Book Reviews


The title of this book is more complete when followed by the subtitle, namely, "Health of animals and man is linked to the mineral balance of the soil." It is a sequel to the author's "Grass Productivity."

The author is a member of the Academy of Agriculture of France. He has charge of instruction at the National Veterinary College of Alford (Paris).

The translation is by Catherine T. M. Harriot and Henry Kennedy. There are 267 pages of text of 66 short chapters on different subjects presented with 2 or 3 appropriately head-lined subdivisions per page. Consequently, each idea is presented briefly and concisely to lend the book to intermittent reading. More than 400 references are well cited in the text, indicating the author's study of, and familiarity with, the research reported in more than one language. By the digestion of these facts in relation to his own success with "rational" grazing of grassland, he links soil science, biochemistry, plant physiology, and medicine in a broad approach to biological matters as only a closely-observing and intelligent farmer can. The more technical chapters are so labelled for the choice of the reader.

In its practical aspects, this book encourages soil conservation under grassland farming with details of its profitable management equal to that of arable farming. That is clearly presented with facts and figures of lay-out of areas, grazing systems, soil treatments, and animal behaviors to be observed from their more efficient services as harvesters of grass.

In the more extensive and technical discussions, the roles of the different inorganic elements are presented as these fail to serve in nutrition because of deficiencies and imbalances. Emphasis is given, in particular to the trace elements, copper, iron, iodine, zinc, molybdenum, and magnesium, as parts of the cell's enzymes, and other biochemical compounds serving in the body processes.

Thus the soil is considered the foundation of health via nutrition. By means of that ultimate basis, the cells of the microbe, the plant, the animal and the human body build the health of themselves through their protein defense mechanisms for digesting foreign proteins before such invaders digest their victims in what we call "infectious diseases".

His able management of the health of cattle, according to this principle, through 13 years of his "rational" grazing system on his farm in northern France and his study of biochemistry lead him to connect the insufficient soil and deficient grass with the degeneration of cell functions, called cancer. He visualizes this as a degeneration, in agreement with Warburg and others, because of deficiencies and imbalances in nourishment to prohibit the highly oxidative cell processes and the removal of by-products. Shortages of the trace elements and the enzymes they support, like the catalase to remove hydrogen peroxide, a by-product of respiration, are suggested as a causative condition of this cell irregularity in its growth and metabolism.

Mr. Voisin presents in provocative thoughts what more and more observing farmers, agricultural scientists, veterinarians, dieticians, and doctors are coming to think. They will read with interest what he says in seeming contradiction to conventional beliefs. They will appreciate the able support of his projected thinking he has assembled from the scientific literature and his own trials. Mr. Voisin moves our thinking away from emphasis on relief for ill-health by artificials and toward attention to good health by building it through a nutrition that starts with fertile soils. In that respect, the book should find a prominent place in agricultural libraries.—WM. A. ALBRECHT.


A well written and excellently illustrated treatise on sugarcane and the diseases that affect this crop. The book is handsomely presented and the illustrations conveniently located throughout the text. The contents of this book clearly reflect the vast experience of the author on the maladies of sugarcane. Although the main emphasis is placed on the different diseases of sugarcane the author discusses other aspects such as history, classification, breeding, varieties, etc. The references cited by the author are numerous (714) and should be of great help to those who work with sugarcane or its diseases. The student of plant pathology will find in this book not only interesting reading but also valuable information. The author should have included and discussed the available literature on root transmission of the etiologic agent of chlorotic streak. Had this been done the section devoted to chlorotic streak would have become still more challenging to those intrigued by the intricacies of this puzzling disease of sugarcane. Dr. Edgerton's excellent appraisal of the information derived both from his own personal cognizance as well as from the extensive sources cited in his selected references makes this treatise an important contribution to Plant Pathology.—JULIO BIRD, Department of Plant Pathology and Botany, Agricultural Experiment Station of the University of Puerto Rico, Rio Piedras, P.R.