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GC-MS determination of chemical composition of chloroformic extracts from the marine plants *Thalassia testudinum and Syringodium filiforme* and their pharmacological activities

arine plants represent a prolific source of new bioactive metabolites with multiple pharmacological applications. Thalassia testudinum and Syringodium filiforme are the most abundant marine angiosperms from the Cuban coastal zones and they hydroethanolic extracts have shown antioxidant, cytoprotective and antiinflammatory and properties in different models, however, the non-polar components of these extracts have not been fully characterized and their cytotoxic capacity and antibacterial effects have not been evaluated. The obtainment and characterization of the chloroform fraction from T. testudinum and S. filiforme hydroethanolic extracts were carried out. By mean of GC-MS

analyses around 70 compounds were identified in each fraction and they were mainly composed of fatty acids (80%). Some other compounds such as benzoic acid derivatives, glycerides, and sterols were also found in lower proportions. In both extracts, palmitic acid was the predominant component. Our study also revealed a cytotoxic potential of this organic fraction in the cell lines A549 (human lung carcinoma) and EA.hy926 (human immortalized endothelial cells) as well as is antibacterial effects.

Biography

David Marrero Delange is currently working as a Research Director in the Institute of Marine Sciences. Cuba. He also worked in the National Center for Scientific Research; Center of Natural Products, Cuba, from 1991 to Sept. 2016. He is one of the authors of some nutritional Supplements like Prevenox and DALPREMIX which are registered in Cuba. His major research work includes Gas Chromatography, GC-MS analysis, HPLC analysis, Spectroscopic Analysis, Chemistry of Natural products, Development and Validation of analytical methodologies for Quality Control (active ingredients, finished forms, and pharmacokinetic and metabolism), GMP, GLP. David has done his Fellowship programme from the Flemish Minister for education for Cuban Academics, Ghent University by Prof. Patrik Sandra. Belgium, "Recent developments in capillary gas chromatography"; Research Institute for Chromatography. Kortriik. Belgium by Prof. Pat Sandra and Prof. Frank David. He



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has also done International training on Standardization and Quality Assurance. NITS. Bureau of Indian Standard in 2013. He is an Invited Professor at University of Valley of San Francisco Petrolina, Pernambuco, Brazil.

He is the Chief Editor of the Editorial Board of Journal CNIC Chemistry. Chairman of the Editorial Board of the Journal CNIC Chemistry; Referee Journal CNIC, J. Food Science and Chemical Engineering, Cuban j of Pharmacy, J of Medicinal Cuban Plants, Analytical Chemistry Letter, J of Natural Products, J of Chromatography, J. Essential Oil-Bearing Plants, Pharmaceutical Research, J. Food Engineering, Pharmacognosy Research, J. of Biological Science and Health (Biotecnia). He is also an active member of the Cuban Society of Chemistry, Cuban Committee of Chromatography and Cuban Society of Pharmacy, Latin American Committee of Chromatography, ItalolatinoAmerican Society of Ethnomedicine (SILAE). He also served as a member of the Organizing and Scientific Committee of various events

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