

Hoshmand, A.R.: **Statistical Methods for Environmental and Agricultural Sciences**. Second Edition. - CRC Press, Boca Raton - New York 1998. 439 pp. 100 tables. USD 74.95. ISBN 0-8493-3152-8.

This second edition is a revised version of the book, which has been used extensively around the world to teach statistical methods in agricultural and natural sciences. The book emphasizes the practical application of statistics and provides examples in various fields of environmental and agriculture sciences. Because the author uses simple, non-mathematical language to present statistical techniques, the reader requires only a familiarity with elementary algebra and mathematical notations to understand and apply the concepts described. Each chapter begins with a set of learning objectives, which enable readers to evaluate their understanding of the materials. Chapters are organized into subsections, which allow the reader to absorb the units incrementally. Summaries and review questions at the end of each chapter highlight the main points of the chapter and enable self-testing. Case studies reflecting the real-world events give the reader opportunity to evaluate the relevance of statistics in agricultural and environmental sciences.

The 14 chapters are arranged into six parts. Part I contains an introduction to how statistical concepts apply

to different fields of environmental and agricultural sciences, followed by descriptive measures of central tendency and variability. Part II covers probability and sampling concepts as used in inferential statistics. Essential techniques of estimation are discussed as well. Part III presents parametric methods in hypothesis testing, which include research designs of special interest to students of environmental and agricultural sciences. Part IV discusses a number of nonparametric techniques. Part V introduces the tests of association and prediction. Finally, analysis of change over time is discussed in Part VI. In the Appendices, a number of statistical tables are provided that are reprinted from other works. The book is equipped with a glossary of mathematical symbols and notations, and a subject index.

This valuable textbook is a useful tool in understanding how to apply and analyse statistical concepts. It is intended for students of agriculture and environmental sciences; however, other workers at agriculture and biology that are imperfectly informed about the statistical methods can use it.

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