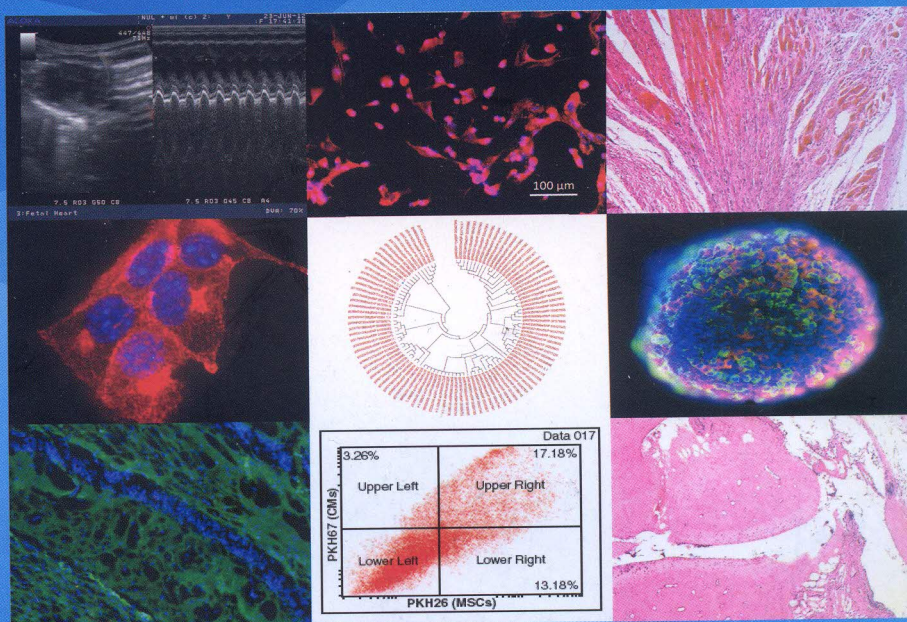


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Evaluation of Antifungal and Antimicrobial Activities of Secondary Metabolites Isolated from *Limonium* Mill.

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In this study, *in vitro* antifungal and antimicrobial activities of methanol crude extracts for aerial parts and roots obtained from the *Limonium* (L.) Mill., *Limonium gmelinii* and *Limonium myrianthum*, were examined. The antimicrobial activity from *Limonium* (L.) Mill. were evaluated against *Candida albicans* ATCC 90028, *Candida glabrata* ATCC90030, *Candida krusei* ATCC 6258, *Asperigillus fumigatus* ATCC 204305, Methicillin-resistant *Staphylococcus aureus* ATCC 33591, *Cryptococcus neoformans* ATCC 90113, *Staphylococcus aureus* ATCC 29213, *Escherichia coli* ATCC 35218, *Pseudomonas aeruginosa* ATCC 27853, and *Mycobacterium intracellulare* ATCC 23068. The bioassay-guided fractionation led to the isolation of sixteen compounds. Their chemical structures were elucidated by spectroscopic analysis including HR-MS, 1D, and 2D NMR. In addition, *Limonium gmelinii* extract showed a very potent antifungal activity against *Candida* fungus with values over 80% of inhibition. Interesting to mention that roots showed values even over 90%. *Limonium myrianthum* showed a moderate activity against *Candida ablicans* with a value over 70% and aerial part showed a promising activity with a value around 50% of inhibition. This work can be considered as a good primary study for further *in vitro* studies for preparation of a suitable dosage forms for a natural antifungal drugs.

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