

**PARASITOLOGICAL
INVESTIGATIONS UPON
THE VEGETABLE
ORGANISMS**

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649451524

Parasitological Investigations upon the Vegetable Organisms by Ernst Hallier

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

ERNST HALLIER

**PARASITOLOGICAL
INVESTIGATIONS UPON
THE
VEGETABLE ORGANISMS**

PARASITOLOGICAL INVESTIGATIONS
UPON THE
VEGETABLE ORGANISMS

FOUND IN

MEASLES, TYPHUS EXANTHEMATICUS, TYPHUS ABDOMINALIS,
SMALL-POX, KINE-POCK, SHEEP-POCK, CHOLERA, &c.

BY DR. ERNST HALLIER,
PROFESSOR IN AUSTRIA.

Translated from the German,
WITH AN APPENDIX.

BY HENRY C. PERKINS, M.D.
NEWBURYPORT.

1872.

LANE LIB

TO THE FELLOWS
OF THE
Massachusetts Medical Society,
THIS TRANSLATION OF PROF. HALLER'S BOOK ON THE "GERMS" OF
CERTAIN DISEASES,
Is respectfully submitted, by
J. J. J. J.

LAMBERT LIBRARY



ΛΑΜΠΑΔΙΑ ΕΧΟΝΤΕΣ ΔΙΑΔΩΣΟΥΣΙΝ ΛΑΛΗΛΟΙΣ.

H17p
1892

INTRODUCTION,

BY THE TRANSLATOR.

My attention was first directed to the subject of "Disease Germs" by a work of Dr. Beale's bearing this title. After its perusal, which left the matter still open, the work of Prof. Hallier on "The Vegetable Organisms found in Sheep-pock, Kine-pock, Small-pox, Measles, &c.," was kindly put into my hands by a friend, Mr. Carl Meinerth. It was in an unknown tongue; but the interest felt in the subject led to the study of so much of the German language as would enable me to understand its contents.

I had already for some months enjoyed the acquaintance of a young German student, Mr. CARL CASTELHUN, who had been educated at Heidelberg, and who had made the study of the lower vegetable organisms a pastime in connection with his professional studies, and who besides was familiar with the use of the microscope. His services therefore were solicited and cheerfully granted in this new investigation. To him I am indebted for the correct rendering of the text.

The microscope used for our purpose was got up by Mr. Edwin Bicknell, microscopist at the Zoölogical Museum, Cambridge. Its optical properties have proved satisfactory, its powers ranging from 35 to 2750 linear diameters.

Some liberties have been taken with the original in omitting the translation of certain parts which were of an historic and polemic nature, or which had no important bearing upon the subject. All else has been translated, and I have thought it advisable to add, from another work of Prof. Hallier, a

description of his Culture apparatus, that such as may feel disposed to repeat his cultures may profit by his experience.

The hypothesis that there was something invisible and intangible which occasioned contagious and miasmatic diseases, it is well known, had been started in earlier times; and until now all medical men have believed and declared, that the causes of certain diseases, as measles, scarlatina, &c., were conveyed through the medium of the air. This doctrine, restored by Hallier and others, not only brings the bodies above referred to before us, but assumes to define for each different form of zymotic disease, the micrococcus (or yeast) of a specified fungus as the miasm or contagion.

This revived hypothesis, the doctrine of ferment, has met with an exceedingly favorable reception in Germany, and wrought a change in the views of many distinguished observers and physicians.

It remains now to test its truth, not by speculative reasoning, but by experiment and observation. Under direction of the British Government the initiative has been taken, and it is to be hoped the example may be followed, if not by other nations, by individuals willing to aid in discovering the truth in so far as relates to other diseases incident to man and brute animals, and the plants upon which they feed, and which are used as medicines.

I would only add, that in order to understand my author's theory, his work on "Fermentation" was imported, and such parts studied as appeared necessary. Its translation must be left to some younger person.

ABSTRACT OF PREFACE.

IN this work a division and contribution of labor took place which I have so often desired, and which is more necessary for an epidemico-logical than for any other question in Pathology. The previous history of Parasitism and Epidemiology proves this difficulty, that no inquiry into these two subjects can be satisfactorily carried on from the medical side solely; the co-operation of Botany, Zoölogy and Chemistry is required. * * * *

Dr. Zürn undertook the pathologico-anatomical part of this investigation, and myself the botanical, &c. A constant mutual interest and control was kept up by daily discussion. The publications are kept apart, so that herein only the vegetable organisms and their effects appear. Dr. Zürn will hereafter report upon his part of the labor.

Dr. Reiter, of Munich, most obligingly and faithfully assisted me by furnishing the material of cow-pock and that taken from the human subject. What I could find in it is given in the following pages. Furthermore, I add the result of the most recent investigations upon the contagion of cholera, for the material of which, from five different cases of Cholera asiatica and one of Cholera nostras I thank Prof. J. Vogel, of Halle.

Whereas, in cholera the chief argument, that fungus and contagion are identical, is with great difficulty supported directly, because so few cases are offered for examination, and the nature of the disease itself presents obstacles—so there remains only the second way of proving indirectly, that always the same organisms accompany the cholera. This method I have pursued, and as will be seen at the end of the treatise, not without happy results. The dejections of seven different patients have yielded in my cultures precisely the same results, viz., that in the cysts (fruits) micrococcus is formed, which must be considered as the contagion.

The proof of this proposition was more necessary, as pathologists who labor without the aid of botany have recently again confounded the fruits of fungi with organic concretions. This is not to be wondered at, inasmuch as they are not provided with sufficient botanical knowledge, hence they pronounce the real fruits which they know only from illustrations or preparations, inorganic forms, just as the London Medical Society did twenty years ago. To a botanist well acquainted with fungi, such a mistake could not happen. An essential support and perhaps the most important of all for my view of cholera contagion, was afforded by my rice cultures with choleraic dejections, wherefrom it results, that, in fact, the cholera fungus produces a disease in the leaf of the rice plant, which reproduces the same micrococcus from cysts as appear in the dejections of patients sick with cholera. * * * *