

NATIVE AND CULTIVATED PASSIFLORAS IN BRAZIL. PHARMACOGNOSTIC, PHYTOCHEMICAL AND PHARMACOLOGICAL EVALUATIONS CONCERNING POPULAR USES AND DEVELOPMENT OF LOCAL PHYTOMEDICINES

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The rational and scientific use of medicinal plants from the Brazilian rainforest is currently considered an important scientific and therapeutical alternative, mainly by the great pharmaceutical industries. The genus *Passiflora*, *Passifloraceae*, commonly used by the folks in tropical and subtropical regions has already been proven to have potential therapeutical activities. The species *Passiflora incarnate* has been used in many countries as anxiolytic, sedative and antispasmodic in Brazil. Many phytotherapies (medicines) with *Passiflora* extracts can be found in the market. However, since no therapeutical activity could yet be suitably proven, there are no scientific data of its efficacy. The present work aims at isolating and biomonitoring the active substances of the extracts of the species. Eventually the species with proven pharmacological activity will be characterized considering their macroscopic aspects, and the contents of their bioactive substances will also be determined.



Passiflora species: *P. edulis*

SUMMARY OF RESULTS TO DATE AND PERSPECTIVES

In a preliminary screening, the hydroalcoholic extracts of *P. alata*, *P. edulis* and *P. coccinea* (aerial parts) presented anxiolytic-like and anticonvulsant activities in mice. Possible effects of all extracts on the spontaneous motor activity in mice were not excluded. Tested on experimentally-induced gastric ulcers in mice, the extract of *P. alata* reduced the ethanol-induced gastric ulcers in rats. The antiulcer activity of the extracts of the aerial parts of *P. edulis*, *P. coccinea* and *P. nitida* also presented antiulcer activities in the same animal model. Tested at 0.5, 1.0 and 2 g/kg, p.o., the extract of *P. incarnata* (aerial parts) obtained from commercial sources had not presented antisecretory gastric effect in pylorus-ligated mice, and was ineffective on gastric ulcers induced by 75% ethanol, cold-restrained stress or non-steroidal anti-inflammatory agents (NSAIDs). At equal doses, the extract of *P. edulis* (fruits) protected the gastric mucosa against gastric ulcers induced by cold-restraint stress and NSAIDs, but not ethanol. The results indicated that the anxiolytic-like and anticonvulsant activities detected for the *Passiflora* extracts, may be related to the presence of flavonoids in these species. These compounds have been shown to present benzodiazepine-like activity. The antiulcer activity of *P. alata* and *P. edulis* was unrelated to inhibition of gastric acid secretion, and possibly associated with its central depressant activity. The photochemical composition of fractions (hexane, dichloromethane, ethyl acetate, water) derived from freeze-dried extracts by successive partitioning, has been performed. The aerial parts of the species with proven pharmacological activity have been characterized considering their morphologic and anatomic aspects.



*Passiflora
alata*

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