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★ **Algebras in genetics.**

Lecture Notes in Biomathematics, 36.

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This is a complete account of all that had appeared at the time of publication on the subject of genetic algebras, with references also to several papers awaiting publication. The bibliography lists some fifty contributions directly on the subject, by 16 authors and an editor. It includes, for example, the reviewer's paper [Proc. Roy. Soc. Edinburgh **59** (1939), 242–258; [MR0000597 \(1,99e\)](#)] which initiated the study of genetic algebras, the seminal papers of R. D. Schafer [Amer. J. Math. **71** (1949), 121–135; [MR0027751 \(10,350a\)](#)] and O. Reiersøl [Math. Scand. **10** (1962), 25–44; [MR0137740 \(25 #1189\)](#)] and the many papers by Gonshor, Holgate, Heuch and others. The book may be read at different levels. Experts on genetic algebras will find it an invaluable reference source, and they may profit by seeing how the author discusses their papers and places them in context, and in some cases generalises their theorems. Geneticists, mathematically literate but not knowing anything about genetic algebras, or indeed what an algebra is, will find here all lucidly explained: they can read sample theorems and can safely take the proofs on trust. The author is very careful and painstakingly thorough. There are a sprinkling of misprints which will cause no trouble (e.g. Monique Bertrand, author of a booklet on genetic algebras, is referred to more than once as Bertran).

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