

**EFFECT OF DRYING CONDITIONS  
OF DEHYDRATED LUCERNE ON GROWTH PERFORMANCES  
OF RABBITS RECEIVING DIETS CONTAINING LUCERNE**

F. LEBAS, J. DOLZ\* et Annie ESPAGNET\*  
avec la collaboration technique de Marie-Claude COUSIN et G. SARDI

*Station de Recherches sur l'Élevage des Porcs,  
Centre national de Recherches zootechniques, I. N. R. A.,  
78350 Jouy en Josas*

\* *Station expérimentale de l'I. T. C. F.,  
91920 Boigneville*

---

In 1972, 18 different adjustments of the lucerne dehydrating machine have been attempted. They correspond to the factorial combination of 3 factors : the temperature of the air at the inlet (1 050°-850°-650°) and at the outlet (140°-125°-110°) as well as the rotation rate of the roller (2.8 and 4.8 tr/mm). Seven of the lots of lucerne obtained in this way were used to prepare a diet containing 65 p. 100 lucerne, 32 p. 100 maize and 3 p. 100 minerals and vitamins. Growth performances of rabbits fed these 7 diets were all the better as the outlet temperature of the lucerne dehydrater was low. Neither the inlet temperature nor the rotation rate of the roller seemed to have any striking effect. Comparison of the results obtained with the animals and the chemical analyses of the different lots of lucerne showed that a simultaneous alteration of proteins and carbohydrates was observed in the lots being the least used by the rabbits.

---

**EFFECT OF A LYSINE ADDITION  
TO SESAME OIL-MEAL DIETS IN THE RABBIT**

M. COLIN  
avec la collaboration technique de G. SARDI

*Station de Recherches sur l'Élevage des Porcs,  
Centre national de Recherches zootechniques, I. N. R. A.,  
78350 Jouy en Josas*

---

In the rabbit, supplementation of a diet containing 15 p. 100 sesame proteins by increasing doses of L-lysine (0-0.225-0.450-0.675-0.900 p. 100) brought about a high improvement of the weight gain and, at a lower scale, of the conversion ratio. The best performances were obtained

when adding 0.45 p. 100 lysine, which would indicate a lysine requirement of 0.78 p. 100 of the diet. In a second experiment where 0.0.34 and 0.68 p. 100 lysine were added to a diet containing 17 p. 100 sesame proteins, it was noted that the addition of this amino acid improved the nitrogen balance and nitrogen retention coefficient whereas the digestibility of the diet was not changed.

---

**EFFECT OF DL-METHIONINE ADDITION  
TO A SOYBEAN OIL-MEAL DIET  
ON GROWTH AND NITROGEN RETENTION IN THE RABBIT**

M. COLIN, G. ARKHURST  
avec la collaboration technique de G. SARDI

*Station de Recherches sur l'Élevage des Porcs,  
Centre national de Recherches zootechniques, I. N. R. A.,  
73350 Jouy en Josas*

---

It has been demonstrated in the rabbit that DL-Methionine supplementation of soybean oil-meal diets has a favourable effect on growth performances, feed efficiency, nitrogen balance and nitrogen retention coefficient. On the other hand, the digestibility of the diet does not seem to be affected. Using two protein levels (10 and 13 p. 100), the best results were obtained with a DL-methionine supplementation of 0.1 p. 100 of the diet. But an addition of 0.3 p. 100 DL-methionine has slight depressive effects on the weight gain. However, on account of the low protein level in the diets studied, it seems to be difficult, on the basis of the present experiment, to make an approach of the requirement for sulphur amino acids in the rabbit.

---

**II. — Pathology**

**ROLE OF *ESCHERICHIA COLI*  
IN THE AETHIOLOGY OF DIARRHOEA IN THE RABBIT**

L. RENAULT, J. VAISSAIRE, Cl. MAIRE, E. LE BOURHIS  
et J. P. LABADIE

*Laboratoires vétérinaires Sanders,  
17, Quai de l'Industrie,  
91260 Juvisy sur Orge*

---

An experiment carried out on 408 strains of *E. coli* isolated from the intestinal contents of 75 live rabbits, suffering from serious digestive troubles unrelated with coccidiosis showed, through systematic analyses of the hemolytic and pathogenic power on the mouse and enteropa-