

Bioactivity of Biflorin, a Typical *o*-Naphthoquinone Isolated from *Capraria biflora* L.

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Capraria biflora L. (Scrophulariaceae) is a perennial shrub widely distributed in several countries of tropical America. The present work verified the cytotoxic and antioxidant potential of biflorin, an *o*-naphthoquinone isolated from *C. biflora* collected in the northeast region of Brazil. The cytotoxicity was tested on three different animal cell models: mouse erythrocytes, sea urchin embryos and tumor cells, while the antioxidant activity was assayed by the thiocyanate method. Biflorin lacked activity on mouse erythrocytes as well as on the development of sea urchin eggs, but strongly inhibited the growth of all five tested tumor cell lines, especially the skin, breast and colon cancer cells with IC₅₀ of 0.40, 0.43 and 0.88 µg/ml for B16, MCF-7 and HCT-8, respectively. Biflorin also showed potent antioxidant activity against autoxidation of oleic acid in a water/alcohol system.

Key words: *Capraria biflora*, Biflorin, Cytotoxicity