower and it does not require significant labor or additional feed costs. Additionally, the semi-intensive system is considered more suitable for the environmental conditions of Soropia Subdistrict, which still has an abundant supply of natural forage in plantation areas, shrublands, and coastal regions. This rearing system also facilitates direct access to natural forage for the livestock, thereby helping to reduce farmers' production costs.

The Kacang goat is known for its high adaptability to tropical environments and its ability to effectively utilize natural forage. Therefore, the semi-intensive system is highly suitable for Kacang goats in Soropia Subdistrict. In addition to being more economical, this system also allows livestock to move more freely, thereby supporting their physiological activities and growth. However, some farmers have begun adopting intensive systems, particularly for livestock intended as breeding stock or for fattening, to ensure more optimal control over feed and livestock health



(a)

(b)

Figure 4.2 Goat Rearing Systems in Soropia Subdistrict: (a) Intensive System and (b) Semi-Intensive System

### 4.1.3 Feeding

Feeding of Kacang goats in Soropia Subdistrict is generally carried out using the “cut

and carry” method, wherein farmers cut grass or forage growing wild around forest areas, gardens, farmlands, and settlements, then provide it to the livestock in the pens. Feeding is conducted two to three times a day, depending on the number of livestock and the availability of forage around the farm location. This feeding system is widely adopted by smallholder farmers because it is more practical and allows them to utilize local resources available in the surrounding environment.

The types of forage most commonly fed to Java goats include gamal leaves (*Gliricidia sepium*), jackfruit leaves (*Artocarpus heterophyllus*), mara leaves (*Macaranga tanarius*), mangrove leaves (*Rhizophora* spp.), and various types of local grasses that grow around pens, plantations, and coastal areas. These forages are chosen because they are easily obtained and have sufficient nutritional content to support the growth of dwarf goats. Additionally, some types of forage, such as gamal leaves, are known to have a relatively high crude protein content, making them suitable as a feed source for small ruminants.

The use of local forage in the feeding system provides economic benefits for farmers as it reduces the reliance on commercial concentrate feed, which is relatively expensive. The abundant availability of natural forage in the Soropia sub-district of also supports the sustainability of smallholder goat farming. However, the quality of the forage provided is sometimes affected by seasonal conditions, particularly during the dry season when forage availability begins to decline. Therefore, some farmers typically seek additional forage from areas near the farm or coastal regions to ensure livestock feed needs are met.



Figure 4.3 Types of Forage for Kacang Goats in Soropia Subdistrict

## 4.2 Body Weight of Kacang Goats

The results of the study on the body weight of male and female Kacang goats in Soropia Subdistrict are presented in Table 4.1.

Table 4.1 Mean, Standard Deviation, and Coefficient of Variation of Body Weight of Kacang Goats in Soropia Subdistrict

Variable	Male (n=33)			Females (n=41)		
	$\bar{X}$	SD	FV (%)	$\bar{X}$	SD	KK (%)
Body weight (kg)	16.41 <sup>a</sup>	1.31	7.97	15.89 <sup>b</sup>	1.19	7.46

Notes:

Different superscript letters on the same row indicate a significant difference ( $P < 0.05$ ).

Based on the research results in Table 4.1, it is known that the average body weight of male Kacang goats in Soropia Subdistrict was  $16.41 \pm 1.31$  kg with a coefficient of variation (CV) of 7.97%. Meanwhile, female Kacang goats had an average body weight of  $15.89 \pm 1.19$  kg with a coefficient of variation of 7.46%. These results indicate that male Kacang goats have a higher body weight compared to female Kacang goats. This difference in body weight is likely influenced by sex, as male goats generally exhibit faster muscle growth and skeletal s compared to female goats.

The results of the t-test analysis indicate a significant difference ( $P < 0.05$ ) between the body weights of male and female Kacang goats in Soropia Subdistrict. This suggests that sex exerts a significant influence on the growth performance of Kacang goats. Male goats tend to have better growth potential than female goats due to the influence of testosterone, which plays a role in muscle tissue formation and body growth. In addition to biological factors, differences in body weight may also be influenced by feed intake, the animals' adaptability, and the husbandry systems implemented by farmers.

