



antibiotics

IMPACT
FACTOR
4.8

Indexed in:
PubMed

CITESCORE
5.5

Special Issue Reprint

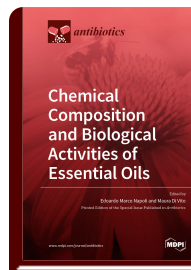
Chemical Composition and Biological Activities of Essential Oils

www.mdpi.com/books/reprint/3981

Edited by
Edoardo Marco Napoli
Maura Di Vito

ISBN 978-3-0365-1250-1 (Hardback)

ISBN 978-3-0365-1251-8 (PDF)



Essential oils extracted by the distillation or hydrodistillation of aromatic plants are a complex mixture of volatile compounds with several biological activities. Their efficacy as antimicrobial agents is related to the activity of several natural compounds belonging to different chemical families that can act both in synergy with each other and with other antibiotics. The antibiotic resistance detected among pathogens has been quickly increasing in recent years, and the control of some of these microorganisms is becoming a planetary emergency for human and animal health. The control of the microbial growth is a problem of great importance also for the food industry (food deterioration and shelf life extension) and for the world of cultural heritage (indoor and outdoor phenomena of biodeterioration). Essential oils can play an important role in this scenario, due their recognized broad-spectrum antimicrobial activity. Therefore, the main subject of this Special Issue includes an essential oil-based approach to control microorganisms in areas such as human and veterinary medicine, entomology, food industry and agriculture. In addition, the chemical composition of essential oils from endemic and rare medicinal/aromatic plants, nanoformulations of essential oils, applications in human and veterinary medicine and its use as animal feeding supplements are topics covered in this Special Issue



Order Your Print Copy

You can order print copies at

www.mdpi.com/books/reprint/3981

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.