illustrated by the passive <u>presentation</u> of (experimental and observational) data in two-way-tables. Analogously, more advanced sections on <u>how</u> to use matrices (and operations defined by them) are illustrated by recommendations on the (active) <u>interpretation</u> of data.

It may be ungracious to criticise an author for failing to achieve what he did not attempt, nor claim to do; this book is emphatically <u>not</u> a textbook in algebra: the proofs of important theories - although correct could well be improved. Nor is it a textbook in statistics. However, this reviewer hopes that it shall be read as widely as it deserves: it shall then help many biologists to complete the simplest analyses of their data, and encourage them to collaborate with mathematical statisticians, for the more refined interpretations.

One may, moreover, hope that it will also encourage attempts to understand more advanced books on linear algebra, as well as introductions to modern statistics.

As a final remark (possibly conditioned by the reviewer's personal interests and taste) one could desire more examples, showing the efficiency of matrix-techniques, dealing with <u>discrete</u> varieties as it is often required in genetics (cf. Corsten L. C., <u>Biometrics</u>, 13, 451+).

The emphasis on the importance of "generalised inverses", (1951) an exceedingly valuable device, is most welcome.

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Algèbres Non Associatives et Algèbres Génétiques, by Mme. Monique Bertrand. Gauthier-Villars, Paris, 1966. 103 pages. F.20.-

A non-associative algebra A of order n over a field F is baric if there is a homomorphism w of A into F such that  $w(x_0) \neq 0$  for some  $x_0 \in A$ . A commutative baric algebra is a genetic algebra if the characteristic function of each element  $T = \alpha I + f(Rx_1, \ldots)$  of the enveloping algebra depends on the  $w(x_1)$  rather than on the  $x_1$ . Genetic algebras were introduced by R.D. Schafer in 1949 in the American Journal of Mathematics.

The book is divided into three parts. Part I is an elementary exposition of some basic results and techniques in the theory of non-associative algebras. Some of these are early results of A.A. Albert and I.M.H. Etherington which are necessary for an understanding of part III. Part II (seven pages) introduces the basic ideas of genetics which lead to the study of train and genetic algebras. The third part is essentially a translation of papers of Schafer, Etherington and H. Gonshor on train algebras, special train algebras and genetic algebras.

There are some minor errors and misprints.

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