



marine drugs

IMPACT
FACTOR
4.9

Indexed in:
PubMed

CITESCORE
9.6

Special Issue Reprint

Marine Natural Products with Antifouling Activity

www.mdpi.com/books/reprint/4547

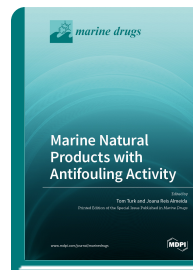
Edited by

Tom Turk

Joana Reis Almeida

ISBN 978-3-0365-2145-9 (Hardback)

ISBN 978-3-0365-2146-6 (PDF)



Marine fouling affects most man-made surfaces temporarily or permanently immersed in the sea, causing important economic costs. Intense research is aimed at methods for preventing or reducing fouling development. The most widespread solution to inhibit fouling is to make surfaces unsuitable for settlers by coating them with antifouling paints containing toxic compounds. Most such antifouling agents give undesirable effects on nontarget species, including commercially important ones. The search for new nontoxic antifouling technologies has become a necessity, particularly after the ban of organotin compounds such as tributyltin (TBT), once the most widespread and used antifouling agent. Alternative organic and metal-based biocides are now used in antifouling paints, but their possible toxic effects on the aquatic environment are not yet fully understood. A nontoxic alternative for antifouling protection comes from the possibility of adopting natural antifouling compounds that are and may be found in marine sessile invertebrates like sponges, bryozoans, corals, and tunicates and in marine microorganisms. Such metabolites can prevent their producers from being fouled on by other organisms or be responsible for specific metabolic functions that may interfere with biofouling species adhesion. As natural marine compounds, they may inhibit settlement through a nontoxic mechanism without adverse effects to the environment. They could be developed into active ingredients of new antifouling coatings. So far, a rather limited number of natural products antifoulants (NPAs) has been isolated from marine organisms, but a huge reservoir of compounds with potential antifouling activity is hidden in marine organisms. The SI aims at the discovery of such their activity, toxicity and potential application in environmentally friendly coatings.



Order Your Print Copy

You can order print copies at

www.mdpi.com/books/reprint/4547

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.