High-Performance Liquid Chromatographic Analysis of Anthraquinone Compounds in the *Laurera benguelensis**

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Abstract—A high-performance liquid chromatographic (HPLC) method has been developed for the characterization of anthraquinone metabolites in extracts of the lichen *Laurera benguelensis*. With this method four anthraquinone derivatives 1,8-dihydroxy-3-methoxy-6-methylanthraquinone, 1,8-dihydroxy-3-formyl-6-methoxyanthraquinone, 1,8-dihydroxy-3-hydroxymethyl-6-methoxy-anthraquinone and 1,3,8-trihyroxy-6-methylanthraquinone can be analyzed. Components of lichen were detected by characteristic ultraviolet spectra and relative retention times. This is first report of phytochemical analysis of *L. benguelensis*. Importance of this research is in recognizing some new source (lichen and its extracts) as a natural emplacement of antioxidants because oxidation with free radicals or autooxidation is big problem for preservation of food products.

DOI: 10.1134/S0036024409090258