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Titolo	Introduction to Nonparametric Statistics for the Biological Sciences Using R / / by Thomas W. MacFarland, Jan M. Yates
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ISBN	3-319-30634-0
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (XV, 329 p. 65 illus., 64 illus. in color.)
Disciplina	519.5
Soggetti	Biometry Mathematical statistics - Data processing Agriculture Statistics Biostatistics Statistics and Computing Statistical Theory and Methods
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Chapter 1 Nonparametric Statistics for the Biological Sciences -- Chapter 2 Sign Test -- Chapter 3 Chi-Square -- Chapter 4 Mann-Whitney U Test -- Chapter 5 Wilcoxon Matched-Pairs Signed-Ranks Test -- Chapter 6 Kruskal-Wallis H-Test for Oneway Analysis of Variance (ANOVA) by Ranks -- Chapter 7 Friedman Twoway Analysis of Variance (ANOVA) by Ranks -- Chapter 8 Spearman's Rank-Difference Coefficient of Correlation -- Chapter 9 Other Nonparametric Tests for the Biological Sciences.
Sommario/riassunto	This book contains a rich set of tools for nonparametric analyses, and the purpose of this supplemental text is to provide guidance to students and professional researchers on how R is used for nonparametric data analysis in the biological sciences: To introduce when nonparametric approaches to data analysis are appropriate To introduce the leading nonparametric tests commonly used in biostatistics and how R is used to generate appropriate statistics for each test To introduce common figures typically associated with

nonparametric data analysis and how R is used to generate appropriate figures in support of each data set. The book focuses on how R is used to distinguish between data that could be classified as nonparametric as opposed to data that could be classified as parametric, with both approaches to data classification covered extensively. Following an introductory lesson on nonparametric statistics for the biological sciences, the book is organized into eight self-contained lessons on various analyses and tests using R to broadly compare differences between data sets and statistical approach. This supplemental text is intended for: Upper-level undergraduate and graduate students majoring in the biological sciences, specifically those in agriculture, biology, and health science - both students in lecture-type courses and also those engaged in research projects, such as a master's thesis or a doctoral dissertation. And biological researchers at the professional level without a nonparametric statistics background but who regularly work with data more suitable to a nonparametric approach to data analysis.
