



The Science of Agriculture: A Biological Approach (5th Ed.)

Author: Dr. Ray V. Herren

Boston: Cengage Learning, Inc.

Date of Publication: July 06, 2017

ISBN 10: 1337271586

ISBN 13: 99781337271585

736 pages (Hardcover)

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Ray Herren's textbook, *The Science of Agriculture: A Biological Approach* (5th ed, 2017) provides instructors a framework for educating high school and college students in the constantly changing field of science, especially the biological sciences. The book explains the scientific principles behind the production of food and fiber. Modern agriculture is built on these principles, and it is through scientific inquiry that we progress. *The Science of Agriculture: A Biological Approach* is divided into 28 chapters, none of which take the traditional approach of most agricultural texts by focusing on the 'how' of production. Rather, this book focuses on the 'way' or means of production, thereby allowing its readers to build and strengthen their understanding of agriculture as a science.

Throughout the book, chapters feature appropriate and useful materials, including reader-friendly narrative, full-color photos, illustrations and designs of key points, explanations of learning objectives, discussion questions, and student learning activities.

Herren has updated this edition to include readings within each chapter. These readings are broken down into smaller sections with new headings to help students easily learn new concepts and quickly locate specific topics. Students will find 'bio briefs' that reflect on current news in the world of science and agriculture, and place a spotlight on exciting agricultural advancements. One of the most beneficial features of the book is its companion site, which features tools to support learning and facilitate teaching. These tools include answers to review questions, an answer key for the lab manual, lesson plans, PowerPoints, testing, construction plans, an image gallery, and resources for developing critical career skills.

Overall, *The Science of Agriculture: A Biological Approach*, 5th edition, has up-to-date information for high school and college students entering the exciting field of agriscience. It is in-depth and focuses on providing information for students as they learn the essential information necessary for continued exploration in agriscience. For instructors, the book is a great resource for planning and implementing an instructional program, and ensures an efficient use of time and other resources. Instructors and students can benefit from the book's companion site resources, which are easy to follow. Overall, the content is accessible and of excellent quality.

Dr. Ray Herren is a renowned author of life sciences textbooks. As a college professor, I utilize both *Exploring Agriscience* (5th ed, 2017) and *The Science of Agriculture: A Biological Approach* (5th ed, 2017) in my agriculture classes.

In comparing both of Dr. Ray Herren's textbooks and their benefits in terms of student usage, I feel that *Exploring Agriscience* is ideal for introducing students to different aspects of the agriculture industry through hands-on exploration activities. It is a good book for educating high school and college students on understanding basic agricultural terms and industry developments. This textbook focuses mainly on general agriculture concepts.

However, *The Science of Agriculture: A Biological Approach* provides instructors with an optimal framework for educating high school and college students. This textbook is good for students who have a basic knowledge of biological science and its impact on society. It is ideal as a supplementary textbook in any biological sciences course. In order to be able to properly utilize this textbook and to fully understand each chapter, students should have a general familiarity with the agricultural and biological sciences.

I recommend both of Dr. Ray Herren's textbooks to instructors because they both are well-structured, the exercises and exams are manageable, and the textbook content is up-to-date. Both textbooks are available in hardcover and eBook format.

References:

Herren, R. V. (2017). *The Science of Agriculture: A Biological Approach*. 5th Ed. Boston: Cengage Learning, Inc. ISBN-10: 1337271586; ISBN-13: 9781337271585

Herren, R.V. (2017). *Exploring Agriscience*. 5th Ed. Boston: Cengage Learning, Inc.
 ISBN 10: 1305949706; ISBN 13: 9781305949706

<u>Bibliographic Information</u>		<u>Bibliographic Information</u>	
<i>The Science of Agriculture: A Biological Approach</i>		<i>Exploring Agriscience</i>	
Author:	Ray V. Herren	Ray V. Herren	
Edition:	5 th edition	5 th edition	
Publisher:	Cengage Learning, Inc.	Cengage Learning, Inc	
Publication Date:	July 6, 2017	January 27, 2017	
Publication City/County United States	Boston, Massachusetts, United States	Mason, OH, United States	
Language:	English	English	
ISBN 10:	1337271586	1305949706	
ISBN 13:	99781337271585	9781305949706	
Length/Format:	736 pages (Hardcover)	608 pages (Hardcover)	
Cost:	\$131.95	\$131.95	
Subjects: / Horticulture	Science / Life Sciences	Science / Life Sciences / Horticulture	