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Authors: KALINER, G., GROOTENHUIS, J. G., and PROTZ, D.

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A SURVEY FOR SARCOSPORIDIAL CYSTS IN EAST AFRICAN GAME ANIMALS

G. KALINER,^[1] J. G. GROOTENHUIS^[2] and D. PROTZ^[3]

INTRODUCTION

In a previous survey,¹ the occurrence, location in the host's tissues and morphology of macroscopic sarcosporidial cysts (macrocyysts) in a variety of East African game animals were described. At that time only the myocardium could be histologically examined for sarcosporidial cysts (microcyysts) invisible to the naked eye.

METHODS

To complete the previous data, a histological examination for microcyysts has been made of the tongues, diaphragms and myocardia of 617 game animals, mainly adult, of several species. Infestation of the musculature with macrocyysts has also been recorded. The number and species of the animals examined are listed in Table 1.

With the exception of most of the zebra, which were shot in Northern Tanzania, the animals were killed on

ranches and in the uncultivated areas of Kenya during 1971-1973. Haematoxylin-eosin stained paraplasm sections of at least 2 cm² were subjected to histological search.

RESULTS AND DISCUSSION

The results are presented in Table 1.

Macrocyysts were not seen in the tissues of a large number of game animals of several species but most of the carcasses had microcyysts, predominantly in the diaphragm and tongue.

Of 161 zebra, none showed macrocyysts and in the myocardium of only one were microcyysts found. This observation is similar to that made in the survey of 1964-1970. However, the diaphragm of the majority of the zebra and to a lesser extent the tongue contained microcyysts. A similar pattern was observed in the giraffe and the waterbuck.

Sarcocysts in zebra, giraffe and waterbuck occur mainly in the striated musculature rather than in the myocardium.

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[1] Veterinary Research Laboratory, P.O. Kabete, Kenya.

[2] Wildlife Disease Research Project, Veterinary Research Laboratory, P.O. Kabete, Kenya, a project of the Government of Kenya supported by the United Nations Development Programme with the Food and Agricultural Organization of the United Nations as the Executing Agency.

[3] Veterinary Investigation Centre, P.O. Box 3084, Arusha Tanzania.

TABLE 1. Distribution of sarcocysts in some East African Game animals.

Species	No.*	Macro.	Myo.	Dia.	Ton.
GRANT'S GAZELLE (<i>Gazella granti</i>)	82	27	80	82	82
THOMSON'S GAZELLE (<i>Gazella thomsoni</i>)	120	10	107	115	114
IMPALA (<i>Aepycerus melampus</i>)	59	0	22	56	54
BUFFALO (<i>Syncerus caffer</i>)	4	3	2	3	2
ELAND (<i>Taurotragus oryx</i>)	24	0	23	24	24
WILDEBEEST (<i>Connochaetes taurinus</i>)	19	10	19	19	19
DEFASSA WATERBUCK (<i>Kobus defassa</i>)	7	0	0	5	4
(survey 1964-1970)	(14)	(2)	(0)	(NE)	(NE)
KONGONI (<i>Alcelaphus buselaphus</i>)	67	3	39	61	63
WARTHOG (<i>Phacochoerus aethiopicus</i>)	9	2	6	9	9
ZEBRA (Kenya) (<i>Equus burchelli</i>)	8	0	0	8	4
ZEBRA (Tanzania) (survey 1964-1970)	153 (38)	0 (0)	1 (3)	140 (NE)	74 (NE)
GIRAFFE (<i>Giraffa camelopardalis</i>)	30	0	1	19	19
(survey 1964-1970)	(14)	(0)	(0)	(NE)	(NE)
BOHOR REEDBUCK (<i>Redunca redunca</i>)	18	0	3	5	5
CHANDLER'S MOUNTAIN REEDBUCK (<i>Redunca chanleri</i>)	9	0	0	2	0
ORIBI (<i>Ourebia ourebi</i>)	8	0	0	0	0

*No.—Number of animals examined.

Macro.—Number of macroscopic sarcosporidial cysts in the carcass musculature.

Myo.—Number of animals with microcysts in myocardium.

Dia.—Number of animals with microcysts in diaphragm.

Ton.—Number of animals with microcysts in tongue.

(NE)—Not examined.

()—Data obtained from the survey 1964-1970.¹

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