Involvement of monoaminergic system in the antidepressant-like effect of riparian I from *Aniba riparia* (Nees) Mez (Lauraceae) in mice

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Introduction: The riparin I (rip I) is an alcamide isolated from the green fruit of *Aniba riparia* (Nees) Mez. In past studies, its analogues rip II and III showed anxiolytic and antidepressant-like actions.

Experimental section: to investigate the potential antidepressant of rip I, we use the forced swimming test (FST) and tail suspension test (TST), two classical tests for screening antidepressant-like agents in rodents. After, to investigate the involvement of the monoaminergic system in this effect, we pretreat the animals with prazosin (1 mg/kg, i.p., an α₁-adrenoceptor antagonist), yohimbine (1 mg/kg, i.p., an α₂-adrenoceptor antagonist), SCH23390 (15 mg/kg, i.p., a dopamine D1 receptor antagonist), sulpiride (50 mg/kg, i.p., a dopamine D2 receptor antagonist), PCPA (100 mg/kg, an inhibitor of serotonin synthesis), WAY 100625 (0.1 mg/kg, a serotonin 5-HT1A receptor antagonist) or ritanserin (4 mg/kg, a serotonin 5-HT2A/2C receptor antagonist).

Rip I was acutely administered by intraperitoneal and oral routes to male mice at doses of 25 and 50 mg/kg. Results/Discussion: rip I at both tested doses and administration routes produced a significant decrease of immobility time in TST and FST. The pretreatment with pharmacological antagonists/modulators of monoaminergic transmission reduced the anti-immobility effects elicited by rip I (50 mg/kg, p.o.) in the FST. Conclusion: rip I produces significant antidepressant-like activity in the FST and TST and this effect seems to be mediated at least in part by an interaction with the dopaminergic (D1 and D2 receptors), noradrenergic (α₁ and α₂-receptor), and serotonergic (5-HT2A/2C receptor) systems. Acknowledgements: The authors are thankful to the CNPq and CAPES, Brazil, for financial support.