
Experimental Design and Its Statistical Basis. *D. J. Finney.* The University of Chicago Press, Chicago 37, Illinois. 1955. pp. 169. \$4.50.

A biological experiment involves (1) an idea, (2) one or more variables, (3) an experimental design, (4) a statistical analysis, and (5) an interpretation. This book by Finney is an introductory account of the role of design in planning experiments. Biologists will profit from reading it. The exposition is remarkably clear, as non-mathematical as possible, and as extensive as a short book will allow.

EARL I. GREEN

Petrography, An Introduction to the Study of Rocks in Thin Sections. *Howel Williams, Francis J. Turner and Charles M. Gilbert.* W. H. Freeman and Co., San Francisco, 1955. x + 406 pp. \$6.50.

This work is a textbook for students of petrography at the intermediate level. It represents the combined efforts of three specialists on igneous, metamorphic and sedimentary rocks, and is a most welcome addition because of this trinity. The rock descriptions are augmented by more than three hundred "microdrawings" by Williams, and these display the graphic ability for which he is noted.

In the preface the authors state that "no new rock names have been coined." Most petrographers will be thankful for this. However, the authors have perpetuated a vast technical vocabulary, some of which would be better if permanently forgotten. Some of the phraseology is so loose as to be misleading, for example: "*Bentonite* is montmorillonite formed by alteration of vitric ash." Most petrographers regard bentonite (derived from the Fort Benton shale) as a rock name, whereas montmorillonite is surely the name of a mineral and, as such, is independent of any particular mode of origin.

Dahlite is misspelled (p. 376). Were this name not derived from the proper name Dahll, the author's spelling might be acceptable because of continued usage inasmuch as the erroneous spelling is almost as frequent as the correct.

Although most of the book is descriptive, rather than interpretive, the reviewer particularly enjoyed some of the interpretive comments, such as (p. 163): "We do not subscribe to this view." (Nor does the reviewer.)

Why such highly altered rocks as serpentinites should be considered under igneous rather than metamorphic rocks is puzzling to the reviewer, except that there appears to be ample tradition for classifying some strange things under igneous rocks—strange in the sense that the minerals presently comprising them hardly could have resulted from solidification of a magma or even from pronounced deuteric effects in many cases.

While the reviewer has commented critically on some minor matters, the book is a most excellent treatment of the mineral compositions and textural characteristics of all kinds of rocks.

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