

Antimicrobial research at Keele University

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ABX network

Natural Products/Peptides

- * Marine organisms
- * African/Chinese endogenous (medicinal) plants
- * Synthesis and semi-synthesis



Contents lists available at ScienceDirect

Comparative Biochemistry and Physiology, Part C

journal homepage: www.elsevier.com/locate/cbpc



Antibacterial and antibiotic potentiating activities of tropical marine sponge extracts



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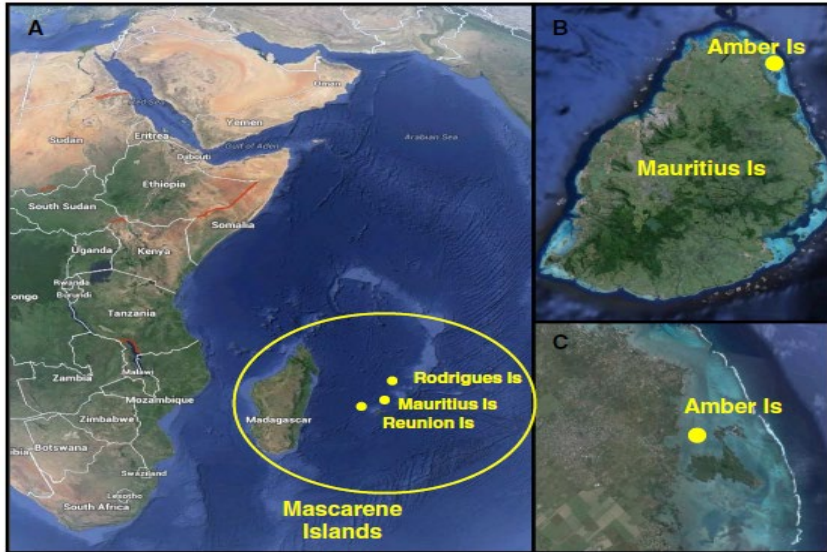
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Mauritian marine organisms



Neopetrosia exigua

The Royal Society exchange grant

Chinese medicinal plants/peptides






International Journal of
Molecular Sciences



Article

Coupling Plant-Derived Cyclotides to Metal Surfaces: An Antibacterial and Antibiofilm Study

Pan Cao ^{1,2}, Ying Yang ², Fidelia Ijeoma Uche ², Sarah Ruth Hart ² , Wen-Wu Li ^{2,*}  and
Chengqing Yuan ^{1,*} 

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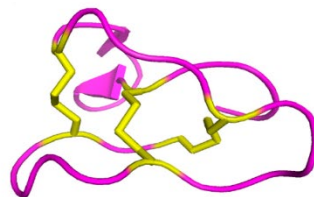
² Institute for Science and Technology in Medicine, Keele University, Stoke-on-Trent ST4 7QB, UK; y.yang@keele.ac.uk (Y.Y.); f.i.uche@keele.ac.uk (F.I.U.); s.r.hart@keele.ac.uk (S.R.H.)

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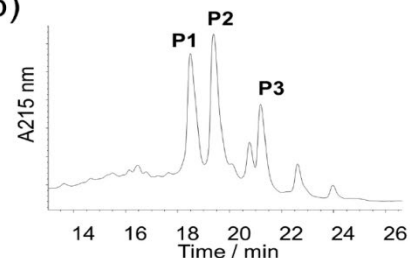


Viola philippica

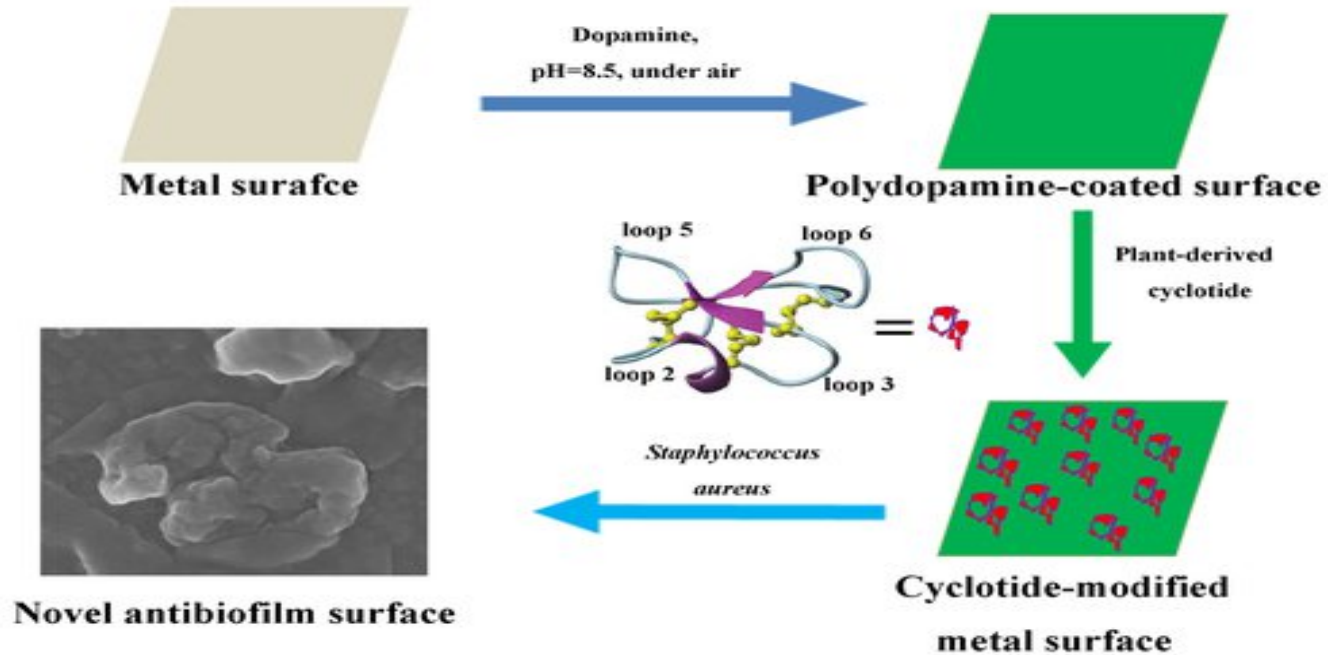
a)



