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New bioactive secondary metabolites from *Streptomyces lividans*

During our search for bioactive compounds from actinomycetes, the *Streptomyces lividans* was large scale fermented on rice solid medium, followed by working and purification, affording the new 1-nona-decanoyl, 4-oleyl disuccinate (1), the bacterial new metabolite: filoboletic acid; (9Z,11E)-8,13-dihydroxy octadeca-9,11-dienoic acid (2), and the microbial new metabolite: sitosteryl-3 β-D-glucoside (3). This was in addition to further ten known bioactive metabolites: ferulic acid (4), glycerol linoleate, linoleic acid, indol-3-acetic acid methyl ester, 4-hydroxy-phenyl acetic acid, 2-hydroxy-phenyl acetic acid, 3-(hydroxy-acetyl)-indole, indol-3-carboxylic, p-hydroxy-benzoic acid and uracil. The chemical structures of the new metabolites (1-3) were confirmed by extensive 1D and 2D NMR and mass spectrometry, and by comparison with literature data. The antimicrobial activity of the strain extract was studied using a set of microorganisms. The isolation and taxonomical characterization of *Streptomyces griseorubens* strain ASMR4 is reported as well.

Biography

Mohammad Magdy El-Metwally is currently working in Department of Botany and microbiology, Faculty of Science at Damanhour University, Egypt. Magdy international experience includes various programs, contributions and participation in different countries for diverse fields of study. Magdy research interests reflect in Magdy's wide range of publications in various national and international journals.

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