



THE NEW YORK BOTANICAL GARDEN



Springer

Review: [untitled]

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Source: *Economic Botany*, Vol. 19, No. 3 (Jul. - Sep., 1965), p. 317

Published by: Springer on behalf of New York Botanical Garden Press

Stable URL: <http://www.jstor.org/stable/4252632>

Accessed: 13/08/2010 09:47

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The reader is cautioned to read the preface of the book and to become familiar with the aims of the author. Anyone who attempts to use this book as a laboratory guide is in for a rude awakening unless he is already quite familiar with the general techniques involved. The book is not intended for this use and is not adequate for it. It is an introduction to diverse areas of plant chemistry and provides an introduction to methods of isolation and identification of the various classes of compounds. From this one can make a tentative decision as to the general method most suited to a specific need. Appropriate literature citations are provided to sources of details of the methods and to reviews of the chemistry of each group of chemicals. The main value of the book as a research tool, in my opinion, is as guide to the chemicals likely to be involved, to methods likely to be appropriate, and to the literature.

A graduate student in plant physiology or related fields would do well to read this book even though he is well grounded in the conventional areas of biochemistry. The scope of the book is broader than most biochemistry, natural-products chemistry, or pharmaceutical chemistry courses encountered in university curricula. The brevity of the individual sections allows one to gain a relatively painless introduction to subjects of peripheral interest; at the same time, each section provides entry into the literature of any area of particular interest.

The book is remarkably free of typographical errors: two or three errors in the first two chapters and two in chapter six were the only ones noticed. In all honesty it should be noted that a great many of the more exotic names and formulae were unfamiliar to me; however, the general level of accuracy in both the text and figures inspires confidence in the unfamiliar areas.

One could debate the value of the biochemical pathways given. In general those which are even moderately well established are available in a great many texts. The rest are generally based largely on speculation, and their value depends upon the extent to which they may stimulate interest in an area. However, the pathways do not de-

tract from the book—the moot point is whether they add to its value.

The author has carefully delimited the aims of the book and has accomplished his announced purpose admirably. As long as the book is used for the purposes defined it can be of real value to many graduate students and scientists working in any of the many areas involving plants and chemistry.

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Mineral Deficiencies in Hevea and Associated Cover Plants. Victor M. Shorrocks. 76 pp. illus. Rubber Research Institute, Kuala Lumpur, Malaya, 1964. M\$25.

“The principal aim of this book is to provide the rubber planter with the means to identify nutrient deficiency symptoms in *Hevea brasiliensis* and to correct the deficiencies when diagnosed.” In addition to the rubber tree, three important leguminous cover crops (*Pueraria phaseoloides*, *Centrosema pubescens*, and *Calopogonium mucunoides*) are similarly considered. The book most certainly fulfills its purpose.

There are five main sections: 1) the essential inorganic elements and their roles; 2) mineral nutrients in the soil and the effect of fertilizers on soil nutrient status; 3) visual symptoms of deficiency; 4) soils, manuring, and the correction of nutrient deficiencies; and 5) appendix (leaf nutrient composition). The principal of these sections—that dealing with visual symptoms—is profusely illustrated with 53 superb colour photographs of leaves, shorts, or young plants affected by deficiencies. Notwithstanding the high quality and direct style of the written portion of the volume, these coloured photographs constitute the most valuable contribution for the stated aims of the book. The whole work is up to the usual high standards that we have come to expect from the Rubber Research Institute. The Kynoch Press, designer and printer of the book, is, likewise, to be congratulated on a most artistic production.

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