



Special Issue Reprint

Chloroplast

www.mdpi.com/books/reprint/859

Edited by Bartolome Sabater

ISBN 978-3-03897-336-2 (Softback) ISBN 978-3-03897-337-9 (PDF)



Chloroplasts are at the front line of many advancements in molecular biology, ranging from evolutionary biology to the mechanism of energy transduction, also including stress responses and programmed leaf death. In addition to the relevance of basic knowledge, advances are unveiling promising insights to improve plant productivity, disease resistance, and environmental control. The production of secondary metabolites and proteins by transformed chloroplasts adds further excitement to applied investigations on chloroplasts.

The comparison of the sequences of the chloroplast DNA of different plants provides valuable information on gene content, reordering in the circular chloroplast DNA, and mutational genetic-derive, relevant to the evolution of the chloroplast. Increasing facilities for intense genome sequencing have prompted many laboratories to focus on the chloroplast DNA. Reflecting these efforts, more than half of the articles in this book deal with functional or evolutionary investigations based on sequence analyses of chloroplast DNA. Additional topics treated in the issue include post-transcriptional control, the processing of nuclear encoded preproteins of chloroplasts, the response of photosynthetic machinery to water deficit, turn-over of chloroplast proteins, mechanism of chloroplast division, and chloroplast movements.



Order Your Print Copy You can order print copies at www.mdpi.com/books/reprint/859

MDPINBOOKS Publishing Open Access Books & Series

MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



Open Access

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



Author Focus

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



High Quality & Rapid Publication

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



ᆔ

High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).

Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.

MDPI AG Grosspeteranlage 5 4052 Basel Switzerland Tel: +41 61 683 77 34 www.mdpi.com/books books@mdpi.com

