

BODY WEIGHT AND CARCASS PERCENTAGE OF MALE AND FEMALE LOCAL PIGEON (*Columbia Livia*) IN KENDARI CITY**Harapin H¹, A. Napirah², and S. Wanci³**

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harapinhafid@yahoo.co.id**ABSTRACT**

Currently, a common poultry that bred by the society are chicken and duck. Nevertheless, some poultry besides chicken and duck is potentially expanded as meat producer. Pigeon is one of the poultry which can be expanded as meat producer. This study was aimed to evaluate the male and female pigeon body weight and carcass percentage. Ten male pigeons and ten female pigeons aged from 4 – 6 month were used in this study. Measured parameters were body weight and percentage of breast, thigh, back, and wings. The data obtained were analyzed using t-student test. The result showed that male and female pigeon have the same body weight and carcass parts percentage which consist of breast, thigh, back and wings. There was no any significant difference between male and female body weight and carcass parts percentage. It can be conclude that sex did not affect the productivity of pigeon. Male and female pigeon have the same opportunity to be extended as a meat producer in poultry.

Keywords: *Body Weight, Carcass Parts Percentage, Pigeon*

INTRODUCTION

An increasing in human population was followed by increasing in needs of animal protein source. Livestock sector is one of the sectors that play an important role in fulfillment of animal protein needs. Meat eggs and dairy products are the major product of livestock. The poultry sector hold an important role in the production of meat and eggs. Currently, a common poultry that bred by the society are chicken and duck. Nevertheless, some poultry besides chicken and duck is potentially expanded as meat producer. Pigeon is one of the poultry which can be expanded as meat producer.

Pigeon has several advantages, such as more resistant to disease and requires lower maintenance cost (Omojola et al., 2012). Pigeon also has delicious and nutritious meat (Apatu et al., 2015). Pigeon meat contains high protein and low of cholesterol (Pomianowski et al., 2009). Nevertheless, information on productivity of pigeon is still fairly limited, especially

about its ability to produce edible meat. Therefore, this study was aimed to evaluate the male and female pigeon ability to produce edible meat in Kendari City.

MATERIAL AND METHODS**Experimental Animal**

Ten male and ten female pigeons which have reached sex maturity (aged 4 – 6 months), were obtained from traditional pigeon breeder in Kendari City. Slaughtering and carcass evaluation were carried out in Animal Production Laboratory of Animal Science Faculty, Universitas Halu Oleo, Kendari, South East Sulawesi, Indonesia.

Slaughtering, Evisceration, and Carcass Cutting

Pigeons were rested during 12 hours before slaughtering, then pigeons were weighed their body weight and recorded. After that, the pigeons were slaughtered, then hung to bleed. Scalding was done in hot water (65 – 80⁰C) after bleeding, and

then the pigeons were defeathered. The offal, head, neck and feet are carefully removed to yield whole carcass. The whole carcass was weighed and recorded. Whole carcass was cutted into breast, thigh, back and wing. Each carcass part then weighed and recorded.

Measured Parameters

The measured parameters in this study were male and female pigeons body weight and percentage of their carcass parts. These carcass parts were consist of breast, thigh, back, and wing.

$$\text{Percentage of breast (\%)} = \frac{\text{breast weight (g)}}{\text{whole carcass weight (g)}} \times 100\%$$

$$\text{Percentage of thigh (\%)} = \frac{\text{thigh weight (g)}}{\text{whole carcass weight (g)}} \times 100\%$$

$$\text{Percentage of back (\%)} = \frac{\text{back weight (g)}}{\text{whole carcass weight (g)}} \times 100\%$$

$$\text{Percentage of wing (\%)} = \frac{\text{wing weight (g)}}{\text{whole carcass weight (g)}} \times 100\%$$

Statistical Analysis

The data obtained in this study were tabulated and then analyzed using t-student test. The compared data were regarded as different at $P \leq 0,05$.

RESULT AND DISCUSSION

The average of body weight of male and female local pigeon is presented in Table 1. The data showed that there was no any evident difference between male and female local pigeon.

Table 1. The body weight average of male and female local pigeon

No	Parameter	Sex	Average	t value	Significance
1	Body weight	Male	261,70±29,2	1,01	P>0,05
		Female	241,30±29,2		

Table 2. The percentage of carcass parts of male and female pigeon

No	Parameter	Sex	Average	t value	Significance
1	Breast (%)	Male	44,08±1,88	0,85	P>0,05

			Female 42,99±1,40		
2	Thigh (%)	Male	15,73±0,81	-1,21	P>0,05
		Female	16,52±0,89		
3	Back (%)	Male	21,44±1,41	0,14	P>0,05
		Female	21,30±1,13		
4	Wings (%)	Male	18,67±0,95	-0,24	P>0,05
		Female	18,83±0,64		

The percentage of male and female pigeon carcass parts can be seen in Table 2. The percentage of pigeon breast and wings in this study ranged from 42,99 – 44,08% and 18,67 – 18,83%, respectively. This result did not vary much with the result obtained by Omojola et al. (2012) who reported that the percentage of breast and wings of pigeon were 38,3 – 41,99% and 19,49 – 20,62%, respectively. The percentage of pigeon back obtained in this study was 21,30 – 21,44% and the thigh was 15,73 – 16,52%.

Table 2 shows that in both male and female pigeons, the biggest carcass part was their breast and followed by the back, wings, and thigh. Omojola et al. (2012) also reported similar result that the pigeon breast has the biggest percentage compared to other carcass parts. When compared with duck, pigeon has larger breast percentage. Omojola (2007) reported that the breast percentage of muscovy duck range 18,78 – 20,03% and Apata et al. (2014) reported that the percentage of duck breast was 26,39 – 28,53%. In the other hand, the percentage of pigeon breast was almost equal to the percentage of broiler breast. Several previous studies indicate that broiler breast percentage was ranged from 30,01 – 30,70% (Novele et al., 2008) to 41,7 – 42,8% (Young et al., 2001). Thus it can be concluded that the breast percentage of pigeon is almost same with broiler breast percentage but higher than duck.

The results showed that sex did not give any evident effect on body weight. The body weight of male and female pigeon obtained in this study was 261,70 and 241, 30 g, respectively. This result

almost similar with the result obtained by Omojola et al. (2012) who reported that the body weight of pigeon was 256,13 – 265,13 g. Sex also did not affect the breast, thigh, back, and wings percentage of pigeon. Omojola et al. (2012) also reported a similar case that there was no influence of sex on the percentage of chest, wings, and back of pigeon. This means that in this study, either male or female pigeon statistically has body weight and percentage of breast, thigh, back, and wings in the same levels.

Based on the carcass parts percentage, pigeon has a good productivity. Pigeon productivity does not vary much if compared with broiler and duck. Male and female pigeon have same ability to grow. It is seen from the body weight and carcass parts percentage which did not differ among them. Therefore, either male or female pigeons has the same opportunity to be extended into meat producer of poultry.

CONCLUSION

Either male or female pigeon has the same body weight and carcass parts percentage. Sex does not affect the pigeon ability to produce edible meat. The productivity of pigeon is similar to broiler and duck. Therefore, both male and female pigeon could be extended as the meat producer in poultry.

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