

# CARCASS CHARACTERISTICS OF WEANED CROSSBRED NEW ZEALAND WHITE MALE RABBIT RAISED AT DIFFERENT ENVIRONMENT TEMPERATURE

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# INTRODUCTION

- ▶ Rabbit is one of the livestock suppliers of meat
- ▶ The environmental factors that affect animal life is temperature
- ▶ Temperature will have a different effect on each individual animal
- ▶ The purpose of this study was to determine the carcass characteristics of the crossbred male New Zealand White rabbits raised in different maintenance environments.



# METHOD

- ▶ Research Material used were 18 male New Zealand White cross bred rabbits with age of 6-8 weeks
- ▶ The feed given was forage and concentrate. Feed concentrate in the form of BR-1 produced by PT. Wonokoyo. Forage feed in the form of grass.
- ▶ Drinking water is given every day *ad libitum*.
- ▶ The method used was an experimental research using a completely randomized design (CRD) with 3 treatments and 6 replications

# TREATMENT

- ▶ Three treatments were obtained:
- ▶  $T_1$  : Raised temperature 23-25 °C
- ▶  $T_2$  : Raised temperature 27-29 °C
- ▶  $T_3$  : Raised temperature 31-33 °C

# RESEARCH VARIABLES

## ▶ ***Cut weight:***

- ▶ The weight of a rabbit cut is weighed just before the rabbit is cut after 7 hours has been fasted, stated gram/ head.

## ▶ ***Carcass weight:***

- ▶ Carcass weight was weighed after the rabbit was cut, skinned and then reduced blood, head, lower legs, liver, tail, digestive tract and contents of the chest cavity except the kidneys, expressed gram/ head.

## ▶ ***Carcass percentage.***

- ▶ "Carcass percentage =" "Carcass weight" / "Cut weight" "x 100%"

▶ ***Non carcass weight:***

- ▶ Non carcass weight is obtained by weighing all the non-internal carcass parts (digestive organs, reproductive organs and cardiovascular organs), and non external carcasses (head, skin, fourth leg lower tarsus and carpus) from rabbits, expressed as gram / head.

▶ ***Non carcass percentage.***

- ▶ "Non carcass percentage =" "Non carcass weight" / "Carcass weight" "x 100%"

## ▶ ***Commercial cut weight***

- ▶ Commercial cut weight: rabbit carcass cut weight consisting of foreleg, rack, loin and hindleg, expressed as gram/ head.

## ▶ ***Commercial cut percentage***

- ▶ "Commercial discount percentage =" "Commercial pieces weight" / "Carcass weight" "x 100%"

# RESULT AND DISCUSSION



## Cut Weight (g/head)

Treatment	Repetition				Everage
	1	2	3	4	
P1	2254	2299	2231	2297	2270,2±33,40 <sup>c</sup>
T2	2041	2027	2001	1978	2011,7±27,94 <sup>b</sup>
T3	1916	1942	1933	1943	1933,5±12,50 <sup>a</sup>



- ▶ Rabbit carcasses of research results.

# Carcass Weight (g/head)

Treatment	Repetition				Everage
	1	2	3	4	
T <sub>1</sub>	1171	1254	1139	1234	1199,5±53,64 <sup>c</sup>
T <sub>2</sub>	1050	1095	1074	1027	1061,5±29,44 <sup>b</sup>
T <sub>3</sub>	941	959	971	969	960,0±15,71 <sup>a</sup>

## Percentage of Carcasses (%).

Treatment	Repetition				Everage
	1	2	3	4	
T <sub>1</sub>	51,95	54,55	51,05	53,72	52,8±1,60 <sup>b</sup>
T <sub>2</sub>	51,45	54,02	53,67	51,92	52,8±1,27 <sup>b</sup>
T <sub>3</sub>	49,11	49,38	50,23	49,87	49,6±0,50 <sup>a</sup>



