A family of multicyclic indolosesquiterpenes from a bacterial endophyte.

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Details

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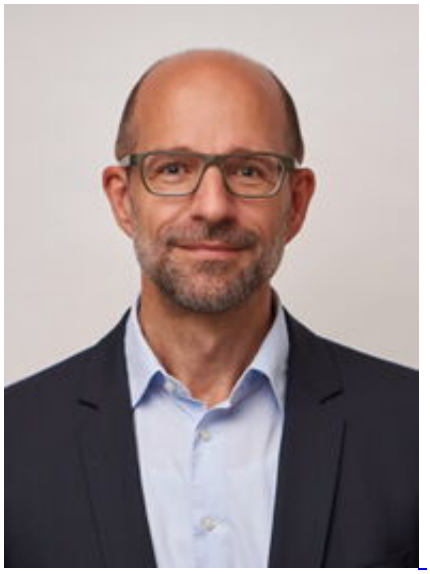
Abstract

Three novel indolosesquiterpenes, xiamycin B (1b), indosespene (2), and sespenine (3), along with the known xiamycin A (1a) were isolated from the culture broth of Streptomyces sp. HKI0595, a bacterial endophyte of the widespread mangrove tree Kandelia candel. Agar diffusion assays revealed moderate to strong antimicrobial activities against several bacteria, including methicillin-resistant Staphylococcus aureus and vancomycin-resistant Enterococcus faecalis, while no cytotoxicity against human tumor cell lines was observed. Together with the previously reported oridamycin, the endophyte metabolites represent the first indolosesquiterpenes isolated from prokaryotes.

Beteiligte Forschungseinheiten

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