The Kabyle Rabbits

Males Kabyle

The Kabyle Rabbits (Algeria)

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SUMMARY – A description of the Algerian local population rabbit is carried out. Items that have been dealt with are: (i) a general description; (ii) climate and main features of its farming; and (iii) performance.

Key words: Kabyle, description, performance.

RESUME – *"Les lapins kabyles (Algérie)". Cet article présente une description des lapins de cette population locale algérienne. Les éléments suivants ont fait l'objet d'études : (i) une description générale ; (ii) le climat et les principales caractéristiques d'élevage ; et (iii) les performances.*

Mots-clés : *Kabyle, description, performances.*

1. Breed name

(i) *Breed name synonyms:* Kabyle.
(ii) *Strains within breed:* none.

2. General description

2.1. Population data

2.1.1. Population size (females) 500

2.1.2. Herd sizes (Table 1)

Table 1. Herd sizes

	Commercial farms	Small-scale farms
Mean		
Adult animals	18	30
Young animals	90	270
Range		
Adult animals	10-32	2-16
Young animals	60-190	18-64

2.1.3. Origin of breed

As far as we know, there is no study on Kabyle rabbits before 1990. In order to develop the rabbit production, the state imported some breeds in the seventies (New Zealand White, Californian and Burgundy Fawn). The result was an anarchic mixture and the loss of the original Kabyle rabbit. The present breed has contributions of New Zealand White, Californian, Burgundy Fawn and the old Kabyle population.

2.1.4. Situation with regard to danger of extinction

Endangered, since the total number of breeding rabbits is less than 500.

2.2. Use of the breed in a descending order of product importance

This breed is used mainly for meat production. It is a small to medium-sized breed.

2.3. Colour

As a consequence of the contribution of New Zealand White, Californian and Burgundy Fawn to the breed several colour phenotypes can be found. The most common ones are shown in photographs.

2.4. General-type

2.4.1. Body parts

Body of the local population rabbits has well-rounded hips with well-filed loin. The body is of medium length with good depth. The ribs are carried forward to combine with shoulders that balance with the rest of the body. The top body line rises in a gradual curve from the base of the ears to the centre of the hips and then falls in a smooth curve downward to the base of the tail. Back is markedly convex ventrally without being pot-bellied. The sides taper slightly from hindquarters towards shoulders. The skin is smooth.

2.4.2. Head: convex

2.4.3. Eyes: black

2.4.4. Ears: erect

2.4.5. Feet and legs: medium in length

2.4.6. Tail: straight

2.5. Basic temperament (for males or females): docile

2.6. Special characteristics of the breed

Somewhat resistant to diseases and moderately adapted to hot climate.

2.7. Nest quality: pooled

3. Pattern

3.1. Climate

3.1.1. Elevation and topography: valley, slope fields (not for desert conditions)

3.1.2. Favourable climate: temperature from 15°C up 35°C and relative humidity from 25% up to 75%

3.2. Main features of farming

3.2.1. Socio-management system: semi-intensive system in batteries (commercial farms) and extensive system in rural areas

3.2.2. Mating method: natural mating

3.2.3. Nutrition

(i) *Concentrates:* pelleted in commercial farms and mash in small-scale farms.
(ii) *Water:* freely available in most farms and restricted in some rural farms.
(iii) *Seasonality of nutrition:* kitchen wastes, grass and hay.

3.2.4. Housing

(i) *Cages:* wired cages and indoor rabbitries are used in commercial farms. In rural areas, cages are built with wood, metal sheet and wire net, and are sometimes placed in old rooms.
(ii) *Photoperiod:* variable period.

3.3. Common diseases and parasites

Coccidiosis, enteritis, ear mites and feet diseases.

4. Performance

4.1. Reproduction (Tables 2 and 3)

Table 2. Sexual maturity

Trait	Mean	Range
Age of buck at first service (months)	5	4.1-6.5
Age of doe at first mating (months)	5	4-7.5
Age of doe at first kindling (months)	6	5-8.5
Weight of buck at first service (g)	2500	2430-2700
Weight of doe at first mating (g)	2490	1970-3000

Table 3. Fertility and fecundity traits

Trait	Mean	Range
Conception rate (%)	85.6	67-87.5
Kindling interval (days)	45	42-72
Litter size at birth	7.5	2-13
Litter size at 21 days	5.6	2-11
Litter size at weaning	5.6	2-11
Litter weight at birth (g)	341	90-530
Litter weight at 21 days (g)	1641	550-2530
Litter weight at weaning (g)	2258	740-3520

4.2. Prenatal mortality per litter (Table 4)

Table 4. Prenatal mortality per litter

Traits	Mean	Range
Abortion (%)	4.5	2-6.5
Stillbirths (%)	12.77	0-75

4.3. Milk yield traits (Table 5)

Table 5. Milk yield traits

Traits	Mean	Range
21-days milk yields (g)	2130.4	790-3230
Peak of lactation (days)	20	18-22
Peak of lactation (g)	1999	1800-2300

4.4. Lifetime production per doe (Table 6)

Table 6. Lifetime production per doe

Trait	Mean	Range
Number of litters per year	3.37	1-5
Doe longevity (years)	5.5	4.2-7.2

4.5. Pre-weaning food utilisation per litter

Current work.

4.6. Post-weaning body weight, gain and food utilisation

Figures presented in Table 7 show that post-weaning body weights and daily gains in this local rabbit population are modest. Table 8 shows that feed intake is also modest but feed conversion ratio is not far from the standard.

Table 7. Post-weaning growth traits (g) and daily gains (g/day)

Trait	Mean	Range
Weight at weaning (28 days)	415	385-458
Weight at weaning (35 days)	670	660-691
Weight at 6 weeks	900	880-931
Weight at 8 weeks	1320	1300-1420
Weight at 10 weeks	1700	1650-1790
Weight at 12 weeks	1900	1600-2100
Daily gain 5-8 weeks	33	31-34.5
Daily gain 8-12 weeks	25	24-27.5
Daily gain 5-11 weeks	30	27-31

Table 8. Post-weaning food utilisation

Trait	Mean	Range
Daily feed intake (g)		
5-8 weeks	94	85-99
8-12 weeks	126	117-142
5-11 weeks	109	101-120
5-12 weeks	112	104-123
Feed conversion (g intake per g gain)		
5-8 weeks	2.9	2.5-3.5
8-12 weeks	5.1	4.8-5.6
5-11 weeks	3.6	3.1-4.2
5-12 weeks	4.1	3.7-4.5

4.7. Carcass traits and meat composition

Figures given in Table 9 indicate that this local population is characterised by: (i) early age at slaughter (12 weeks); (ii) low weight of carcass compared to standard breeds raised in Algeria (Berchiche and Lebas, 1990); and (iii) a good slaughter yield.

Table 9. Carcass traits and meat composition

Trait	Mean	Range
Slaughter age (weeks)	12	11-13
Slaughter live weight (g)	1865	1600-1955
Hot carcass weight (g)	1240	1100-1390
Skin (g)	190	147-217
Dressing percentage	66.5	63-71
Liver (g)	110	89-143
Perirenal fat (% carcass)	2.00	1.9-2.7

6. Genetic improvement

The study of the genetic parameters of the Kabyle rabbits is at the beginning.

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