

Henry, R.J.: **Practical Applications of Plant Molecular Biology**. - Chapman & Hall, London - Weinheim - New York - Tokyo - Melbourne - Madras 1997. 258 pp. ISBN 0-412-73210-6.

The application of molecular biology to the analysis and manipulation of plant genomes provides practical approaches to enhancement of the efficiency of agriculture, forestry and food production by improvement of both quality and quantity of products. These techniques are also useful for the study and management of wild plant populations for species conservation or weed control. Some of that potent techniques have already made good deal in the progress of above mentioned disciplines. The book outlines the current techniques and their practical applications. The emphasis is on the application of molecular biology in agricultural and plant sciences. Details of useful protocols are also included.

The book is divided into five chapters. Chapter 1 - Identification of plants using molecular techniques - describes the main molecular marker techniques available for use in plant identification. Estimation of genetic variation in plants using molecular techniques is content of chapter 2. In chapter 3 are described molecular markers used in plant improvement. Chapter 4 gives to reader the introduction to plant genetic engineering, including a description both of the techniques available and the possible applications. Chapter 5 - Useful routine protocols in plant molecular biology - is oriented to laboratory practice this techniques. Appendices content additional and useful information: plant genome (databases, internet links), classification of flowering plants (outlook of plant system), restriction endonucleases data, plant culture media, and many others.

Practical Applications of Plant Molecular Biology is an important title which cover major techniques and how they are applied to a range of vitality important areas. All undergraduates studying plant sciences, molecular biology, biotechnology and agricultural sciences would benefit from having access to this title. The author, Robert J. Henry is Professor and Head of the Centre for Plant Conservation Genetics at Southern Cross University, NSW, Australia, put into this book his many years' experience of teaching this subject to students. This book also provides an invaluable source of reference for professionals in agriculture, plant breeding, crop protection and improvement, biotechnology and molecular biology.

I. BABŮREK (*Praha*)