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This Week's Citation Classic

Sokal R R & Rohlf F J. *Biometry: the principles and practice of statistics in biological research*. San Francisco: W.H. Freeman, 1969. 776 p.
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This book is a textbook on the application of statistical methods for descriptive, experimental, and analytical study of biological phenomena. Assuming little mathematical background, it develops the subject from an elementary introduction to the level required for current biological research. It emphasizes computational procedures and is suitable for self-study. [The *SCI*® indicates that this book has been cited in over 6,380 publications since 1969.]

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"This book grew out of a set of handouts prepared for my biometry classes at the University of Kansas. I had arrived there in 1951 fresh out of graduate school and full of enthusiasm about statistical methods, only to find that hardly any of the biologists there knew or used any statistics. I set about to remedy this situation and after several years of teaching biometry to graduate students and faculty auditors, began to have an appreciable impact on the type of work carried out in several of the departments. I discovered early that I had a bent for teaching and that even those who claimed lack of mathematical ability could be instructed to understand and use statistics successfully.

"In the late-1950s an unusually talented graduate student came to the University of Kansas. Although I introduced F.J. Rohlf to computers and computing, it soon became obvious that he was far more gifted in this field than I was and he indeed went on to become one of the outstanding computer biologists in the country. I was so impressed with his statistical and computing abilities that I asked him to collaborate with me in turning the handouts into a textbook. Our association has been maintained since those early years as friends and colleagues, most of the time at the same institution, collaborating not only in statistics but also in research on numerical taxonomy. Eventually this volume resulted, together with an accompanying book of tables.[1]

"Textbooks of statistics are prone to frequent citation by researchers in many disciplines who tend to cite the text as a cachet of authority for the statistical method they have applied. Because of its pedagogical approach, our evident enthusiasm for the subject, and the manner in which the material is presented in boxes enabling readers familiar with the book to rapidly return to a given test or procedure, the book has been highly successful. Its frequent use is attested to by the numerous citations. The book has enabled us to make converts to the employment of statistical methods far beyond the influence that we had first at the University of Kansas and then at the State University of New York at Stony Brook.

"The success of this volume led to a recent second edition[2] together with a new set of companion tables,[3] both of which have been very extensively revised with many new methods and developments included. We hope they will be as successful as the earlier volumes.

"The book has contributed to familiarizing biological researchers with various statistical methods. Extensive use of analysis of variance, the G-test for frequency data, randomization tests, and simultaneous test procedures are notable among them."

1. **Rohlf F J & Sokal R R.** *Statistical tables*. San Francisco: W.H. Freeman, 1969. 253 p.
2. **Sokal R R & Rohlf F J.** *Biometry: the principles and practice of statistics in biological research*. San Francisco: W.H. Freeman, 1981. 859 p.
3. **Rohlf F J & Sokal R R.** *Statistical tables*. San Francisco: W.H. Freeman, 1981. 219 p.