Characterisation of the Metabolites of an Antibacterial Endophyte Botryodiplodia theobromae Pat. of Dracaena draco L. by LC–MS/MS

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Abstract:

Botryodiplodia theobromae Pat. belongs to the endophytic fungi that live within the tissues of medicinal plants and produce bioactive natural products. The endophyte was isolated from the leaves of Dracaena draco L. The LC–MS-based metabolite fingerprinting of the ethyl acetate extract of B. theobromae with antibacterial activity led to the identification of 13 metabolites pertaining to various classes: dipeptides (maculosin and L,L-cyclo(leucylprolyl)), alkaloid (norharman), coumarin and isocoumarins (bergapten, meranzin and monocerin), sesquiterpene (dihydrocumambrin A), aldehyde (formyl indanone), fatty alcohol (halaminol A) and fatty acid amide (palmitoleamide, palmitamide, capsi-amide and oleamide). This study reports for the first time, the LC–MS and LC–MS/MS identification of 13 known bioactive metabolites from the antibacterial ethyl acetate extract of B. theobromae isolated from the leaves of D. draco L.

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