The coefficient of variation (CV) values for both male and female Kacang goats were low, as they were below 10%. The low CV values indicate that the level of variation in body weight among the animals is relatively small, and the goat population tends to be homogeneous. This suggests that Kacang goats in Soropia Subdistrict exhibit a fairly high level of growth uniformity. This uniformity is likely due to the relatively similar age range of the

livestock, the nearly uniform husbandry system, and the fact that the types of feed provided by farmers do not differ significantly across the study locations.

## **DISCUSSION**

The difference in body weight between male and female Kacang goats in this study indicates that sex has a significant effect on livestock growth performance. Male Kacang goats have a higher average body weight compared to female Kacang goats, indicating a difference in growth capacity between the two sexes. This condition is influenced by physiological and hormonal factors, particularly testosterone in male livestock, which plays a role in enhancing muscle tissue formation, bone growth, and body protein synthesis. Consequently, male goats tend to have a faster growth rate compared to female goats at relatively the same age. According to Sodiq et al. (2021), male goats generally exhibit better growth performance than female goats, particularly during the early growth phase through early adulthood. Putra et al. (2023) also state that sex exerts a significant influence on the growth and body weight of local goats in Indonesia.

The average body weight of Kacang goats in this study was higher than the results reported by Ibrahim et al. (2022) in Leihitu Subdistrict, Central Maluku Regency, which reported an average body weight of  $7.83 \pm 0.98$  kg for male goats and  $8.07 \pm 4.99$  kg for female goats. These differences are likely influenced by several factors, such as the age of the livestock, feed quality and quantity, management systems, environmental conditions, and the livestock's ability to adapt to the rearing area. Soropia Subdistrict has an abundant supply of natural forage throughout the year, so the livestock's nutritional needs are relatively better met compared to areas with limited feed availability. Additionally, the semi-intensive rearing system adopted by farmers allows goats to receive regular supplementary forage. These conditions are believed to be one of the factors supporting the growth of Kacang goats, resulting in higher body weights compared to previous studies in other regions.

The coefficient of variation (CV) for the body weight of Kacang goats in this study was low, at less than 10%. This value indicates that the level of variation in body weight among the animals is relatively small, and the livestock population tends to be homogeneous. According to Astuti et al. (2019), a coefficient of variation below 10% indicates that a livestock population

exhibits good uniformity of performance. The low CV value in this study suggests that the Kacang goats in Soropia Subdistrict have a relatively high level of growth uniformity. This uniformity is likely influenced by the relatively similar age range of the livestock, nearly uniform husbandry systems among farmers, and feed types that are not significantly different. Additionally, the relatively similar environmental conditions in the study area also contribute to the level of growth uniformity, resulting in smaller variations in body weight among individuals.

In addition to environmental factors and management practices, genetic factors also influence the body weight performance of Kacang goats in Soropia Subdistrict. Genetic factors play a crucial role in determining growth potential, feed efficiency, and livestock production performance. One genetic factor that can affect livestock performance is inbreeding. Nuriadi et al. (2017) explain that inbreeding can lead to a decline in livestock genetic quality, resulting in reduced growth, decreased disease resistance, and the emergence of harmful recessive traits—. However, the results of this study indicate that the level of body weight uniformity among Kacang goats in Soropia Subdistrict remains relatively good, suggesting that the livestock population in the area still possesses relatively stable genetic performance. This indicates that Kacang goats in Soropia Subdistrict still hold potential for development as a productive source of local livestock breeding stock.

The semi-intensive management system implemented by farmers in Soropia Subdistrict is also believed to contribute positively to the growth performance of Kacang goats. In a semi-intensive system, livestock not only obtain natural feed through grazing but also receive additional forage provided directly by farmers in the pens. According to Ramadhan et al. (2023), the semi-intensive system can improve feed utilization efficiency because the livestock receive a combination of natural forage and higher-quality supplementary feed. Additionally, the “cut and carry” method employed by farmers—utilizing local forage such as gamal leaves, jackfruit leaves, mara leaves, mangrove leaves, and local grasses—further supports the livestock’s nutritional needs. These forages are known to have sufficient protein and fiber content to support the growth of Kacang goats. Thus, the combination of a semi-intensive rearing system and the utilization of local forages is believed to be one of the key factors supporting the body weight performance of Kacang goats in Soropia Subdistrict.

