BOOK REVIEWS, continued

Soil Biochemistry, Vol. 2


This second volume of Soil Biochemistry even exceeds the excellence of the first volume in this series. The editors have not only demonstrated their comprehension and appreciation of current trends in soil biochemistry and soil biology, but, in their selection of topics for this second volume, have also highlighted several directions in which further work should be fruitful and illuminating. In addition to grouping related topics artfully under larger and unifying headings, the editors have successfully enlisted, as authors, experts in the various disciplines, regardless of their nationality, scientific interests, or professional affiliations.

Discussed under the heading of “Characterization of Biochemicals from Soil” are the colloid chemical properties of humic materials; their chemical, biological, and spectroscopic characterization; and definitive discussions of chromatographic and isotopic (both radioactive and stable) methods of analysis. The heading, “Biological Reactions in Soil,” covers a spectrum that includes the metabolism in soil of insecticides, fungicides, and nematocides; enzymatic activities and their determination in soil; the methodology and applicability of radioespirometry; the biochemistry of soil polysaccharides; and the biogeochemistry of iron and minor elements in soil. The last heading, “Soil Microbiology,” reviews several discussions in this publication. His discussion on the role of metals during pedogenesis is lucid and could be considered a good reference on this subject.

Brown Forest Soils of Hungary


Pál Stefanovits is a professor of soil science at the University of Agricultural Sciences in Gödöllő, Hungary, and claims to have started mapping Hungarian soils in 1943. Since that time he has authored many publications about the soils of his country, including two editions (1956 and 1963) of Magyarország talajai (The Soils of Hungary). He mentions that he has worked primarily on forest soils, which occur mainly in the hilly parts of Hungary, while his colleague, L. Sziics, has worked more on the chernozemic soils that are more confined to plains areas.

This book, on brown forest soils, has been translated into English by L. Zombori under the supervision of J. W. Muir of the USDA Coolauay Research Station. Soil. It has 18 pages of photographs (12 p. in color) of soil profiles, landscapes and thin sections, and 6 p. of thin sections in black and white.