THE SERVICE OF STATISTICAL FORMULAE IN THE
ANALYSIS OF PLAT YIELDS

J. Arthur Harris

INTRODUCTORY
For many years I have watched with satisfaction the progress in scientific method which has at least accompanied, if indeed it has not been largely the product of, the activities of the American Society of Agronomy.

From the national standpoint, the agronomist has a most important function to fulfill. The increase in agricultural production which is essential if a rapidly growing population is to be maintained in physical fitness, and with leisure for mental productiveness, can be realized only by the more intensive application of scientific method in three interrelated fields of agricultural research and practice. Without attempting the difficult task of arranging them in the order of their potential economic importance, we may note that these are: (a) The extension of productive acreage through the various processes generally designated as reclamation; (b) the increase in the effectiveness of all methods of cultivation, fertilization, harvesting, storage, transportation, preservation, and marketing; and (c) the importation of species or of agricultural varieties suitable for special purposes, or suitable for cultivation under special conditions, and the improvement of existing varieties and the development of new forms by breeding.

In all of these lines, but particularly in the second and third, advance must rest primarily upon the results of quantitative ex-

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