BIOMETRIKA

A Journal for the Statistical Study of Biological Problems

Volume 37 Contents Parts 3 and 4, December 1950

1. A simple stochastic epidemic. By N. T. J. BAILEY. 2. On the Fisher-Behrens test. By G. A. BARNARD. 3. The incomplete Beta Function as a contour integral and a quickly converging series for its inverse. By M. E. WISE. 4. On the levels of significance of the incomplete Beta Function and the F-distribution. By L. A. AROIAN. 5. On the generalized second limit-theorem in the calculus of probabilities. By D. G. KENDALL and K. S. RAO. 6. A note on the cumulants of Kendall's S-distribution. By H. SILVERSTON E.7. The comparison of percentages in matched samples. By W. G. COCHRAN 8. The distribution of the variance-ratio in random samples of any size drawn from non-normal universes. By A. K. GAYEN. 9. The exact partition of χ^2 and its application to the problem of the pooling of small expectations. By H. O. LANCASTER. 10. Use of range in analysis of variance. By H. O. HARTLEY. 11. On the comparison of estimators. By N. L. JOHNSON. 12. A rapid method for ascertaining serial lag correlation. By G. D. GIBSON. 13. Tables of the χ^2-integral and of the cumulative Poisson distribution. By H. O. HARTLEY and E. S. PEARSON. 14. The maximum F-ratio as a short-cut test for heterogeneity of variance. By H. O. HARTLEY. 15. On the sequential t-test. By S. RUSHTON. 16. Properties of some tests in sequential analysis. By A. G. BAKER. 17. The unbiassed estimation of heterogeneous error variances. By A. S. C. EHRENBERG. 18. Sampling theory of the negative binomial and logarithmic series distributions. By F. J. ANSCOMBE. 19. On questions raised by the combinations of tests based on discontinuous distributions. By E. S. PEARSON. 20. Significance of difference between the means of two non-normal samples. By A. K. GAYEN. 21. Testing for serial correlation in least squares regression—I. By J. DURBIN and G. S. WATSON. 22. Distribution of 'Student'-Fisher's t in samples from compound normal functions. By H. HYRENIUS. 23. MISCELLANEA. 24. REVIEWS.

The subscription price, *payable in advance*, is 45s. inland, 54s. export (per volume including postage). Cheques should be drawn to Biometrika and sent to "The Secretary, Biometrika Office, Department of Statistics, University College, London, W.C. 1." All foreign cheques must be in sterling and drawn on a bank having a London agency.

SKANDINAVISK AKTUARIETIDSKRIFT

1950 – Parts 1 – 2

Contents

GERHARD ARFWEDSEN.....Some Problems in the Collective Theory of Risk

E. KIVIKOSKI.....Ein Vernachlässigtes Interpolationsverfahren

E. ZWINGGI. A Study of the Dependence of the Premium on the Rate of Interest

ERICH MICHALUP .....On Inverse Linear Interpolation

H. V. MUHSAM.....An Attempt to Classify Life Tables

Annual subscription: 10 Swedish Crowns (Approx. $2.00).

Inquiries and orders may be addressed to the Editor,

SKÄRVIKSVÄGEN 7, DJURSHOLM (SWEDEN)

Institute of Mathematical Statistics is collaborating with JSTOR to digitize, preserve, and extend access to *The Annals of Mathematical Statistics.*

www.jstor.org

ROYAL STATISTICAL SOCIETY

SPECIAL REPRINTS

SYMPOSIUM ON STOCHASTIC PROCESSES:
Stochastic Processes and Statistical Physics, J. E. MOYAL
Some Evolutionary Stochastic Processes, M. S. BARTLETT
Stochastic Processes and Population Growth, D. G. KENDALL
(With Discussion on the papers)
Price, post free 12s. 6d.

TABLES OF SEQUENTIAL INSPECTION SCHEMES TO CONTROL FRACTION DEFECTIVE, F. J. ANSCOMBE
Price, post free, 2s. 6d.

These papers, published in the *Journal of the Royal Statistical Society*, 1949 have now been issued in reprint form. Copies may be obtained direct from

The Royal Statistical Society,
4, Portugal Street,
London, W.C.2.

MATHEMATICAL REVIEWS

A journal containing reviews of the mathematical literature of the world, with full subject and author indices

Publication of this journal is sponsored by the American Mathematical Society, Mathematical Association of America, Institute of Mathematical Statistics, London Mathematical Society, Edinburgh Mathematical Society, Union Matematica Argentina, and others.

Subscriptions accepted to cover the calendar year only.
Issues appear monthly except July. $20.00 per year.

