A novel seco-dibenzopyrrocoline alkaloid, named oubatchensine 6, and five phenanthroindolizidines (1–5) were isolated from Cryptocarya oubatchensis, and their structures were elucidated. Displacement centrifugal partition chromatography was used to purify compounds 1 and 6. Structure determination of the latter was carried out by mass spectrometry, NMR spectroscopy, quantum chemistry, and computer-assisted structure determination. Cytotoxic activity against KB cells was then investigated.

The biological screening of several extracts from Neocalen- donian flora allowed the selection of Cryptocarya oubatchensis (Lauraceae) as a source of alkaloids with extremely promising in vitro cytotoxic activity against human carcinoma cell lines. The Lauraceae family, mainly found in western Asia, produces well-known aromatic evergreen trees or shrubs such as laurel, cinnamon, cassia, camphor, and avocado or deciduous plants such as sassafras. About 40 alkaloids have already been described in the Cryptocarya genus. Most of them are antitumoral, bactericidal, antimicrobial, fungicidal, insecticidal, or antioxidant agents.1–3 C. oubatchensis has been previously investigated, and three quaternary dibenzopyrrocoline alkaloids were identified.4 In the present study, compounds 1–5 were isolated from the leaves and compounds 1 and 6 were isolated from the bark of C. oubatchensis. The latter were isolated by pH-zone refining centrifugal partition chromatography (CPC),5 a displacement mode that is specific to both acidic and basic analytes. CPC is a support-free liquid–liquid chromatographic technique that provides important benefits for natural compound purification, such as no sample loss on solid support and high selectivity and recovery.6,7 Structure determination of 6 was supported by computer-assisted struc-

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