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QUALITATIVE STUDY OF RABBIT COCCIDIA IN REPUBLIC OF BENIN

ETUDE QUALITATIVE DES COCCIDIES DU LAPIN EN REPUBLIQUE DU BENIN

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SUMMARY - A qualitative investigations about rabbit coccidia has been led in twenty breeding sites of Atlantic Department (South-BENIN). Eight coccidia species of the genus *Eimeria* have been identified on the nine species traditionally found in this animal. Only *Eimeria intestinalis* has not been met. The apparent non-existence of the ninth coccidia species remains to be confirmed because investigations still go on in other BENIN Departments.

Key Words : Coccidia - Rabbit - Bénin.

RESUME - Une étude qualitative des coccidies du lapin a été menée dans vingt différents élevages du Département de l'Atlantique au Sud du Bénin. Sur les neuf espèces d'*Eimeria* identifiées de nos jours chez le lapin, huit ont été retrouvées. Seule *E. intestinalis* n'a pas été rencontrée. Cette inexistence devra être confirmée par les études qui se poursuivent dans les cinq autres Départements du pays.

Mots Clés : Coccidies - Lapin - Bénin.

Coccidiosis is known as one of the major handicaps to rabbit breeding. This pathology causes important disturbance to rabbit. However, it is not often easy to evaluate the meaning of this infection (CHAPMAN, 1929; LÖLINGER et al., 1969; DE VOS, 1970; HOFFMANN et al., 1973; COWIE-WHITNEY, 1977.).

Nowadays, nine species of coccidia have been identified, eight of which are located in the intestines and the last one's area is the liver (CATCHPOLE and NORTON, 1979; COUDERT, 1979). BENIN is a rabbit rearing area in full expansion. The tribute paid to diseases by different rabbit breeding farms in this country is important. Many times, coccidiosis was named in cases of rabbit diarrhea. Today, the only solution often brought is a complete blind anticoccidial treatment. For a more effective and above all

cheaper medication, it is necessary to identify the concerned coccidia species and to evaluate the impact of their presence in rabbit.

MATERIALS AND METHODS

The animals

Twenty different rabbit rearing centers are concerned by this study. They are all situated in Atlantic Department divided up into three towns which can be considered to be the principal rabbit rearing areas of BENIN. Hygienic conditions are fairly good, the breeding is done on the ground or on flat-deck. The animals used for the present study are local populations or crossed-breed rabbits of all ages. They are clinically healthy.

Excreta

Several globally representative samples of faeces are taken on each breeding site without consideration of age, sex or total number of rabbits. Each sample of faeces is correctly mixed, homogenized, then sieved and diluted in magnesium sulphate solution (d=1,20). The mixture is then put to sporulate during three to five days at laboratory temperature (25 to 30°C). The identification of the different coccidia species is realized according to the following criteria admitted by COUDERT et al., 1988 and COUDERT, 1989.

RESULTS AND DISCUSSION

Eight species of coccidia have been identified with the following absolute frequencies :

* E intestinalis	0 %
* E. irresidua.....	100 %
* E. magna.....	80 %
* E. perforans.....	75 %
* E. flavescens.....	45 %
* E. stiedae.....	45 %
* E. media.....	40 %
* E. coecicola.....	25 %
* E. piriformis.....	20 %

Large associations including 5 to 7 species of coccidia have been registered in several rabbit breeding sites. But E intestinalis has not be found. This absence can explain why coccidiosis is not a so important epidemiologic problem in Benin; diarrhea doesn't always mean intestinalis coccidiosis. Investigations in five other Departments might confirm the inexistence of E. intestinalis in Benin. In this case it would be necessary to be careful not to introduce this Eimeria in the country.

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