

**LECTURES ON SOME
OF THE PHYSICAL
PROPERTIES OF SOIL**

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649628889

Lectures on Some of the Physical Properties of Soil by Robert Warington

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

ROBERT WARINGTON

**LECTURES ON SOME
OF THE PHYSICAL
PROPERTIES OF SOIL**

LECTURES
ON SOME OF THE
PHYSICAL PROPERTIES OF SOIL

HENRY FROWDE, M.A.

PUBLISHER TO THE UNIVERSITY OF OXFORD



LONDON, EDINBURGH, AND NEW YORK



Joannes Sibthorp.

LECTURES
ON SOME OF THE
PHYSICAL PROPERTIES
OF SOIL

BY

ROBERT WARINGTON, M.A., F.R.S.

FORMERLY SIBTHORPIAN PROFESSOR OF RURAL ECONOMY IN THE UNIVERSITY
OF OXFORD; EXAMINER IN THE PRINCIPLES OF AGRICULTURE TO THE
DEPARTMENT OF SCIENCE AND ART

WITH A FRONTISPIECE



Oxford

AT THE CLARENDON PRESS

1900

S 591
W 35

Oxford
PRINTED AT THE CLARENDON PRESS
BY HURMACH NARY, M.A.
PRINTER TO THE UNIVERSITY

PREFACE

THE contents of this volume formed the substance of a course of lectures delivered by the author as Sibthorpean Professor of Rural Economy in Michaelmas Term, 1896. The subject of the final chapter did not actually form part of these lectures, though it had been prepared for delivery if time permitted. The whole of the matter has since been carefully revised.

The form of lectures has not been adhered to in the present volume; the language has in fact been greatly condensed. The title of lectures has, however, been retained, as it best expresses the character of the work. This is not a textbook, dealing exhaustively with the physical properties of soils; but lectures, discussing with some fullness particular portions of the subject.

In these lectures the attempt has been made to treat every subject from an experimental point of view, and a considerable space will be found occupied by accounts of the investigations which appear to have thrown most light upon the subjects discussed.

The behaviour of actual soils under known conditions has been made as far as possible the foundation of the conclusions drawn.

A great mass of results has accumulated from the investigations made in the very numerous Agricultural Experiment Stations in Europe and America; with these results the agricultural teacher is too often unacquainted. His valid excuse is the scattered publication of the reports, and his want of time to correlate the several results recorded. The writer hopes that the publication of these lectures will stimulate others to labour in the abundant harvest field of Experiment Station Reports. It must ever be borne in mind that it is only on the results of experimental investigations that Agricultural Science can be safely built.

The reader will probably be surprised that so little is said respecting English soils, and so much respecting the soils of America. The writer heartily wishes that this might have been otherwise. In fact, however, the physical constitution and properties of English soils have as yet not been investigated, save in a very few exceptional cases; this has been doubtless due to the great lack of investigators and research laboratories in this country. The general properties of soils can of course be equally well illustrated by any well studied examples, but the deficiency of knowledge of our own local soils is nevertheless a very real evil, and must greatly hinder the practical application of general principles.