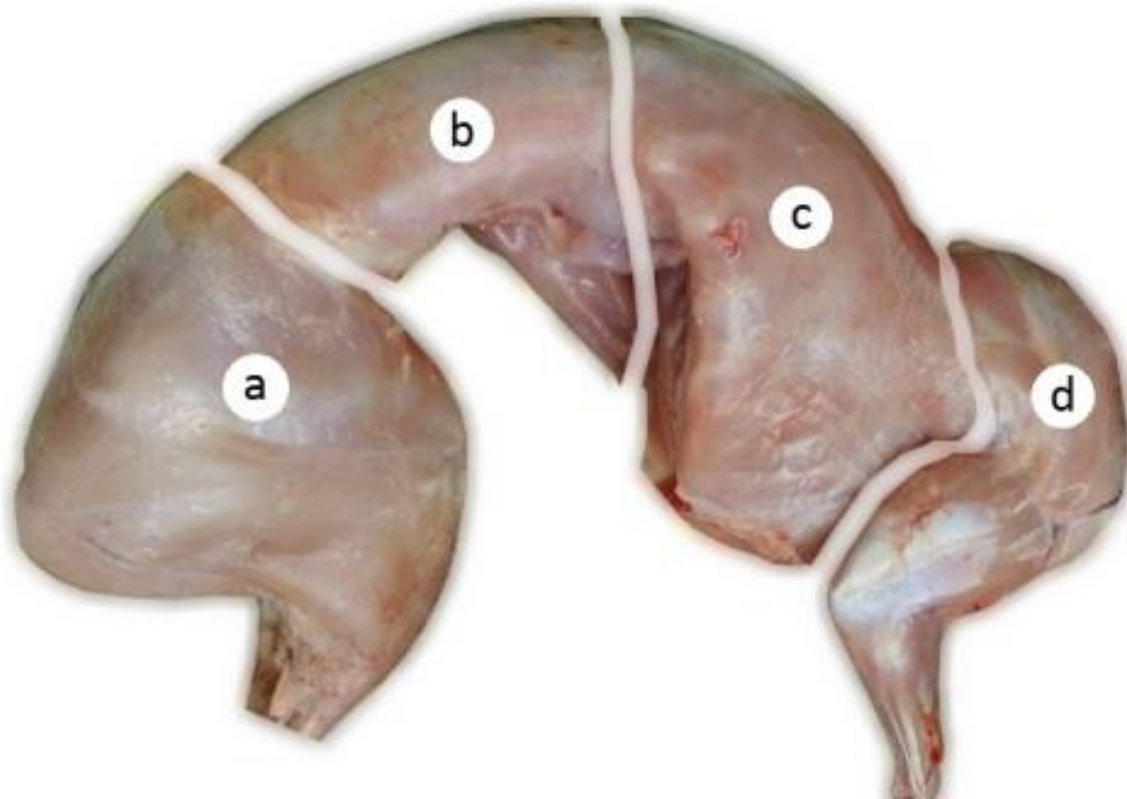
## Non Carcass Weight (g/head).

Characteristic	Treatments		
	T <sub>1</sub>	T <sub>2</sub>	T <sub>3</sub>
Internal	460,5±24,23	409,0±25,01	411,0±22,17
External	489,7±34,97	445,5±16,30	463,0±21,65

# Non Carcass Percentage (%)

Characteristics	Treatments		
	T <sub>1</sub>	T <sub>2</sub>	T <sub>3</sub>
Internal	20,3±0,96	20,3±1,27	21,3±1,16
Eksternal	21,6±1,80	22,1±0,71	23,9±1,22

# Commercial Pieces of Rabbit Research Results



- ▶ a: hindleg
- ▶ b: loin
- ▶ c: rack
- ▶ d: foreleg



# Commercial Cut Weight (g/head)

Characteristics	Treatments		
	T <sub>1</sub>	T <sub>2</sub>	T <sub>3</sub>
Foreleg	195,2±10,31 <sup>b</sup>	175,2±8,77 <sup>ab</sup>	161,2±9,00 <sup>a</sup>
Hindleg	481,0±14,17 <sup>c</sup>	422,0±2,94 <sup>b</sup>	391,2±12,37 <sup>a</sup>
Rack	274,5±30,62	246,0±2,16	227,2±30,61
Loin	248,7±12,84 <sup>b</sup>	218,2±30,40 <sup>ab</sup>	180,2±18,82 <sup>a</sup>

## Commercial Cut Percentage (%).

Characteristics	Treatments		
	T <sub>1</sub>	T <sub>2</sub>	T <sub>3</sub>
Foreleg	16,3±0,83	16,5±0,82	16,8±0,95
Hindleg	40,1±0,96	39,8±1,28	40,7±0,94
Rack	22,8±1,72	23,2±0,68	23,7±3,10
Loin	20,7±0,63	20,5±2,32	18,8±2,04

# CONCLUSION

- ▶ The carcass characteristics of the Crossbred New Zealand White rabbits in **cutting weight**, **carcass weight** and **carcass percentage** decreased with the high maintenance temperature.
- ▶ Weight and percentage of **non-internal carcasses** (digestive organs, reproductive organs and cardiovascular organs) and **externally** (head, feathers, front legs and rear part of the metatarsus) are generally the same for each environmental temperature treatment.

## *Continued*

- ▶ Commercial cuts in the weight of the forelegs, hind legs and waist decreased as the maintenance temperature increased, but the rack weight and the percentage of all commercial pieces were generally the same.
- ▶ The best temperature to produce high carcass is the temperature of 23-25 °C which approaches the comfort zone of 21 °C.

*Thank you*