

PREFACE.

The purpose of this book is to aid the reader and student in acquiring a knowledge of the *science* of agriculture as distinct from the *art* of agriculture ; that is, a knowledge of the "why," rather than a knowledge of the "how." The science of agriculture may be said to consist of a mingling of chemistry, geology, botany, entomology, physiology, bacteriology, and other sciences, in as far as they have a bearing upon agriculture. The aim has been to include but the first principles of these various sciences, and to show their application to the art of agriculture. In a field so wide, and with so limited a space at the author's disposal, this work claims to deal only with the simple first principles of agricultural science. It is hoped, however, that the beginning here made will lead to a further study of what is one of the most interesting and most profitable sciences—one that is at the present time making most wonderful advance.

From his experience of several years teaching at the Ontario Agricultural College the author believes that the rational teaching of agriculture in Public and High Schools is not only possible, but would be exceedingly profitable. An intelligent understanding of the science underlying the art of agriculture will add much interest to what is otherwise hard work, and, as a natural consequence, the pleasure of such work may be