





Special Issue Reprint

Silage Preparation, Processing and Efficient Utilization

www.mdpi.com/books/reprint/10601

Edited by Siran Wang

ISBN 978-3-7258-3411-2 (Hardback) ISBN 978-3-7258-3412-9 (PDF)



Ensiling is a technique for the long-term preservation of feed; it is both effective and widespread, and is characterized by its low cost and ease of operation. At the initial stage of ensiling, water-soluble carbohydrates are broken down into carbon dioxide, water, and energy under the respiration of aerobic bacteria. As oxygen is depleted, lactic acid bacteria attached to forage multiply and convert WSC into organic acids, thereby creating an anaerobic and acidic environment, which, in turn, inhibits the activities of undesirable bacteria, such as clostridia, and reduces the risk of forage spoilage. Ensilage is a complex process involving the actions of microbes and biochemical variations. It is one of the most significant methods of preserving herbages. Animals that consume silage have been shown to enhance the bioavailability of animal protein and decrease methane emissions. A plethora of silage resources are available on Earth. However, the utilization rates remain low, resulting in significant resource wastage and substantial environmental degradation. Conversely, the accelerated growth in animal production has resulted in a persistent annual deficit of animal roughage. Consequently, there is a need to investigate the recent situations of silage preparation, processing, and efficient utilization. This reprint, entitled "Silage Preparation, Processing and Efficient Utilization", comprises one editorial and eleven original research articles. Collectively, these contributions illustrate the promising future of silage application, with the objective of advancing the field of animal feed.





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.

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

