

CARCASS CHARACTERISTICS OF AMERICAN CHINCHILLA CROSS-BRED RABBITS

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Rabbit raising has gained popularity in advanced countries and there is a greater awareness of rabbits as alternate meat source in developing countries as well. This is because of the general acceptability of rabbit meat among consumers of different socio-economic group, rapid growth, economic management, prolificity in production and early sexual maturity (Rao *et al*, 1977). Rabbits have high adaptability to intensified production and varied climatic conditions (Schlolaut, 1980). Perusal of the available literature reveal that not much study has been made on carcass characteristics of rabbits under the prevailing conditions. The present study was undertaken to collect data on carcass characteristics of American Chinchilla cross-bred rabbits.

Materials and Methods

Forty American Chinchilla cross-bred rabbits, consisting of 21 males and 19 females belonging to the Small Animal Breeding Station of the Kerala Agricultural University, were used for the study. They were weaned at four weeks, raised under cage system and fed on a balanced ration. They were allowed free access to drinking water and feed was withheld for 16 hours before slaughter. The rabbits were slaughtered at 12 weeks of age. The rabbits were stunned by a sharp-blow on the back of the neck and bled by severing the carotid artery and the jugular vein and then flayed and eviscerated. The weight of hot carcass, liver, heart, kidneys, spleen, lungs and trachea, testes, female genitalia, G. I. tract, blood, head and pelt were recorded. The data were statistically analysed.

Results and Discussion

The mean live weight of male and female rabbits ranged from 1420 to 1780 g and 1370 to 1855g; while the mean values were 1636.19 ± 24.53 g and 1667.89 ± 28.93 g respectively. There was no significant ($P > 0.05$) difference between male and female in their body weight at 12 weeks of age. The mean live weight of both sexes together was 1651 ± 18.76 g and it ranged from 1370 to 1855 g (Table-1).

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Table I

Carcass characteristics of American chinchilla cross-bred rabbits

Sl. No.	Character	Mean weight & SE (g)	Percentage of live-weight
1	Live weight	1651.25 ± 18.76	—
2	Hot carcass	797.45 ± 11.96	48.27 ± 0.41
3	Liver	57.15 ± 1.83	3.47 ± 0.107
4	Heart	6.85 ± 0.85	0.40 ± 0.022
5	Kidneys	11.25 ± 0.55	0.70 ± 0.023
6	Spleen (in mg)	1125.75 ± 46.69	0.069 ± 0.012
7	Lung and trachea	10.2 ± 1.67	0.62 ± 0.018
8	Testes (n-21)	5.48 ± 0.16	0.36 ± 0.028
9	Female genitalia (n-19)	14.68 ± 0.32	0.88 ± 0.34
10	G. I. tract	398.10 ± 9.33	24.14 ± 0.531
11	Blood	30.14 ± 4.76	1.65 ± 0.01
12	Head	153.75 ± 2.7	9.32 ± 0.135
13	Pelt	138.27 ± 5.77	8.54 ± 0.205

The mean hot carcass weights of male and female rabbits were 798.43 ± 16.23 g and 796.37 ± 18.15 g respectively. The mean hot carcass weight of both sexes together was 797.45 ± 11.96 g and it ranged from 630 to 972 g. The mean dressing percentage of male rabbits was 48.76 ± 0.51 and it ranged from 44.37 to 52.55 g; while in those of females it was 47.74 ± 0.65 g with a range of 43.03 to 52.4 g. There was no significant ($P > 0.05$) difference in dressing percentage between the sexes. The mean dressing percentage of both sexes together was 48.27 ± 0.41 and it ranged from 43.03 to 52.55 and this is comparable to the values reported by Rao *et al.* (1978) and Portsmouth (1979). The mean weights and their percentage in relation to live weight are also furnished for hot carcass, liver, heart, kidneys, spleen, lungs and trachea, testes, female genitalia, G. I. tract, blood, head and pelt.

The mean percentage weight of liver, heart and kidney were 3.47, 0.41 and 0.7 respectively. The giblet (liver, heart and kidneys) constitute 4.58%, which is less than that reported by Lukefahr *et al.* (1982) in flemish giant, Newzealand white and their terminal crosses. The mean percentage weights of head and pelt were 9.32 and 8.54 respectively, which were at variance with the report of Rao *et al.* (1978). The mean percentage weight of spleen, lungs and trachea, testes, female genitalia, G. I. tract, and blood were 0.069 ± 0.012 , 0.62 ± 0.018 , 0.36 ± 0.028 , 0.88 ± 0.034 , 24.14 ± 0.53 and 1.65 ± 0.01 respectively.

Summary

Carcass characteristics of 40 American chinchilla cross-bred rabbits (21 males and 19 females) of University Small Animal Breeding Station were studied. The mean dressing percentage was 48.27 ± 0.41 with a range of 43.03 to 52.55. The dressing percentage of males and females showed no significant ($P > 0.05$) difference when compared. The percentage yield of liver, heart, kidneys, spleen, lungs and trachea, genitalia, G. I. tract, blood, head and pelt in relation to live weight were also studied.

സംഗ്രഹം

കേരള കാർഷിക സർവകലാശാല പരീക്ഷണ മൃഗ വളർത്തു കേന്ദ്രത്തിലെ നാല്പതു അമേരിക്കൻ ചിൻചില സങ്കര മൃഗങ്ങളിൽ മാംസോൽപാദനത്തോടു അനുബന്ധിച്ച വിവിധ ശരീര ഭാഗങ്ങളെക്കുറിച്ചു നടത്തിയ പഠനത്തിൽ അവയിൽനിന്ന് 48.27 ശതമാനം എല്ലോടുകൂടിയ മാംസവും, 3.47 ശതമാനം കരളും 0.41 ശതമാനം ഹൃദയവും 0.7 ശതമാനം കിഡ്നിയും കിട്ടുന്നതായി കണ്ടു. ആകെ ശരീര ഭാഗത്തിന്റെ 9.32 ശതമാനം തലയും, 8.54 ശതമാനം രോമത്തോടുകൂടിയ ഉപയോഗയോഗ്യമായ തുകയും ഉള്ളതായി കണ്ടു. ആൺ മൃഗങ്ങളിലും പെൺ മൃഗങ്ങളിലും തമ്മിൽ എല്ലോടുകൂടിയ മാംസത്തിന്റെ അളവിൽ പ്രകടമായ വ്യത്യാസമില്ലെന്നും തെളിഞ്ഞു.

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