

## Review of Garlic and Other Alliums. The Lore and the Science

**Garlic and Other Alliums. The Lore and the Science.** By E. Block (University of Albany, State University of New York). RSC Publishing, Cambridge, UK. 2010. xx + 454 pp. 6 × 9 in. \$42.00. ISBN 978-1-84973-180-5.

This book is at once the author's reflections on his career of studying the chemistry of the genus *Allium*, a review of the history of all research on the genus, and an effort to relate the chemistry and biology of the Alliaceae to the nonscientist. As such, there is something for everyone in its pages.

The first two chapters of the book delve into the botany/taxonomy and general phytochemistry of the genus and the early history of man's use of alliums, including their impact or presence in literature, poetry, art, architecture, and more.

Chapters 3 and 4 deal primarily with the chemistry and biochemistry of *Allium*, delving into the details of the compounds, their biosynthesis and transformations, and the effect of cooking on the chemistry of onion and garlic. These are the scientifically most detailed and challenging chapters.

Chapter 5 focuses on the use of *Allium* spp. in traditional and complementary medicine and botanical supplements. Discussed are medicinal uses in different cultures over the course of human history, current use in supplements, brief reviews of clinical trials, and adverse effects. The final chapter looks at the interactions of *Allium* spp., including allelopathic, antibiotic, herbicidal, insecticidal, and insect repellent and attractant properties.

In addition, there is an extensive bibliography of suggested additional reading; a large compilation of all the references cited in the text; tables of the flavor precursor content of representative Alliaceae, antibiotic activity of various *Allium*-derived compounds, and in vitro studies of the antitumor activity of *Allium* compounds; and color illustrations of various *Allium* spp.

This is a very affordable book, chock full of useful information and historical detail. It should be of interest to researchers in any discipline associated with natural products, particularly the food, phytomedicine, and supplement industries. It is also an excellent book for students of pharmacognosy and natural products chemistry. Nonscientists will also find much to learn and enjoy in this book.

**John H. Cardellina, II**

McCormick & Co., Inc.  
 Hunt Valley, Maryland

### ■ AUTHOR INFORMATION

#### Notes

The author declares no competing financial interest.

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