

Lack of clastogenic/genotoxic effects of *Baccharis dracunculifolia* extract on Swiss mouse peripheral blood cells

N.S. Andrade¹, F.F. Perazzo² and E.L. Maistro³

¹Laboratório de Genética, Universidade José do Rosário Vellano, Alfenas, MG, Brasil

²Laboratório de Pesquisa em Fármacos, Universidade Federal do Amapá, Macapá, AP, Brasil

³Departamento de Fonoaudiologia, Faculdade de Filosofia e Ciências, Universidade Estadual Paulista, Marília, SP, Brasil

Corresponding author: E.L. Maistro

E-mail: edson.maistro@marilia.unesp.br

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ABSTRACT. *Baccharis dracunculifolia* De Candolle (DC) (Asteraceae) is indigenous throughout southeastern Latin America and is used by local people in traditional medicine. This plant is known to be the source of resin for the highly valued Brazilian green propolis. As no information is available on the safety of high doses of *B. dracunculifolia* extract, we evaluated the mutagenic potential of high doses of this plant extract *in vivo* on peripheral blood cells of Swiss mice using the comet assay and the micronucleus test. The extract was administered by gavage at doses of 1000, 1500 and 2000 mg/kg body weight. Peripheral blood cell samples were collected 4 and 24 h after treatment for the comet assay (genotoxicity assay), and at 48 and 72 h for the micronucleus test (clastogenicity assay). The *B. dracunculifolia* extract was devoid of clastogenic/genotoxic activity at all doses.

Key words: *Baccharis dracunculifolia*; Micronucleus test; Single cell gel electrophoresis; Mutagenicity assay