BOVINE TUBERCULOSIS AND ITS CONTROL

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649085569

Bovine Tuberculosis and Its Control by Veranus Alva Moore

Except for use in any review, the reproduction or utilisation of this work in whole or in part in any form by any electronic, mechanical or other means, now known or hereafter invented, including xerography, photocopying and recording, or in any information storage or retrieval system, is forbidden without the permission of the publisher, Trieste Publishing Pty Ltd, PO Box 1576 Collingwood, Victoria 3066 Australia.

All rights reserved.

Edited by Trieste Publishing Pty Ltd. Cover @ 2017

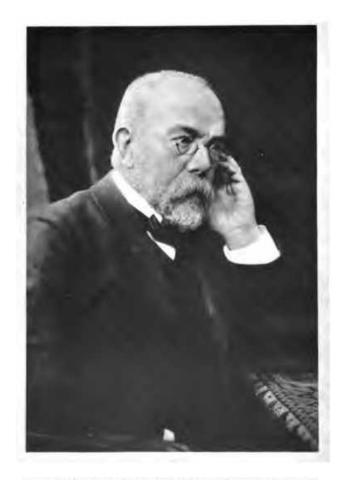
This book is sold subject to the condition that it shall not, by way of trade or otherwise, be lent, re-sold, hired out, or otherwise circulated without the publisher's prior consent in any form or binding or cover other than that in which it is published and without a similar condition including this condition being imposed on the subsequent purchaser.

www.triestepublishing.com

VERANUS ALVA MOORE

BOVINE TUBERCULOSIS AND ITS CONTROL





DR. ROBERT KOCH WHO DISCOVERED THE CAUSE OF TUBERCULOSIS

BOVINE TUBERCULOSIS ITS CONTROL

BY

VERANUS ALVA MOORE, B.S., M.D., V.M.D.

Professor of Comparative Pathology, Bacteriology and Meet Inspection, New York State Veterinary College at Cornell University, and Director of the College

THIRTY FULL PAGE ILLUSTRATIONS

ITHACA, N. Y. CARPENTER & COMPANY 1913 TO THOSE WHO ARE ACTIVELY
INTERESTED IN THE ERADICATION
OF BOVINE TUBERCULOSIS THIS
VOLUME IS DEDICATED.

PREFACE

THE early belief that the bacteria of human and of bovine tuberculosis were identical and that large numbers of people became infected from diseased cattle caused bovine tuberculosis to stand out somewhat conspicuously among the affections of animals.

The sanitary significance of this affection in addition to its great economic importance have caused it to be very carefully studied in each and all of its phases. Although there is still much to be ascertained concerning it, knowledge of this disease has become quite definite in many respects. However, it is a complicated subject with many difficult questions still to be answered. These relate to the various diagnostic tests and the differentiation of its cause from closely allied species of bacteria.

The preparation of this volume was undertaken largely at the instance of practitioners of veterinary medicine and health officers who during recent years have sought for a summary of the knowledge of bovine tuberculosis and its control. It seemed that for those who are intelligently working to eradicate this scourge benefit would be derived from bringing together the results of the more important investigations on the nature, diagnosis and various methods for the control of this disease.

Individuals, commissions, government laboratory workers and state experiment stations have made many contributions to the knowledge of this subject. While it is impossible to summarize this literature, the publications listed and the citations given will, it is believed, make it possible for those interested in the subject to ascertain fully the details of the work that has been done on this disease.

I am indebted to Dr. S. H. Burnett of this laboratory and Dr. A. R. Keith for the photographs from which the illustrations were made. The original specimens are in the collection of the Department of Comparative Pathology and Bacteriology of the New York State Veterinary College.

V. A. M.

ITHACA, N. Y., JANUARY, 1913.

