



Chemical Composition and Anti-Inflammatory Activity of the Essential Oil of *Schinus terebinthifolius* Raddi (Anacardiaceae) Fruits

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SUMMARY. Traditional usage of *Schinus terebinthifolius* Raddi, popularly known as Brazilian pepper, includes the treatment of inflammatory diseases. Chemical composition of the essential oil extracted of fruits of *S. terebinthifolius* collected in Mato Grosso do Sul was investigated and the anti-inflammatory activity was evaluated. The essential oil (EOST) obtained in Cleveger and analyzed by GC-MS, exhibited predominance of monoterpenes. The oral administration of EOST significantly inhibited, in dose dependent manner, the carrageenan (Cg) induced rat paw oedema. The observed inhibitions after two hours of Cg-injection were 57 ± 8 % (100 mg kg^{-1}) for EOST and 66 ± 6 % for dexamethasone (DEXA). In another model of inflammation, the oral administration of EOST (100 mg kg^{-1}) reduced 56 ± 11 % while DEXA inhibited about 91 ± 5 % the Cg-induced leukocyte migration in the air pouch model. Finally, in the persistent inflammation induced by complete Freund's adjuvant (CFA), the daily oral treatment with EOST (200 mg/kg) inhibited 33 ± 6 % in 4 days after injection of CFA. The essential oil (EOST) exhibited a marked anti-inflammatory activity and these response profiles differ from others oils collected in different places.

KEY WORDS: Anacardiaceae, Inflammation, Pink pepper, *Schinus terebinthifolius*.

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