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## Book Review

World Agriculture Series. Wheat: Science and Trade, first ed., Brett F. Carver, Wiley-Blackwell (2009). 569 pp., Library of Congress Catalog Card Number: 2008049844, ISBN: 978-0-8138-2024-8: £124.99, €208.40

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Readers may well question whether they wish to purchase another book on wheat, with a number of excellent volumes covering aspects of genetics and breeding, agronomy and production, grain structure and composition, and processing having been published over the last decade. However, several volumes are currently required to cover this full range of topics whereas this new volume aims to cover them all, and more, in a single volume of less than 600 pages. In order to do this the editor has brought together a formidable group of authors who have contributed 23 chapters on topics ranging from genomics to marketing.

The chapters are divided into four sections which essentially focus on the biology, production, breeding and utilisation of wheat. Thus, section 1 (the “making of the wheat plant”) has chapters on the origin and evolution of wheat, plant development and the flowering pathway while section 2 (“the making of a wheat crop”) covers all aspects of crop production and management, including the control of pests, pathogens and weeds, nitrogen management and yield improvement with limited water. Section 3, “the making of a wheat cultivar”, includes a broad introduction to the theory and practice of wheat breeding with more detailed chapters on more modern aspects of genetic improvement: genomics, marker-assisted selection, synthetics and transgenics. Finally, section 4 (“the making of a wheat industry”), covers aspects of grain composition, processing quality, new uses (including health benefits) and grain classification and trade.

Although the volume provides an impressive range of up-to-date coverage it does have one significant drawback which is most apparent in the section 4. This is a strong regional bias, with only nine of the 64 authors coming from countries other than the USA, Canada and Australia. Thus, the two chapters devoted to marketing and trade are focussed almost exclusively on these three countries, in which export markets are more dominant than in most wheat-producing countries. It is particularly disappointing to find little or nothing on China and the EU, which are the largest and second largest producers of wheat in the world, respectively, and which also have strong research communities. A similar bias is also present, although generally to a lesser extent, in other parts of the book.

Putting aside this criticism, the volume is an impressive achievement, providing almost encyclopaedic coverage with no obvious gaps. Consequently it is probably the best general text on wheat that is currently available, with the level of coverage and an accessible style making it suitable as a text for undergraduate and postgraduate students as well as a valuable source of information for practising wheat scientists.