

**ELEMENTARY HORTICULTURE  
FOR CALIFORNIA SCHOOLS:  
A MANUAL FOR TEACHERS  
AND AMATEUR GARDENERS**

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649355235

Elementary Horticulture for California Schools: A Manual for Teachers and amateur gardeners  
by Clayton F. Palmer

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**CLAYTON F. PALMER**

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UNIV. OF  
CALIFORNIA

ELEMENTARY HORTICULTURE

— FOR —  
CALIFORNIA SCHOOLS

A MANUAL FOR TEACHERS AND AMATEUR GARDENERS

— By —  
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Kindergarten Plots at the Normal School

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## PREFACE



The manual herewith presented has been written, primarily, to serve as a guide for the use of classes in Agricultural Nature Study in the Los Angeles Normal School, and in the Training School. It is also hoped that it may arouse the interest of at least a few teachers of our state in some of the phases of elementary horticulture herein discussed.

The writer desires to express his appreciation of the helpful suggestions received from President J. F. Millspaugh and Dr. F. A. Howe of the Normal School. The half-tones for figures 2 and 3 are presented through courtesy of the International Children's School Farm League of New York City. The garden scene is a view of a portion of the now well-known De Witt Clinton Park. The line drawings shown in figures 9 and 10 were made by Miss de Garmo, a student of the Normal School.



"I dropped a seed into the earth. It grew, and the plant was mine. It was a wonderful thing, this plant of mine. I did not know its name, and the plant did not bloom. All I know is that I planted something apparently as lifeless as a grain of sand and that there came forth a green and living thing, unlike the seed, unlike the soil in which it stood, unlike the air into which it grew. No one could tell me why it grew nor how. It had secrets all its own, secrets that baffle the wisest men; yet this plant was my friend. It faded when I withheld the light, it withered when I neglected to give it water, it flourished when I supplied its simple needs. One week I went away on a vacation, and when I returned the plant was dead; and I missed it."

—L. H. Bailey, in *Junior Naturalist Monthly*.



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## Introduction

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Elementary agriculture is fast claiming for itself a prominent place in the curriculum of many of the high schools of our state which are located in communities having important agricultural interests. The instructors in most of these cases are men trained for the work they are doing.

The movement in favor of agriculture as an elementary school subject, is somewhat retarded, and largely because there is a general lack of teachers trained to initiate and carry on the work. This condition seems likely to prevail for some time to come, in spite of the courses in agriculture offered by our state institutions and the helpful bulletins available for reference.

A great deal has been said and written favoring school gardens as a valuable phase of nature study, or more specifically, agriculture. Having conducted the work with several hundred students, and watched as many grade pupils at their garden work, the writer is firmly convinced of its value, and earnestly urges every school, which has available ground, and a teacher willing to undertake the work, to profit by the opportunities offered by the growing of plants. But there are many schools which can neither spare nor secure sufficient ground for a garden, and it is perhaps rather to such that this manual will appeal. Several different phases of plant production have been discussed briefly, and it is believed that every school will be able to make use of at least a few of these suggestions.

It is anticipated that some of the more conservative teachers and school officials will at once challenge the advisability of attempting to do in the grades much of the work recommended with plants. But since most of that herein suggested has been successfully done by pupils in the grades, and under somewhat unfavorable conditions, the writer feels that it is worthy an honest trial by such teachers as are willing to undertake it.