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Marine Sponges of the Genus *Neopetrosia* with Anti-Inflammatory Activity

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***SUMMARY*. The present study aimed to investigate the anti-inflammatory effect of marine sponges of the genus *Neopetrosia* which are abundant in the Colombian Caribbean. We obtained three fractions from a total methanolic extract of *Neopetrosia rosariensis* and *proxima*. *In vivo* activity was measured using λ-carrageenan-induced paw edema assay. The *in vitro* inhibitory effects were evaluated on myeloperoxidase activity (MPO) and nitric oxide (NO), prostaglandin E2 (PGE2), and tumor necrosis factor alpha (TNF-α) production. Total extracts of *N. rosariensis* and *N. proxima* (100 mg/Kg) significantly inhibited the paw edema of rats (71.74% and 60.06%, respectively). Dichloromethane and methanol fractions of *Neopetrosia* sponges reduced MPO activity. Only, dichloromethane fraction of *N. rosariensis* significantly inhibited NO (66%), PGE2 (30.5%) and TNF-α production (72%). Our results show anti-inflammatory activity in extracts and fractions from species of marine sponges belonging to *Neopetrosia* genus and open the way for complementary studies to purify and identify active molecules.**

KEY WORDS: Anti-inflammatory agents, λ-Carrageenan, Inflammatory mediators, Marine sponges, *Neopetrosia*.

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