

Horticultural Sciences

Plant Analysis and Fertilizer Problems. vol. 4. C. Bould, P. Prevot, and J. R. Magness, Eds. American Society for Horticultural Sciences, East Lansing, Mich., 1964. x + 430 pp. Illus. \$7.50.

This volume, published by the American Society for Horticultural Science, covers the fourth colloquium on plant analysis and fertilizer problems held in conjunction with the 16th International Horticultural Congress (Brussels, Belgium) in September 1962. The first colloquium was in Paris in 1954 in connection with the Eighth International Botanical Congress, and the second, also in Paris, in 1956, was in connection with the Sixth International Congress of Soil Science. The first two were organized by, and the proceedings volumes published by, the Institut de Recherches pour les Huiles et Oléagineux, Paris. The third and fourth colloquia were organized by an international committee. The report of the third, held at Montreal in 1959 in connection with the Ninth International Botanical Congress, was published by the American Institute of Biological Sciences (1961).

Unfortunately, the papers in volume 4 are not organized by plant groups or analytical methods as the papers were in earlier volumes. The 29 papers in this volume may be divided into several groups based on interest; the largest group is concerned with aspects of the relationship between plant-tissue composition and growth and yield, and contains papers dealing with fruits (citrus, banana, pineapple, and grape), vegetables (potatoes, tomatoes, and peas), agronomic crops (cotton, sugar beets, and pasture grasses), and special plants (tea, tung, and Hevea rubber); a second group relates to the effects of various factors (weather, parasitic nematodes, salinity, soil sterilization, and growth regulators) on the mineral nutrition and tissue composition of plants, while a small group deals with certain biochemical aspects of mineral deficiencies in plants.

Diagnoses of deficiency or excess of plant nutrients depend on plant symptoms and on soil and plant analyses, individually or in combination. Of the three, plant analyses raise many distinct problems with respect to the sampling of specific plant organs, determining the correct physiological age for study, and interpreting results. Pres-

ent knowledge of the relationship between the concentration of nutrients in plant tissues and the growth and yield potentials of agricultural plants is admittedly inadequate. In general, the series emphasizes the progressive advances in the analysis of plant tissues and valid interpretation of the results.

This volume is printed on good quality paper and is well bound. It indicates a continued worldwide interest in the field by an ever-increasing group of workers. Its bibliographies substantially extend the body of literature in the field. The last chapter, as in previous volumes, indicates not only progress made to date but also sets forth as clearly the unsolved problems. Everyone interested in soil fertility and mineral nutrition must consider this series of colloquia. The fifth colloquium, organized by James A. Cook (Department of Viticulture, University of California, Davis) will be held in connection with the 17th International Horticultural Congress, at the University of Maryland, in August 1966.

JOHN C. FRAZIER

Department of Botany and Plant Pathology, Kansas State University, Manhattan

New Books

Economics and the Social Sciences

Advancing Psychological Science. vol. 4, *Research in Physiological Psychology.* Richard T. Louttit, Ed. Wadsworth, Belmont, Calif., 1965. 155 pp. Illus. Paper, \$2.60. Fourteen papers; the sections are Motivation: The production of thirst (5 papers); Mechanisms of memory (4 papers); and Electrical self-stimulation of the brain (5 papers).

Arab Border-Villages in Israel: A Study of Continuity and Change in Social Organization. Abner Cohen. Humanities Press, New York; Manchester Univ. Press, Manchester, England, 1965. 208 pp. Illus. \$6.

Basic Facts of Introductory Psychology. Fred Couey. Macmillan, New York, 1965. 64 pp. Paper, 95¢.

The Child. William Kessen. Wiley, New York, 1965. 315 pp. Paper, \$2.95; cloth, \$4.95. Perspectives in Psychology Series, edited by William Kessen and George Mandler. Selected essays of William Cadogan, Thomas Martin, Anthony Ashley Cooper, John Locke, Jean-Jacques Rousseau, Johann Heinrich Pestalozzi, Charles Robert Darwin, Wilhelm Preyer, Granville Stanley Hall, James Mark Baldwin, Hippolyte Adolphe Taine, Alfred Binet and Theophile Simon, Arnold Lucius Gesell, John Broadus Watson, Sigmund Freud, and Jean Piaget.

Choiseul Island Social Structure. Harold W. Scheffler. Univ. of California Press, Berkeley, 1965. 336 pp. Illus. \$7.

Closed Systems and Open Minds: The Limits of Naïvety in Social Anthropology. Max Gluckman, Ed. Aldine, Chicago, 1965. 274 pp. \$7.95. Five essays: "Symbols in Ndembu ritual" by V. W. Turner; "Two villages in Orissa (India)" by F. G. Bailey; "Urban communities in Africa" by A. L. Epstein; "Workshop behaviour" by Tom Lupton and Sheila Cunlison; "Social mobility and social class in industrial communities" by William Watson; and an introduction and conclusion by Ely Devons and Max Gluckman.

Communication Processes. Proceedings of a symposium (Washington, D.C.), 1963. Frank A. Geldard, Ed. Published for North Atlantic Treaty Organization by Pergamon, London; Macmillan, New York, 1965. 309 pp. Illus. \$14. NATO Conference Series, vol. 4. The topics discussed were data presentation, data transmission, language barriers and language training, group communication, and man-computer communication.

Experiments in General Psychology. James H. L. Roach, Barbara R. Sherman, and Patricia P. Roach. Harper and Row, New York, 1965. 204 pp. Paper, \$3.75.

Handbook of Mathematical Psychology. vol. 3. R. Duncan Luce, Robert R. Bush, and Eugene Galanter, Eds. Wiley, New York, 1965. 547 pp. Illus. \$11.95. Seven papers: "Analysis of some auditory characteristics" by Jozef Zwislocki; "Theoretical treatments of selected visual problems" by Leo M. Hurvich, Dorothea Jameson, and David H. Krantz; "Identification learning" by Robert R. Bush; "Concept utilization" by Edwin Martin; "Preference, utility, and subjective probability" by R. Duncan Luce and Patrick Suppes; "Stochastic processes" by J. Laurie Snell; and "Functional equations" by Richard Bellman.

The Impact of Science on Technology. Seminar on Technology and Social Change. Aaron W. Warner, Dean Morse, and Alfred S. Eichner, Eds. Columbia Univ. Press, New York, 1965. 231 pp. \$6.75. Seven papers: "The interaction of science and technology" by I. I. Rabi; "The interaction of science and technology: Another view" by Harvey Brooks; "Government, education, and civilian technology" by Alvin M. Weinberg; "Advanced technology and American business: Friends or foes?" by Frederic de Hoffmann; "Science and the civilian technology" by J. Herbert Hollomon; "Technology and social change: A congressman's view" by John Brademas; "Modern science and its implications for the university" by Ralph S. Halford; and a summation by Aaron W. Warner.

Infantile Autism: The Syndrome and Its Implications for a Neural Theory of Behavior. Bernard Rimland. Appleton-Century-Crofts (Meredith), New York, 1964. 294 pp. \$5. The Century Psychology Series, edited by Richard M. Elliott, Gardner Lindzey, and Kenneth MacCorquodale.

Ponape: A Pacific Economy in Transition (*Anthrop. Rec. Univ. Calif.* 22). William R. Bascom. Univ. of California Press, Berkeley, 1965. 159 pp. Plates. Paper, \$3.