Overall, the results of this study indicate that male Kacang goats have higher body weights than female Kacang goats, with a relatively low level of population diversity. This suggests that Kacang goats in Soropia Subdistrict exhibit fairly good and uniform growth rates. Sex, husbandry practices, feed quality, environmental conditions, and genetic factors are believed to be the primary factors influencing the body weight performance of the livestock. The results of this study can serve as a basic information source for Kacang goat development programs, particularly in breeding selection activities, improvements in management practices, and the development of local goat populations in Soropia Subdistrict, Konawe Regency. Additionally, this study is expected to provide a basis for local governments and farmers to enhance the sustainable productivity of Kacang goats in the future.

### **CONCLUSION AND IMPLICATIONS**

Based on the research results, it can be concluded that male Kacang goats in Soropia Subdistrict have a higher body weight compared to female Kacang goats, indicating that sex has a significant effect on livestock growth performance. The average body weight of male Kacang goats was  $16.41 \pm 1.31$  kg, while that of female Kacang goats was  $15.89 \pm 1.19$  kg. The results of the t-test analysis showed a significant difference ( $P < 0.05$ ) between the body weights of male and female goats. The coefficient of variation for both livestock groups was below 10%, indicating that the Kacang goat population in Soropia Subdistrict exhibits a fairly high level of growth uniformity. Gender, feed quality, management systems, environmental conditions, and genetic factors are suspected to be the primary factors influencing the body weight performance of Kacang goats. The results of this study can serve as foundational information for breeding selection programs, population development, and the enhancement of Kacang goat productivity in Soropia Subdistrict, Konawe Regency.

The results of this study have important implications for the development of the Kacang goat farming industry in Soropia Subdistrict, Konawe Regency. Information regarding body weight characteristics and the level of uniformity of the Kacang goat population can be utilized as a basis for breeding selection programs and the improvement of the genetic quality of local livestock. The low level of body weight variation indicates that the Kacang goat population in the study area exhibits relatively uniform growth performance, making it a potential source for

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local superior breeding stock. Furthermore, the implementation of a semi-intensive rearing system and the utilization of local forage have proven capable of supporting livestock growth quite effectively. Therefore, efforts to improve feed quality, rearing management, and livestock reproduction management are necessary so that the productivity of Kacang goats can continue to increase sustainably and support the development of smallholder livestock farming in Konawe Regency.

## **REFERENCES**

- Abdullah, S., & Padang, P. (2024). Growth and physiological performance of Kacang goats fed milled corn as an energy source. *Jurnal Ilmiah AgriSains*, 25(1), 50–59.
- Ansar, A., Basri, B., & Hidayat, M. (2023). Faktor keberhasilan pemeliharaan kambing kacang dengan sistem semi-intensif di Kabupaten Jeneponto. *Jurnal Peternakan Lokal*, 5(2), 101–109.
- Astuti, D. A., Suryani, N. N., & Wahyuni, S. (2019). Keragaman performa produksi kambing lokal berdasarkan bobot badan dan ukuran tubuh. *Jurnal Ilmu Ternak*, 19(1), 45–52.
- Awaluddin, A., Hisein, W. S. A., Efendi, S., Oge, L., & Wahyudin, C. I. (2026). Response Of Nilaparvata Lugens (Stal.) Hemiptera; Delpacidae To The Application Of Deltamethrin Insecticides At Sublethal Concentrations. *Journal of Agriculture, Agribusiness, Welfare, Technology, Humanity, Environment, Social, and Economy*, 1(4), 182-191.
- Azzahra, N., Yusuf, M., & Hasanuddin, H. (2023). Pengaruh pemberian hijauan berkualitas terhadap konsumsi bahan kering dan penambahan bobot badan kambing lokal. *Jurnal Nutrisi Ternak Tropis*, 6(1), 55–63.
- Badan Pusat Statistik Kabupaten Konawe. (2023). *Kecamatan Soropia dalam angka 2023*. Konawe: BPS Kabupaten Konawe.
- Badan Pusat Statistik Kabupaten Konawe. (2024). *Kecamatan Soropia dalam angka 2024*. Konawe: BPS Kabupaten Konawe.
- Budisatria, I. G. S., Udo, H. M. J., Baliarti, E., & Murti, T. W. (2009). Religious festivities and marketing of small ruminants in Central Java Indonesia. *Asian Journal of Agriculture and Development*, 5, 57–73.
- Fauzy, M. I., Rusdin, M., Badaruddin, R., Sutopo, D., Aka, R., & Rahadi, S. (2024). Penampilan *Journal Of Agriculture, Agribusiness, Welfare, Technology, Humanity, Environment, Social, And Economy*

