Antimicrobial Activity of Fatty Acid Methyl Esters of Some Members of Chenopodiaceae

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Z. Naturforsch. **63c**, 331–336 (2008); received November 26/December 28, 2007

Fatty acid methyl ester (FAME) extracts of four halophytic plants, viz. Arthrocnemum indicum, Salicornia brachiata, Suaeda maritima and Suaeda monoica belonging to the family Chenopodiaceae, were prepared and their composition was analyzed by GC-MS. The FAME extracts were also screened for antibacterial and antifungal activities. The GC-MS analysis revealed the presence of more saturated fatty acids than unsaturated fatty acids. Among the fatty acids analyzed, the relative percentage of lauric acid was high in S. brachiata (61.85%). The FAME extract of S. brachiata showed the highest antibacterial and antifungal activities among the extracts tested. The other three extracts showed potent antibacterial and moderate anticandidal activities.

Key words: Chenopodiaceae, Fatty Acid, Antimicrobial Activity