
Lamsiekte (Parabotulism) in Cattle in South Africa.

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in collaboration with:—

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Being the results of investigations carried out by Sir **Arnold Theiler**, Director of Veterinary Education and Research, and late Director of Lamsiekte Research; **P. R. Viljoen, H. H. Green, P. J. du Toit, Hans Meier, and E. M. Robinson.**

FOREWORD.

THE report which follows is the record of experimental work upon lamsiekte, most of which was conducted during the years 1917 to 1921. A popular account of the main features of this work appeared under the title "Cause and Prevention of Lamsiekte" in the *Journal of the Department of Agriculture*, Union of South Africa, June, 1920. In the intervening years the work has been continued, especially upon the nutritional aspect of aphosphorosis, and a further report will be published before long.

The present report is divided into a number of chapters, enumerated below, each of which deals fully with one particular aspect of the lamsiekte problem, written up by the various collaborators at various dates. For the convenience of readers, a general review summarizing the broad facts has been placed at the beginning of the report. In this introductory review the following arrangement of the main text has been adhered to:—

- (1) Definition and Historical Notes, pages 843-851.
- (2) Cause of the Disease and Experiments upon its Production in the Lamsiekte Area, pages 851-1051.
- (3) Experiments Outside the Recognized Lamsiekte Area, pages 1051-1099.
- (4) The Lamsiekte Toxin and Experiments on Immunity, pages 1099-1201.
- (5) Isolation and Description of the Toxicogenic Saprophyte, pages 1201-1211.
- (6) Osteophagia and Phosphorus Deficiency in Relation to Lamsiekte, pages 1211-1248 and 1307-1361.
- (7) Symptomatology of Lamsiekte, pages 1248-1292.
- (8) Pathology and Pathogenesis of Lamsiekte, pages 1292-1306.

* NOTE.—A. Theiler was Director of Veterinary Research until 1918; conducted investigations at Vryburg in person during 1919-20 in co-operation with the Veterinary Research Laboratory at Pretoria, initially in charge of Mr. R. E. Montgomery as Director, and subsequently in that of Mr. D. T. Mitchell as Acting Director, and returned to Pretoria as Director of Veterinary Education and Research in 1920. G. de Kock was in charge at Vryburg 1914-15, supe vision of the work there being taken over by P. R. Viljoen 1915-19. The whole scheme of work was under the Direction of A. T., and discussed freely between all collaborators. In regard to detail, A. T. wishes to acknowledge particular co-operation of H. H. G. in sections 1 and 6; P. R. V. in section 3 and sub-section A of section 2; P. J. du T. and H. M. in section 4; and E. M. R. in section 5.