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- reproduksi kambing kacang pada peternakan rakyat di Kecamatan Wadaga Kabupaten Muna Barat. *Jurnal Ilmiah Peternakan Halu Oleo*, 6(3), 200–207.
- Hajar, H., Panga, L., Sasmita, F., Oge, L., Hastian, H., & Harudin, L. (2022). Characteristics of rats and ectoparasites on animal quarantine health in ports. *Jurnal Sultra Sains*, 4(2), 10–20.
- Hajar, H., Inal, I., Sari, A. M., & Oge, L. (2026). Development of Precision Feed Technology Model for Ruminant Livestock Based on Nutritional Sensors. *Journal of Agriculture, Agribusiness, Welfare, Technology, Humanity, Environment, Social, and Economy*, 1(4), 223–231.
- Ibrahim, A., Talib, A., & Husain, M. (2022). Karakteristik bobot badan kambing kacang di Kecamatan Leihitu Kabupaten Maluku Tengah. *Jurnal Agripet*, 22(2), 87–94.
- Kurnianto, E., Lestari, C. M. S., & Sutopo, S. (2022). Sistem pemeliharaan kambing rakyat berbasis sumber daya lokal. *Jurnal Pengembangan Peternakan Tropis*, 47(3), 233–241.
- Nuriadi, D., Sulastri, S., & Qisthon, A. (2017). Dampak inbreeding terhadap performa produksi ternak kambing lokal. *Jurnal Ilmiah Peternakan Terpadu*, 5(3), 150–157.
- Putra, R. A., Lestari, C. M. S., & Sodik, A. (2023). Pertumbuhan dan bobot badan kambing lokal berdasarkan jenis kelamin dan umur. *Jurnal Peternakan Indonesia*, 25(3), 221–229.
- Ramadhan, F., Hidayati, N., & Salim, M. (2023). Efisiensi sistem semi-intensif pada peternakan kambing rakyat. *Jurnal Agrisistem Peternakan*, 4(2), 110–119.
- Salamena, J. F., Noor, R. R., Sumantri, C., & Inounu, I. (2007). Hubungan genetik, ukuran populasi efektif dan laju silang dalam per generasi populasi domba di Pulau Kisar. *Media Peternakan*, 30(2), 71–75.
- Sarwono, B. (2009). *Beternak kambing unggul*. Jakarta: Penebar Swadaya.
- Sodik, A., Sumarmono, J., & Santosa, S. A. (2021). Performa pertumbuhan kambing kacang berdasarkan jenis kelamin pada fase pertumbuhan. *Jurnal Produksi Ternak Tropis*, 9(3), 201–209.
- Steel, R. G. D., & Torrie, J. H. (1995). *Prinsip dan prosedur statistika: Suatu pendekatan biometrik* (Edisi ke-2). Jakarta: Gramedia Pustaka Utama.
- Sugiyono. (2022). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Bandung: Alfabeta.
- Sulistijo, E. D., Benu, I., Oematan, G., Rosnah, U. S., Hilakore, M. A., & Jelantik, I. G. N. *Journal Of Agriculture, Agribusiness, Welfare, Technology, Humanity, Environment, Social, And Economy*

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(2024). Enhancing nutrient intake, digestibility, rumen fermentation, and blood metabolites in Kacang goats using compost-enriched hydroponic maize fodder. *Tropical Animal Science Journal*, 47(4), 475–482.

Widodo, W. (2021). *Metodologi penelitian peternakan*. Malang: Universitas Muhammadiyah Malang Press.