

Antimicrobial Activity of the Extract and Isolated Compounds from *Baccharis dracunculifolia* D. C. (Asteraceae)

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Z. Naturforsch. **63c**, 40–46 (2008); received May 29/July 5, 2007

Baccharis dracunculifolia D.C. (Asteraceae) is the most important plant source of the Brazilian green propolis. Since propolis is known for its antimicrobial activity, the aim of this work was to evaluate the antimicrobial activities of *B. dracunculifolia* and some of its isolated compounds. The results showed that the leaves extract of *B. dracunculifolia* (BdE) presents antifungal and antibacterial activities, especially against *Candida krusei* and *Cryptococcus neoformans*, for which the BdE showed IC₅₀ values of 65 µg mL⁻¹ and 40 µg mL⁻¹, respectively. In comparison to the BdE, it was observed that the green propolis extract (GPE) showed better antimicrobial activity, displaying an IC₅₀ value of 9 µg mL⁻¹ against *C. krusei*. Also, a phytochemical study of the BdE was carried out, affording the isolation of ursolic acid (**1**), 2α-hydroxy-ursolic acid (**2**), isosakuranetin (**3**), aromadendrin-4'-methylether (**4**), baccharin (**5**), viscidone (**6**), hautriwaic acid lactone (**7**), and the clerodane diterpene **8**. This is the first time that the presence of compounds **1**, **2**, and **8** in *B. dracunculifolia* has been reported. Among the isolated compounds, **1** and **2** showed antibacterial activity against methicillin-resistant *Staphylococcus aureus*, displaying IC₅₀ values of 5 µg mL⁻¹ and 3 µg mL⁻¹, respectively. **3** was active against *C. neoformans*, showing an IC₅₀ value of 15 µg mL⁻¹ and a MIC value of 40 µg mL⁻¹, while compounds **4–8** were inactive against all tested microorganisms. The results showed that the BdE, similar to the GPE, displays antimicrobial activity, which may be related to the effect of several compounds present in the crude extract.

Key words: *Baccharis dracunculifolia*, Brazilian Green Propolis, Antimicrobial Activity