

## Breed main performance indices for the slaughtering of young rabbits

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**Abstract.** Our study aimed at investigation of the main performance indices of young rabbits at slaughtering, depending on the breed, at 90 days of age. Three different and well-known rabbit breeds were used in this study: White Giant, New Zealand Red, and Giant Papillon. In terms of body weight at slaughtering and carcass weight, the best results were obtained in the case of Giant White rabbit, while the poorest were in the case of New Zealand Red. In terms of slaughter yield with head, the best results were recorded for Giant Papillon rabbit, while the poorest were obtained in the case of New Zealand Red. However, the situation was rather different for the slaughter yield without head. For this index, the Giant White rabbit showed better results than both other two rabbit breeds, Giant Papillon and New Zealand Red. Although a medium sized breed carcass should be of higher quality than those obtained from large breeds, in our case the New Zealand Red showed the poorest meat/bones proportion at 90 days when compared to Giant White rabbit and Giant Papillon rabbit. The last breed mentioned, Giant Papillon, showed the best results for carcass quality and meat/bones proportion.

**Key Words:** meat quality, slaughter yield, carcass quality, New Zealand Red, Giant White, Papillon.

**Introduction.** Although industrial rabbit meat production is optimized wide world using standard hybrids (Metzger et al 2006), in some countries rabbit farming in subsistence farms as pure breed allows two marketing options: 1) brood stock sales at best price and 2) when brood stock cannot be sold, they sell meat/carcasses at lower price. This is why in some countries, such as Romania, rabbit farming as pure breeds are not uncommon (Blaga & Burny 2014). This is on one side; on the other side, some breeds are emblematic for some countries and the breeders prefer to rear them due to the patriotic spirit (Petrescu-Mag et al 2014; Botha et al 2015; Ilyes et al 2016).

The present study aims at investigation of the main performance indices of young rabbits at slaughtering, depending on the breed. We studied three different and well-known rabbit breeds, namely: White Giant, New Zealand Red and Giant Papillon (Janett/solid black variety; see details about this variety in Petrescu-Mag et al 2016). Study animals are presented in Figure 1.

**Material and Method.** Optimal conditions in terms of space and feeding were created for rabbits according to the standard requirements of each breed. Animals were grown and fed under housekeeping conditions, with green fibrous mass and cereals (maize, wheat and barley) at their discretion. The rabbits were weaned at 30 days and were slaughtered at 90 days. The number of animals used in the study was: three breeding cycles (with at least 7 kits / birth x 3 births. If we exclude mortality, we can calculate at least 15 animals from each breed).

**Results and Discussion.** The results of the study are summarized in Table 1. In terms of body weight at slaughtering and carcass weight, the best results were obtained in the case of Giant White, while the poorest were in the case of New Zealand Red. In terms of slaughter yield with head, the best results were recorded for Giant Papillon (Janett) and the poorest were in the case of New Zealand Red. However, the situation was different

for the slaughter yield without head. For this index, the Giant White showed better results than both Giant Papillon (Janett) and New Zealand Red (Table 1).



Figure 1. The study animals: Giant White, New Zealand Red, and Giant Papillon (Janett) (photo by Miklos Botha).

Although, theoretically, a medium sized breed carcass should be of higher quality than those obtained from large breeds, the New Zealand Red indicated the poorest meat/bones proportion at 90 days, compared to Giant White and Giant Papillon (Janett). The last mentioned one showed the best results for carcass quality (Table 1).

Table 1

The main performance indices at the slaughtering of young rabbits in Giant white, New Zealand Red and Giant Papillon Janett pure breeds

Breed	Body weight at slaughtering (g)	Carcass weight, including head (g)	Slaughter yield with head (%)	Carcass weight, without head (g)	Slaughter yield without head (%)	Weight of the rabbit fur (g)		Head weight (g)		Meat /bones proportion	Carcass quality
						x±Sx	%	x±Sx	%		
Giant White	3750±7.98	2250.00 ± 2.73	60	2025.00 ±1.31	54	324 ± 2.11	8.64	314 ±3.42	8.37	1:6.0	C
New Zealand Red	2400±7.00	1392.00 ± 1.96	58	1272.00 ±1.83	53	235 ± 1.99	9.79	201 ±2.35	8.37	1:6.3	D
Giant Papillon (Janett)	2601±6.43	1586.60 ± 1.88	61	1430.50 ±2.01	55	225 ± 2.07	8.68	274 ±1.98	9.49	1:6.2	C
Mean value	2917±7.13	1742.86 ± 2.19	59	1575.83 ±1.71	54	261 ± 2.05	9.03	263 ±2.58	8.74	-	-

**Conclusions.** The present study aimed at investigation of the main performance indices of young rabbits at slaughtering, depending on the breed. Three different and well-known rabbit breeds were used in this study: White Giant, New Zealand Red and Giant Papillon. In terms of body weight at slaughtering and carcass weight, the best results were obtained in the case of Giant White, while the poorest were in the case of New Zealand Red. In terms of slaughter yield with head, the best results were recorded for Giant Papillon, while the poorest were obtained in the case of New Zealand Red. However, the situation was different for the slaughter yield without head. For this index, the Giant White showed better results than both Giant Papillon and New Zealand Red. Although, theoretically, a medium sized breed carcass should be of higher quality than those obtained from large breeds, the New Zealand Red indicated the poorest meat/bones proportion at 90 days, compared to Giant White and Giant Papillon. The last mentioned one showed the best results for carcass quality.

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