
The subtitle of Li's book, "A Non-mathematical Exposition of the Theory of Statistics Written for Experimental Scientists", is a significant descriptor. The book is unusual in being nonmathematical without being nontheoretical. Basic theoretical concepts are developed by empirical methods, utilizing hypothetical populations for which all possible samples can be listed and studied. The technique is to state a theorem, then to show by reference to the hypothetical population and sampling distributions obtained from it how the theorem applies. The technique may not appeal to mathematicians looking for formal proofs, but it is an effective means for providing the practical statistician with insight and understanding. Theory is supported by discussions of applications to a variety of subject-matter fields, and good selections of problems follow each chapter.

The book is divided into the following three main parts: (i) Basic concepts and definitions, and normal, t, χ², and F, distributions; (ii) Analysis of variance, covariance, regression; (iii) Sampling from binomial and multinomial populations, transformations, distribution-free methods. Review chapters separate the three parts.

Readers of the Agronomy Journal will be interested in comparing this book to Snedecor's classic, STATISTICAL METHODS. They will find that Li's text is more intensive and theory-oriented than Snedecor's extensive practice-oriented book. Consistent with this approach, Li gives less space to intricate computations arising from complex experiments, but for the more straightforward situations he considers he gives more of the "why". The two books complement each other very well. Both are books for the practical man.

Within the framework he establishes, Li's book is admirably organized, and it is of doubtful value to criticize him for omissions. Nevertheless, one is somewhat disappointed to find nothing on multiple regression, nor on analysis of variance with unequal or disproportional sub-class numbers. It is odd, too, that Li nowhere uses or mentions a finite population correction, although he makes frequent use of small finite populations.

Over-riding these minor negative comments, this reviewer considers Li to be one of the very best books available on applied analytic statistics. In addition, it is an excellent book from which to teach the one-year beginning course for which the author intends it to be used.—F. E. McVay, North Carolina State College.

THE MEASUREMENT OF GRASSLAND PRODUCTIVITY:


This book includes reports by British forage workers presented in a symposium at the University of Nottingham in 1959. Emphasis is given to basic factors of plant growth and to utilization of forage by ruminants both as fresh herbage and hay.

Information is well organized by presentation in five phases: I—generalities of this complex problem; II—plant growth relationships; III—forage consumption by livestock; IV—animal production; and V—farm scale measurements. Field experiments are summarized and indicate the advantages and limitations of the measurement techniques used.

Measurement of the complex interrelationships of forage production by plants under various climatic and fertility conditions is recognized. Information is presented regarding the use of forages in relation to their nutritive value as measured in animal growth and production. Based on work largely conducted in Great Britain and Ireland, and with the author's opinions, suggestions are given that should aid in developing techniques adapted for use under variable conditions elsewhere. Agronomists and those in animal husbandry and nutrition of forage crops will find interest in this book. Author and subject indices facilitate its use.—VANCE G. SPRAGUE, Cropt Research Division, ARS, USDA, Regional Pasture Research Laboratory, University Park, Pa.

WEST AFRICAN COTTON RESEARCH CONFERENCE. Report published by the Regional Research Station, Ministry of Agriculture, Samaru, Northern Nigeria. 209 pp. 1957. $6.00 per copy.

This report of a conference held November 18–23, 1957, is still timely for those interested in the agronomic and economic importance of this crop in a large section of a large continent. The conference was attended by representatives of 12 countries or territories and they presented 31 papers on the various aspects of cotton culture and 2 papers on cotton marketing in these areas. About half of the papers are in English and the others in French. Summaries are given in both languages.

Agronomic Affairs

SOIL SCIENCE CONGRESS HOUSING RESERVATIONS REQUESTED

All participants who want dormitory housing and meal service during the 7th International Soil Science Congress at the University of Wisconsin in August should fill out the reservation card and mail it to the Congress Manager at the earliest possible date. The attendance will be large and the earlier the card is returned the greater the assurance of getting satisfactory accommodations. No deposit is required for a reservation.

If you do not have a reservation card, request one from Prof. Emil Truog, Congress Manager, Soils Building, Madison 6, Wisc.

POSITIONS WANTED

Agronomist, Ph.D., with minors in genetics and botany. Desires teaching and/or research position. Experienced in classroom teaching as well as plant breeding and crop production research. Age 34, married, 2 children. Available on reasonable notice to present employer. Write AJ 5–1.


Agronomist, M.S. 1953, ½ course work towards Ph.D. completed. Two years experience as Federal Grain Inspector, five years with state institution in teaching, plant breeding, and production research. Married, 3 children, age 32. Desires new position in either research or teaching, U.S. or Foreign. Write AJ 5–3.