



Phytochemical Profile and Anti-Inflammatory Effect of the Orchid *Catasetum macroglossum*

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SUMMARY. The pseudobulbs of *Catasetum macroglossum* (Orchidaceae) are popularly used as topical anti-inflammatory and antirheumatic in the forests and medium lands of Ecuador, but they were never studied. We evaluated whether the decoction of *C. macroglossum* has antiinflammatory effect and which is its phytochemical profile. The effect of 30 and 90 mg lyophilized/kg via i.p. was studied on the carrageenan-induced edema in the paw rat, in comparison with saline and indomethacin. The paw edema was inhibited in about 60 to 80 % after 1 to 3 h of carrageenan injection. The phytochemical profile was done by chemical tests to evaluate the presence of reducing sugars and flavonoids, and TLC of the aqueous extract and the hydrolyzed one. There were detected reductive substances after the acidic hydrolysis, and two spots with the features and Rf of the standard glucose and mannose. Some peaks in the HPLC-DAD chromatogram showed absorption at 225 and 280 nm in agreement with dihydro derivatives of phenantrene and stilbene in traces amount. The antiinflammatory kinetic of *C. macroglossum* suggests inhibition on prostaglandins. This work validates the popular use of *C. macroglossum*, which could be due to the presence of a glucomannan and traces of phenantrene and stilbene, as in other species of *Catasetum*.

KEY WORDS: Anti-inflammatory, Carrageenan test, *Catasetum macroglossum*, Glucose, HPLC-DAD, Mannose, Phenantrene, Stilbene, TLC.

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