Book Review

ANNUAL REVIEW OF PLANT PHYSIOLOGY, VOL. 9.

This annual issue of comprehensive reviews and reports on special phases of plant physiology contains 15 chapters by 23 authors with 3105 literature references. Repetition is minimized by placing emphasis upon the developments occurring since the previous review of each subject and a more detailed evaluation of the new work in several rapidly developing fields of each phase is attempted.

The Quantum Yield of Photosynthesis (Robert Emerson) discusses the maximum observable quantum efficiency and the quantum yield as a function of wavelength of light. Physiology of Salt Tolerance (Leon Bernstein, H. E. Hayward) is restricted to an evaluation of physiological factors involved in this tolerance. The Naturally Occurring Auxins and Inhibitors (Joyce A. Bently) is concerned with hormones controlling growth, i.e., the auxins, together with possible antiauxins and related inhibitors. Destruction of Auxin (Peter M. Ray) deals largely with recent progress in the biochemistry and physiology of auxin destruction in plants. Metabolism of Ascorbic Acid in Plants: Part I. Function (L. W. Mapson) discusses the function of this vitamin in plants. Physiology of the Tobacco Plant (Robert A. Steinberg, Y. C. Tso) deals with the physiology, nutrition, and metabolism of the tobacco plant and the immediate post-harvest changes in the leaf. Mineral Nutrition of Tree Crops (Walter Reuther, Tom W. Embleton, Winston W. Jones) draws some generalizations from studies concerned with the nutrition of fruit trees, emphasizes recent studies, and calls attention to unique problems thus revealed. Physiology of the Fresh Water Algae (R. Ulmen, B. F. Folkes) considers recent evidence of interrelations between respiratory processes and carbohydrate and proteins in plants. Auxin Uses: Flowering and Fruiting (A. C. Leopold) discusses and relates the practical applications to science. Herbicides (K. C. M. Woodford, K. Holly) is concerned chiefly with the principles relating of their action and not with the technology of Morphogenesis in Lower Plants (L. F. Jaffe) considers the variety of systems in which individual, normal, developing cells are observed and experimented upon in the slime molds, true fungi, and bryophytes. Postharvest Physiology (R. M. Rich) reviews successively the main new facts concerning the conditions of ripening, the gas metabolism of postharvest fruits. The Biogenesis of Flavonoids in Plants (Lucile Smith, Britton Chance) reveals the possible activities of the cytochrome-linked systems in nonphotosynthetic tissues, respiratory dark reactions in photosynthetic cells, and light.

This is a significant compilation and definitely high standards of the previous volumes in the series.—HUGH W. BENNETT, ARS, USDA, Mississippi Agr. Exp. St.

Agronomic Affairs

POSITION AVAILABLE

Pedologist. Applications invited for position of Assistant Professor of Soil Science, duties to commence up to September 1, 1959. Initial salary $6000-$7000 depending on training and experience. Excellent opportunities for advancement.

Preference given to university graduate with Ph.D. or equivalent training, who has specialized in pedology. Must have had adequate soil survey experience with special training in soil genesis and classification.

Duties include teaching, research, and extension work in pedology, and work with the Alberta soil survey. Confirmation of appointment subject to satisfactory completion of probationary period of 2 to 4 years.

Applications with details of training and experience, personal information, recent photograph, and the names of three references should be addressed to: Head, Department of Soil Science, University of Alberta, Edmonton, Canada. Closing date: May 31, 1959.

POSITIONS WANTED

Soil Microbiologist, Ph.D., with teaching experience, desires position in university or industrial interest in symbiotic nitrogen-fixing bacteria, biology and limnology. Write AJ 3–1.

Soil Scientist desires research or industrial work of soil fertility. Has M.S. in Soils and B.S. in Economics and Agricultural Education. Six years experience in design and analysis of field plot and experiments. Age 40, married, one child. Write AJ 3.

Agronomist: M. S. Soils, L. S. U. 1959, desires research, or experiment station position. Training and soil fertility (laboratory and field), experience in soil testing laboratory. Competent skill for operation of the most frequently used laboratory instruments. Age 27, married, two children. Write AJ 3–3.