

THE PERFORMANCES OF RABBIT PRODUCTION UNITS
FOLLOWED THROUGH AND ECONOMICAL MANAGEMENT

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Rational rabbit breeding requires skillfull breeders showing good aptitudes for technical management.

Short production cycles and high breeding stock levels require accurate recording : Work planning, individual breeders data sheet (in order to record their "carreer") and Technical and Economical Management.

This last tool is provided to evaluate regularly the gross stock performances allowing breeders to compare themselves to mean results.

Several technical and economical management programs have been used in France for somme years. They are all approved by Ministry of Agriculture and do abide by common rules such as :

* Standardization of data recording

* List of criterions and homogenous ways of calculation.

Homogenous recordings allows for comparaisons of results from various systems in the field, and makes the obtaining of national results easier.

ITAVI is in charge of collecting results from the various systems in order to achieve accurate analysis (described in this present paper) of this databases and go into specific questions such as housing and "all in all out" practises.

Until now, economical results are only concerning margin on feeding costs (Difference between sales of rabbits and feeding costs)

Description of sample

1986 results are bearing upon 543 middlesized units distributed all over the country. Most of the time, rabbit production is not the main activity of the breeder.

The selected production units must :

- * Present complete data recording throughout the period
- * Be on "cruising speed" all year long (Stock beeing housed for at least 6 monthes on the 1st January)

Comparaison of results from one year to the other must be very prudent because of the 30 % renewal of the stock.
(momentanous top of recording)

Analysis of results

A) 1986 Table 1 presents results for the 17 obligatory and 5 complementary criterions, total average and group results.

first column presents the average results, second one the 25 % last productive units and third one, the leading group (25 % best productive units)

This table shows :

- * Good results of rabbits produced/mother cage : a great stock of future female breeders is needed, because of the 120 % ratio of does/mother cages.

- * Female renewal rate is high (160 % / year).

* Mortality between birth and sales (at about 11 weeks of age) is about 28 %.

CRITERONS	MEAN	1st group	last group
Does/mother cage	118,7	102,9	137,5
Annual female renewal rate	157	154	154
Dropping/covering	69,6	65,9	72,9
Interval between 2 droppings	43,2	54,9	33,8
Dropping/mother cage	8,9	7,0	11,0
Live born/dropping	8,54	8,31	8,75
Live born/mothercage/year	76,0	57,7	96,7
Weaning/dropping	6,54	6,03	7,07
Pre weaning mortality	23,2	27,2	19,6
Weaned/mothercage/year	58,4	41,7	77,7
Mortality in fattening	13,4	18,2	10,7
Rabbits/mothercage/year	50,6	34,1	69,4
Liveweight of sold rabbits	2,32	2,32	2,32
Economical conversion rate	4,23	4,62	3,95
Average sale price/kg	13,69	13,81	13,55
Average feeding costs	1,68	1,71	1,66
Margin on feeding costs	773	436	1071
COMPLEMENTARY CRITERIONS			
Number of mother cages	148	125	151
% of female mortality	36	37	33
number of female/male	8,4	8,0	8,8
Rate of dead at birth	6,7	6,8	6,5
weight of rabbits/m ² /cage/year	119	84	156

Analysis of group result

High variability must be spotted out : Head group production is twice as high as one of last group (70 rabbits versus 34), due to differences :

- in utilization of available cages
- in mortality pre and post weaning, (8 %)
- in fertility (Born/covering) 7 % higher in best group

We may also note the light difference in prolificity (0,4 young/dropping)

Finally, though average size of less good units is a bit smaller, bigger units of more than 100 females may be found in this category.

1983 1986 Evolution

Results are presented in table 2.

Gross productivity has increased of 8 youngs/doecage during the last years due to :

- Better rate of does/mother cage
- Increase of fertility and prolificity

On the other hand, mortality remained at the same level.

Difference in productivity

Graph next page presents the evolution of differences between groups, since 1983.

1) Doe/mother cage ration is highly prevailing

We may spot out 2 populations of production units :

- * One showing highly intensive utilization of cages
- * One less intensive, probably because of lower structure expenses.

2) The second main factor is the interval between dropping and covering.

Conclusion

Analysis of so far collected results shows stagnation of technical results (related to mother cage) despite a light increase during 1986 (increase of droppings/female/year and small decrease of pre-weaning mortality).

On the other hand, we may note positive trend in production/mother cage due to better rate of doe/mother cage.

