

## Study on Growth Performance and Carcass Quality of Apparently Healthy Female Rabbits as Affected by Breed

**Sahar Suleman**

Department of Wildlife & Ecology, University of Veterinary and Animal Sciences, Lahore, Pakistan

Correspondence author:saharsuleman59@gmail.com

**Running Title:** Breed Effects on Growth and Carcass Traits in Female Rabbits

### ABSTRACT

Rabbits have been considered as the best alternative meat source especially for underdeveloped/developing countries. The study assesses growth performance and carcass quality attributes of female weanling rabbits of five different rabbit breeds (Dutch, New Zealand White Rabbit, American Black, Wild and Dwarf Brown) being reared in Pakistan under conventional housing system. Female weanling rabbits (n=50; 10 per breed), weaned at about 4 weeks of age were studied for growth performance and carcass quality attributes at 19th week of experimentation. The initial and slaughter weight, and daily weight gain per animal was significantly ( $P \leq 0.05$ ) different for all breeds with highest values noticed for wild rabbits and lowest for Dwarf Brown. The body length, trunk length, fur length, forelimb length and hind limb length was significantly ( $P \leq 0.05$ ) higher for wild rabbits, whereas, tail length and head length were significantly ( $P \leq 0.05$ ) higher in Dwarf Brown breed of rabbits. All the studied carcass attributes viz. live weight, chilled carcass weight, reference carcass weight, dressing out % and dressing fat % were significantly ( $P \leq 0.05$ ) higher for wild rabbits being  $2140 \pm 505.0\text{g}$ ,  $2190.0 \pm 451.0\text{g}$ ,  $69.0 \pm 3.1\%$ ,  $49.0 \pm 1.6\%$  and  $3.2 \pm 1.1\%$ , respectively. The wild breed of rabbits revealed significantly ( $P \leq 0.05$ ) higher values for meat to bone ratio ( $5.4 \pm 0.2$ ), hind limb % ( $39.0 \pm 1.7\%$ ) and bone % ( $13.0 \pm 0.8\%$ ) whereas forelimb % was significantly ( $P \leq 0.05$ ) higher for New Zealand White rabbits ( $13.0 \pm 0.8\%$ ) as compared to other study breeds. The study concludes that genotype is true determinant of growth and carcass attributes in rabbits. Heavier genotypes (wild indigenous and New Zealand White) are recommended for commercial purposes in Pakistan.

**Keywords:** Dutch, Wild and Dwarf Brown Rabbit, Carcass, genotype