



*plants*



*Special Issue Reprint*

## Phytic Acid and Mineral Biofortification Strategies

[www.mdpi.com/books/reprint/2612](http://www.mdpi.com/books/reprint/2612)

Edited by

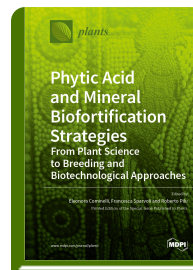
Eleonora Cominelli

Francesca Sparvoli

Roberto Pilu

ISBN 978-3-03936-202-8 (Hardback)

ISBN 978-3-03936-203-5 (PDF)



Two billion people worldwide, mainly in developing countries, where diets are based on the consumption of staple crops, suffer from mineral deficiencies, particularly for iron and zinc. Mineral biofortification includes different strategies aimed to increase mineral concentration and to improve mineral availability from the diet (mineral bioavailability) in the edible parts of plants, particularly the seeds. Phytic acid is a compound that strongly reduces mineral bioavailability as, being highly negatively charged, it strongly binds cations, acting as a magnet. All the contributions in this book aim to describe new results, review the literature, and comment on some of the economic and sociological aspects concerning mineral biofortification research. A number of contributions are related to the study of mineral transport, seed accumulation, and approaches to increase seed micronutrient concentration. The remaining ones are mainly focused on the study of low phytic acid mutants.



Order Your Print Copy

You can order print copies at

[www.mdpi.com/books/reprint/2612](http://www.mdpi.com/books/reprint/2612)

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.



## 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.