Free Radical Scavenging and Anti-Edematogenic Activities of Essential Oil Obtained from *Trichilia silvatica* DC. (Meliaceae) Leaves

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SUMMARY. The present study was focused in evaluating the chemical composition, the anti-edematogenic and antioxidant activities of essential oil obtained from *Trichilia silvatica* (EOTS) leaves. The EOTS was extracted by hydrodistillation and their analyses were performed by GC/MS. The main compounds identified in the EOTS were sesquiterpenes. Furthermore, the EOTS exhibited antioxidant and in vivo anti-inflammatory activity. The oral administration of EOTS (100 and 300 mg/kg), significantly inhibited the carrageenan (Cg) induced rat paw edema. The observed inhibitions were 54 ± 7 and 49 ± 6 % (100 mg/kg) for EOTS and 68 ± 6 % and 66 ± 11 % for dexamethasone after 2 and 4 h after Cg-injection, respectively. In conclusion, the present work showed for the first time, that the anti-inflammatory effects of essential oil seem to be mainly associated with the high levels of sesquiterpene in the leaves of this plant.