



Research on the hydromineral metabolism in rabbits suffering from diarrhoea

Dominique Licois, Pierre Coudert

► To cite this version:

Dominique Licois, Pierre Coudert. Research on the hydromineral metabolism in rabbits suffering from diarrhoea. *Annales de zootechnie*, 1979, 28 (1), pp.140-140. <hal-00887863>

HAL Id: hal-00887863

<https://hal.science/hal-00887863v1>

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.



HAL Authorization

Research on the hydromineral metabolism in rabbits suffering from diarrhoea

D. LICOIS et P. COUDERT

*Station de pathologie aviaire,
Centre de Recherches de Tours, I.N.R.A., Nouzilly, 37380 Monnaie (France)*

« Diarrhoea » in rabbits, induced by experimental infestation with various coccidiae does absolutely not resemble the « classical » diarrhoea encountered in young mammals such as calves and infants.

Hydrous and mineral losses through the faeces were lower than in healthy animals. As the hematocrite and proteinemia decreased and as the diuresis was almost normal, this phenomenon can be considered as a haemodilution. The concentration of all plasma electrolytes studied decreased and the blood pH remained normal. In the intestine, the absence of a « true » diarrhoea can be explained by a very good re-absorption of water in the distal colon. The sodium seemed to be « badly absorbed » in the small intestine. As regards the potassium, and as compared to the controls, changes occurred in the caecum. Let us mention that despite the low feed intake, the apparent digestibility of minerals was highly reduced. With respect to the water metabolism, no dehydration was observed in the extracellular region; only the skin was largely dehydrated.

Rabbit coccidiae and their pathogenicity

P. COUDERT

*Station de pathologie aviaire,
Centre de Recherches de Tours, I.N.R.A., Nouzilly, 37380 Monnaie (France)*

Rabbit coccidiae were isolated as pure strains in SPF rabbits. The pathogenicity of six of these coccidiae was estimated and compared with respect to growth and mortality in the experimentally infested animals. According to the results obtained, the coccidiae can be ranked into 3 categories :

- 1) Very pathogenic coccidiae: *Eimeria intestinalis* and *E. pellerdyi*, mortality occurs with infestations of 5 000 oocysts, 50 000 oocysts cause 100 p. 100 mortality; diarrhoea is severe and the delay of growth very large.
 - 2) A pathogenic coccidium : *E. magna*, leading to very few mortality cases even with severe infestations (500 000 oocysts), but important diarrhoea and growth delay.
 - 3) Little or non pathogenic coccidiae : *E. perforans*, *E. exigua* and *E. neoleporis*, causing neither death nor diarrhoea and an almost neglectable delay in growth.
-