



Research on rabbit feeding and nutrition development during the last 20 years and in the future

F. Lebas

► To cite this version:

F. Lebas. Research on rabbit feeding and nutrition development during the last 20 years and in the future. *Annales de zootechnie*, 1980, 29 (4), pp.431-431. hal-00888004

HAL Id: hal-00888004

<https://hal.science/hal-00888004>

Submitted on 11 May 2020

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

I. — GENERAL REPORT

Research on rabbit feeding and nutrition development during the last 20 years and in the future

F. LEBAS

*Laboratoire de Recherches sur l'Élevage du Lapin,
I.N.R.A., Toulouse,
B.P. 12 — 31320 Castanet Tolosan (France)*

A review of 250 original articles on rabbit feeding published between 1959 and 1978, shows that the yearly number of papers increases irregularly (fig. 1). Nutrition of breeding rabbits is poorly represented with only 16 p. 100 of the total. The principal subject of those publications is protein nutrition, mainly since 1970. On the contrary the number of publications on minerals is regressing (fig. 3).

Many studies are made with a very small (5 to 10) number of rabbits. Thus, performances differing as much as 15 to 20 p. 100 from each others are considered to be equivalent. The practical consequence is the lack of an accurate estimation of the requirements. Variations of the feed quality are also responsible for a part of the variability between observed performances obtained with the « same » diet.

Practical recommendations for feed composition may in some cases be different from the true minimum requirements. This is caused by the absence of knowledge about interactions between nutrients. Practical recommendations are proposed (Tabl. 5).

During the next 10 years it would be of great interest for scientists and rabbit producers that the maximum difference between performances considered as equivalent be progressively reduced from the present 13 p. 100 to 5 and 2-3 p. 100. This can easily be obtained by increasing the number of animals allocated to the experiments. Efficiency of research on rabbit feeding may also be improved if the period of observation is long enough as compared to the practical fattening or reproduction length. It would perhaps be of some interest to consider 2 or 3 periods between weaning and slaughter.

Because of the high capacity of rabbits to transform dietary nitrogen into meat protein, work on nitrogen nutrition should be developed. Digestibility of crude fibre by rabbits is very low as compared with other herbivorous animals, but they may eat very large amounts of crude fibre. Thus, rabbits are able to use very efficiently plants and other materials with a high level of both protein and fibre. This will be a good direction for research on rabbit nutrition during the next 10 years.

II. — SHORT REPORTS

Artificial feeding of young rabbits between birth and weaning

C. BACQUES, J. P. PERRET et A. DORIER

*Laboratoire de Nutrition
Institut Universitaire de Technologie
43, bd du 11 novembre 1918
69621 Villeurbanne (France)*

The diet used for young rabbits before weaning consisted of an autoclaved homogenized mixture of cow's milk calcium caseinate (124 g/l) and medium or long chain triglycerides (114 g/l) supplemented with vitamins A — B — D, a hormone, trace elements and lipotropic factors.

The phosphorus/calcium and carbohydrate/protein ratios as well as the dry matter level used led to a digestibility coefficient of about 85 p. 100.

The survival rate of the rabbits after weaning was 80 p. 100.