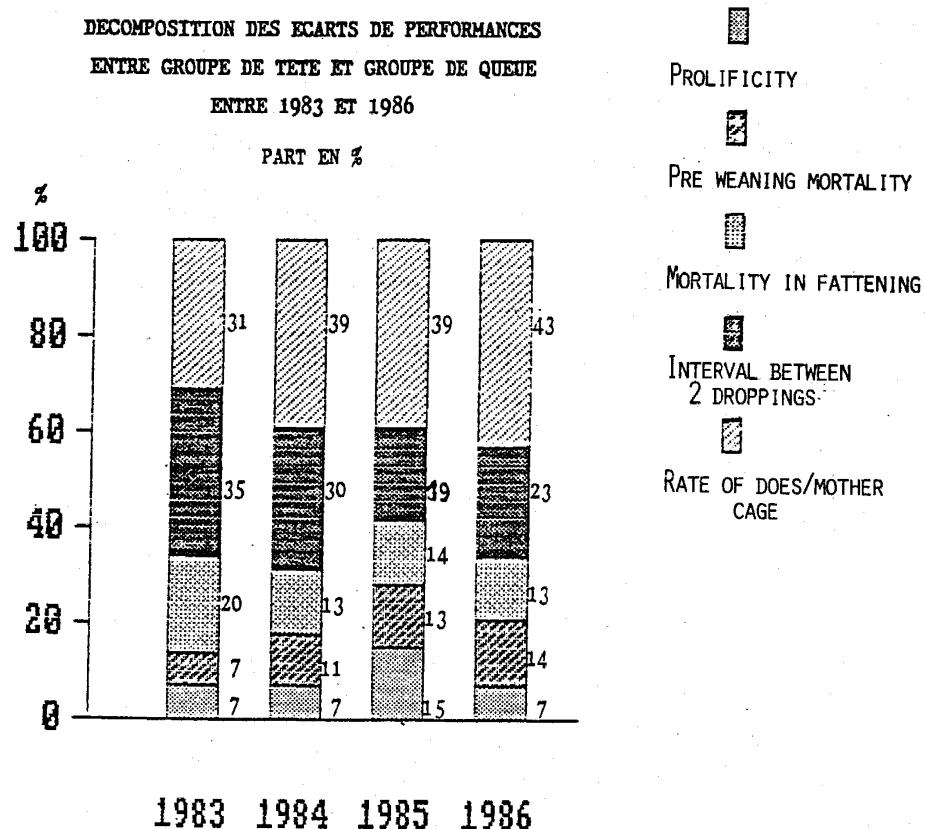
The most important fact to spot out is high variability of results between first and last group.

EVOLUTION OF DIFFERENCES BETWEEN

GROUPS, SINCE 1983

Table 2

CRITERIOUS	1983	1984	1985	1986
Number of breedings	404	384	488	543
Rate of does/mother cage	104	110	114	119
Number of mother cages	142	154	153	148
Female of renewal rate	141	156	157	157
Dropping/covering	68	69	69	70
Dropping/mother cage	7,7	8,4	8,5	8,9
Live born/dropping	8,3	8,3	8,6	8,5
Rate of dead at birth	7,4	6,7	7,0	6,7
Mortality birth-weaning	21,3	23,0	24,3	25,2
Mortality in fattening	14,9	13,6	12,4	13,4
Rabbits/mother cage/year	42,8	46,4	47,9	50,6
Economical conversio.rate	4,37	4,30	4,22	4,23
Average feeding costs	1,67	1,82	1,71	1,68
Average sale price/Kg	12,57	13,17	13,02	13,69
Margin on feeding costs	526	583	650	773
Weight of rabbits/m ² /cage near	108	117	115	119



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summary

In France, the number of production units followed through technical and economical management has increased during last years.

The data which are collected near the production units established since at least one year can be considered as national references as well on a technical or economical basis. The different results concerning 1986 which bear upon 550 units enable the following conclusions :

- the average annual production reaches 50 rabbits per cage, or 42 per present female.
- this production is obtained thanks to 7,5 litters per year, and a prolificacy of 8,5 rabbits born per litter. The mortality between birth and slaughter attains 33 %. The annual renewal ratio for the females reaches 160 %.
- around the averages, the results are very scattered, since the less performant quartile produces only 34 young rabbits per cage per year, compared with the most performant quartile which production is 69.

Since 1983, (the first year for which data began to be collected), following observations have been made :

- an important increase of the annual renewal ratio and an optimum management of cage potential (i.e occupancy ratio of female cages).
- a low, but constant increase of the fertility, the prolificacy, the productivity per female present in the production unit, a constant mortality rate of reared rabbits between birth and slaughter.

PERFORMANCES DES ELEVAGES DE LAPINS

SUIVIS EN GESTION TECHNICO-ECONOMIQUE

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résumé

En France, le nombre d'élevages de lapins suivis en Gestion Technico-Economique n'a cessé de croître depuis quelques années.

Les données ainsi recueillies servent entre autres à établir des références nationales, techniques et économiques, en prenant en compte seulement des élevages en "croisière" et ayant une année complète d'enregistrements.

Les résultats de l'année 1986 portant sur 550 élevages, permettent les constatations suivantes : la productivité moyenne annuelle est de 50 lapins par cage mère ou 42 femelles présentes.

Cette production est obtenue avec 7,5 mises bas dans l'année, une prolifcité de 8,5 lapins nés et une mortalité de la naissance à l'abattage de 33 %. Le taux de renouvellement annuel de femelles est de 160 %. Autour de ces valeurs moyennes, les résultats sont très dispersés, puisque le quart le moins performant produit 34 lapins par cage mère, par an, alors que le quart le plus performant en produit 69.

Depuis 1983, (1ère année de références) on a observé les évolutions suivantes : une forte augmentation des taux de renouvellement et une optimisation de la gestion du potentiel de cage (taux d'occupation des cages mères).

Une augmentation lente mais régulière, de la fertilité, de la prolifcité et de productivité à la femelle présente.

Une constance dans le taux de mortalité des laperaux de la naissance à la vente.

