

Anti-Inflammatory and Cytotoxic Activities of Chichipegenin, Peniocerol, and Macdougallin Isolated from *Myrtillocactus geometrizans* (Mart. ex Pfeiff.) Con.

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The oleanane-type triterpene chichipegenin and the sterols peniocerol and macdougallin, isolated from *Myrtillocactus geometrizans*, showed anti-inflammatory activities in both the 12-*O*-tetradecanoylphorbol-13-acetate (TPA)-induced mouse ear edema model and the carrageenan-induced rat paw edema model. All tested compounds inhibited the TPA-induced edema in a dose-dependent manner, with ED₅₀ values less than or equal to that shown by indomethacin. Among them, peniocerol was the most active compound. However, only peniocerol and macdougallin reduced carrageenan-induced rat paw edema. On the other hand, peniocerol and macdougallin showed cytotoxicity against several human cancer cell lines. These results indicate that compounds isolated from *M. geometrizans* possess anti-inflammatory and cytotoxic properties, and the presence of chichipegenin in the aerial parts could justify the medicinal uses attributed to the plant.

Key words: *Myrtillocactus geometrizans*, Anti-Inflammatory, Cytotoxicity