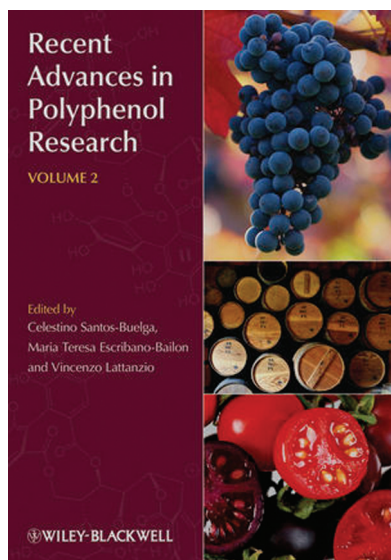


## MNF Books



### Recent Advances in Polyphenol Research, Vol. 2.

Celestino Santos-Buelga, Maria Teresa Escribano-Bailon and Vincenzo Lattanzio (Eds.)  
Wiley-Blackwell, 2010, pp. 352  
ISBN 978-1-4051-9399-3

In our daily diet, we ingest polyphenols by consuming fruits, vegetables and any kind of plant-based foods and beverages (*e.g.* coffee, tea, wine and chocolate). Polyphenols are

well known for their antioxidative properties and are considered to play a key role in the prevention of cancer and other diseases. The number of scientific publications on these substances is increasing each year and for this reason the summary of the state of the art in books or review articles is very helpful for scientists in the field.

The present book – as a sequel to volume one of this series – covers the following areas in 12 chapters. Two chapters deal with the chemistry and function of anthocyanins, whereas one chapter covers all aspects of flavonoid chemistry of leguminosae, the third largest family of flowering plants. In Chapter 4, the chemistry and biological activity of ellagitanines, an underestimated class of polyphenols with complex chemical structures, are the main focus. Chapter 5 describes metabolic engineering-based strategies to optimize the flavonoid content of plants. This aspect opens up new fields to improve the nutritional value and potential health-promoting properties of plants in the future. In this context, the biological activity of polyphenols in plant cells, summarized in Chapter 6, is of great interest. Phenolics in plants also control leaf movement, which is covered in Chapter 8. Two chapters

are dedicated to red wine, also an important source of polyphenols. In Chapter 3 an update on wine pigments is presented, whereas Chapter 10 discusses urinary resveratrol metabolites as useful biomarkers of wine consumption in both clinical and epidemiological studies. Chapter 9 deals with the metabolism and physiological effects of isoflavones in cattle and sheep together with the carry-over of isoflavones in milk products for human consumption. The final three chapters cover the health effects of polyphenols ranging from cognitive aging to antiatherosclerotic effects of dietary flavonoids.

The topics covered in this book follow on nicely from volume one of this series, with several additional aspects of polyphenols being discussed. The book with its more than 300 pages summarizes and updates the present knowledge on polyphenols and also addresses interesting new aspects that have not been discussed in detail before. I can highly recommend this book to all scientists interested in the field of polyphenols.

*Hans-Ulrich Humpf*  
*Institute of Food Chemistry*  
*University of Muenster*  
*Germany*