b)



Surface modification



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Research



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Investigation of the antibiofilm capacity of peptide-modified stainless steel

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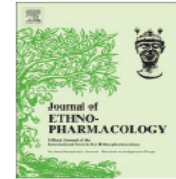
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Journal of Ethnopharmacology

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A characterization of the antimalarial activity of the bark of *Cylicodiscus gabunensis* Harms



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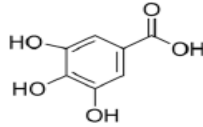
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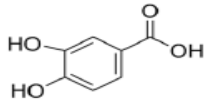


Photo: H.W. Owusu

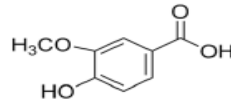
Phenolic compounds



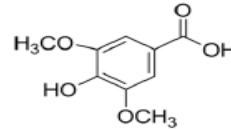
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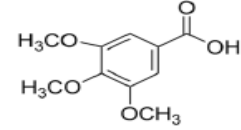
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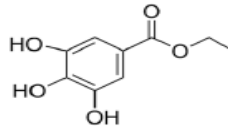
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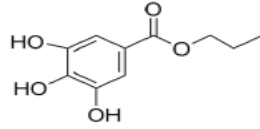
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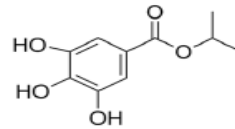
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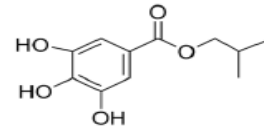
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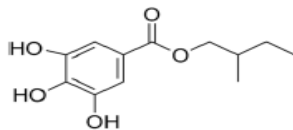
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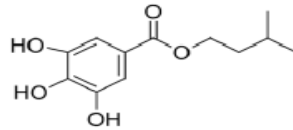
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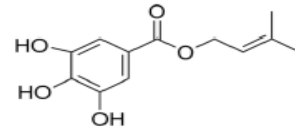
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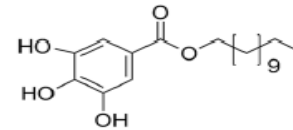
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11



12



13

African medicinal plants

Aldulaimi et al. *BMC Complementary and Alternative Medicine* _#####_
<https://doi.org/10.1186/s12906-019-2589-2>

BMC Complementary and
Alternative Medicine

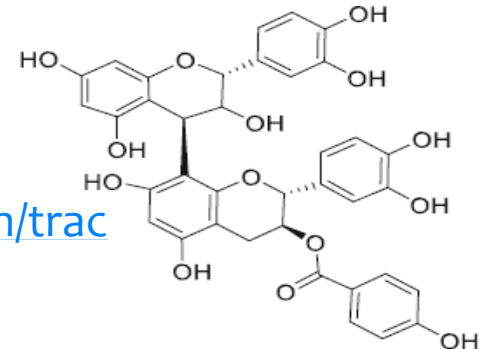
RESEARCH ARTICLE

Open Access

Discovery, synthesis and antibacterial evaluation of phenolic compounds from *Cylicodiscus gabunensis* harms

Omar Aldulaimi^{1,2,4}, Falko Drijfhout³, Fidelia I. Uche¹, Paul Horrocks¹ and Wen-Wu Li¹

<https://bmccomplementaltermmed.biomedcentral.com/tracking/pdf/10.1186/s12906-019-2589-2>



Expertise

- * Isolation and structure elucidation of natural products and peptides
- * Chemical modification and synthesis
- * Antibacterial and antibiofilm assay
- * Surface modification of implants using antibacterial peptides