Send subscription order or request for sample copy to

AMERICAN MATHEMATICAL SOCIETY
531 West 116th Street, New York City 27

SANKHYĀ

The Indian Journal of Statistics

Edited by P. C. Mahalanobis

Vol. X, Parts 1 and 2, 1950

Statistical Analysis of Some Physiological Experiments
ARTHUR LINDER AND ETIENNE GRANDJEAN
On a Problem of Two Dimensional Probability.....R. C. BOSE
Univariate and Multivariate Analysis as Problems in Testing of Composite Hypotheses—I.....S. N. ROY
The Theory of Fractional Replication in Factorial Experiments
C. RADHAKRISHNA RAO
A Note on the Fractional Replication of Factorial Arrangements....K. S. BANERJEE
Two Dimensional Systematic Sampling and the Associated Stratified and Random Sampling.....A. C. DAS
Economic Classification of Agricultural Regions in Bengal.....A. GHOSH
Miscellaneous Notes
Note on "Anthropometric Survey of the United Provinces, 1941: A Statistical Study, Part III—Anthropological Observations"
G. MORGENSTIERNE
United Nations Economic and Social Council Sub-Commission on Statistical Sampling: Report to the Statistical Commission
Book Reviews

Annual subscription: 30 rupees
Inquiries and orders may be addressed to the
Editor, Sankhyā, Presidency College, Calcutta, India.

ECONOMETRICA

Journal of the Econometric Society

Contents of Vol. 19, January, 1951, include:

R. M. GOODWIN
The Nonlinear Accelerator and the Persistence of Business Cycles
JAMES N. MORGAN.....Consumer Substitutions between Butter and Margarine
STEPHEN ENKE
Equilibrium among Spatially Separated Markets: Solution by Electric Analogue
Report of the Berkeley Meeting, August 1–5, 1950
Report of the Harvard Meeting, August 31–September 5, 1950
Report of the Council for 1950
Treasurer's Report
Election of Fellows, 1950
Announcements

Published Quarterly — Subscription to Nonmembers: $9.00 per year

The Econometric Society is an international society for the advancement of economic theory in its relation to statistics and mathematics.

Subscriptions to *Econometrica* and inquiries about the work of the Society and the procedure in applying for membership should be addressed to William B. Simpson, Secretary, The Econometric Society, The University of Chicago, Chicago 37, Illinois, U.S.A.

JOURNAL OF THE AMERICAN STATISTICAL ASSOCIATION

December 1950
Vol. 45 No. 252

1108 16th Street, N. W., Washington 6, D. C.

Who Are the Unemployed?.....PHILIP M. HAUSER AND ROBERT B. PEARL
Some Sampling Simplified.....JOHN W. TUKEY
The Effectiveness of Quality Control Charts.....LEO A. AROIAN AND HOWARD LEVENE
Two-Choice Selection.....IRWIN BROSS
Operations Analysis and the Theory of Games: An Advertising Example..LEONARD GILLMAN
Design of Experiments for Most Precise Slope Estimation or Linear Extrapolation
CUTHBERT DANIEL AND NICHOLAS HEEREMA
Sequential Sampling from Finite Lots When the Proportion Defective is Small
J. H. CHUNG
Correction to "Some New Aspects of the Application of Maximum Likelihood to the Calculation of the Dosage Response Curve.....JEROME CORNFIELD
Index of *Journal*, Volume 45, 1950 (Numbers 249, 250, 251, 252)
Book Reviews

ASA

The American Statistical Association invites as members all persons interested in:
1. development of new theory and method
2. improvement of basic statistical data
3. application of statistical methods to practical problems.

THE INSTITUTE OF MATHEMATICAL STATISTICS

(Organized September 12, 1935)

OFFICERS FOR 1951

President:
P. S. DWYER, University of Michigan, Ann Arbor

President-Elect:
M. A. GIRSHICK, Stanford University, Stanford

Secretary-Treasurer:
C. H. FISCHER, University of Michigan, Ann Arbor

Editor:
T. W. ANDERSON, Columbia University, New York

The purpose of the Institute of Mathematical Statistics is to stimulate research in the mathematical theory of statistics and to promote cooperation between the field of pure research and the fields of application.

Membership dues including subscription to the ANNALS OF MATHEMATICAL STATISTICS are $10.00 per year within the United States and Canada and $7.00 per year elsewhere. Dues and inquiries regarding membership in the Institute should be sent to the Secretary-Treasurer of the Institute.

MEETINGS OF THE INSTITUTE

SPRING MEETING—OAK RIDGE, TENNESSEE—March 15–17, 1951.
To be held in conjunction with the Biometric Society.

SANTA MONICA, CALIFORNIA—June 16, 1951.
Abstracts must be in the hands of Associate Secretary J. L. Hodges, Jr., Statistical Laboratory, University of California, Berkeley 4, California, not later than May 1.

SUMMER MEETING—MINNEAPOLIS, MINNESOTA—September 3–7, 1951.
To be held in conjunction with the American Mathematical Society and the Mathematical Association of America. Abstracts must be in the hands of Associate Secretary K. J. Arnold, North Hall, University of Wisconsin, Madison, Wisconsin, not later than July 15.