



agriculture



Special Issue Reprint

Vermicompost in Sustainable Crop Production

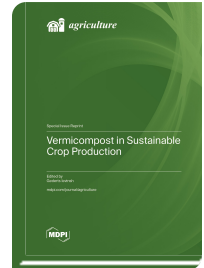
www.mdpi.com/books/reprint/11390

Edited by

Gederts levinsh

ISBN 978-3-7258-4953-6 (Hardback)

ISBN 978-3-7258-4954-3 (PDF)



Sustainable crop production requires new means of fertilization in light of both the use of renewable resources and improving soil quality. The processing of biological waste by the concerted action of earthworms and microorganisms leads to the production of vermicompost—an organic fertilizer with high microbiological activity and rich in mineral nutrients and humic substances. Vermicompost is an extremely promising type of amendment, as evidenced by many studies at laboratory and field scales, in addition to the results of practical application. In organic farming, vermicompost can be used as a basal soil fertilizer, providing plant-available mineral nutrients and organic matter as a source for additional nutrients and microbiological activity. In conventional farming practices, vermicompost can substitute chemical fertilizers. It is evident that the benefits derived from the application of vermicompost in agriculture are related to direct and indirect effects on crop plants, in addition to the improvement of soil properties, leading to a long-term increase in soil sustainability. However, the lack of understanding of specific mechanisms of beneficial influence hinders the ability to scientifically predict the outcome of vermicompost application in different crop production systems. Additional scientific knowledge is therefore necessary to characterize the functional relationships involved in vermicompost production and after its application in soil in order to ensure the quality of this organic fertilizer for wider use.



Order Your Print Copy

You can order print copies at

www.mdpi.com/books/reprint/11390

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.