TABLE OF CONTENTS

List of Illustrations	vi
References	vii
I	age
CHAPTER I.	-
History of Tuberculosis in Cattle	1
CHAPTER II.	
Distribution, Economic and Sanitary Importance of Bovine Tuber- culosis	5
CHAPTER III.	
The Cause of Tuberculosis in Cattle	14
CHAPTER IV.	
The Nature of Tuberculosis and the Changes Produced in the Tissues by Tubercle Bacteria.	
CHAPTER V.	
Symptoms of Tuberculosis in Cattle	29
CHAPTER VI.	
Methods of Dissemination	33
CHAPTER VII.	
The Diagnosis of Tuberculosis in Cattle	51
CHAPTER VIII.	
Tuberculin and Its Use	55
CHAPTER IX.	
Physical Examination in Detecting Tuberculosis in Cattle	72
CHAPTER X.	
Immunization of Cattle Against Tuberculosis	76
CHAPTER XI.	
The Control of Bovine Tuberculosis	85
APPENDIX.	
Report of the International Commission on the Control of Bovine	
Tuberculosis	105

ILLUSTRATIONS

Tubercle	

II. Cultures of tubercle bacteria.

III. Growth of tubercle bacteria on glycerin bouillon.

IV. Structure of a tubercle.

V. Temperature curves after tuberculin.

VI. Bronchial glands (Smith).

VII. Tuberculous lung.

VIII. Tubercle opening into a bronchus.

IX. Tuberculous lung, diaphragm and liver.

X. Tuberculous nodules on lung.

XI. Tuberculous pleura.

XII. A cross section of a tuberculous heart.

XIII. Tuberculous gland.

XIV. Tuberculous gland.

XV. Tuberculous glands.

XVI. Tuberculous mediastinal gland.

XVII. Enlarged tuberculous mesenteric glands.

XVIII. Tuberculous ulcers in the intestine.

XIX. Tuberculous uicers and enlarged glands at ileo-caecal valve.

XX. Tuberculous liver.

XXI. A section of tuberculous liver.

XXII. A tuberculous omentum.

XXIII. A tuberculous omentum.

XXIV. A tuberculous omentum.

XXV. A tuberculous spleen.

XXVI. A tuberculous udder.

XXVII. Tuberculous lesions in skin.

XXVIII. A tuberculous uterus.

XXIX. A tuberculous focus in bone,

XXX. A tuberculous spleen from a pig.

REFERENCES

The following are a few of the more available publications on bovine tuberculosis. The reports of State and Government Departments of Agriculture and many boards of health as well as the veterinary and medical literature of the last twenty years contain many articles on this subject.

- CURTICE. The detection of tuberculosis in cattle. Annual Report, Bureau of Animal Industry, U. S. Dept. of Agric., 1895-96.
- DORSET. Experiments concerning tuberculosis. Bulletin 52, Bureau of Animal Industry, 1904.
- JOHNE. Geschichte der Tuberkulose. Leipeic. 1883.
- KOCH. The etiology of tuberculosis. Mitt. aus dem. Kaiserl. Gesund-heitsamte, Bd. II (1884). Translated in Vol. CXV, New Sydenham Society.
- KOCH. The combating of tuberculosis in the light of the experience that has been gained in the successful combating of other infectious diseases. Amer. Vet. Review, Vol. XXV (1901), p. 441.
- MOHLER. Infectiveness of mifk of cows which have reacted to the tuberculin test. Bulletin 44, Bureau of Animal Industry, 1903.
- MORLER. The tuberculin test of cattle for tuberculosis. Farmers' Bulletin 351, U. S. Dept. of Agric., 1909.
- MOHLER AND WASHBURN. A comparative study of tubercle bacilli from varied sources. Bulletin 96, Bureau of Animal Industry, 1907.
- MOORE. A report on bovine tuberculosis. N. Y. State Dept. of Agric., 1903.
- NOCARD. The animal tuberculosis. New York.
- Pearson. The Pennsylvania plan for controlling tuberculosis of cattle. Proceedings Amer. Vet. Med. Assn., 1899, p. 161.
- Pearson. Tuberculosis in cattle and the Pennsylvania plan of its repression. Bulletin 75, Penn. Dept. of Agric., 1901.
- Pearson. The repression of tuberculosis in cattle by sanitation. Bulletin 74, Penn. Dept. of Agric., 1901.
- PETERSON. The elimination of tubercle bacilli from man and animals.

 Thesis for Doctor of Philosophy, Cornell University. 1910.
- REPORTS of the International Congress on Tuberculosis, especially Sixth Congress held in Washington, D. C., 1908.
- REPORT of the Royal Commission on Tuberculosis (Human and Animal), London, 1907.