

# Antiproliferative Effects of Several Compounds Isolated from *Amburana cearensis* A. C. Smith

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*Amburana cearensis* a common tree found in Northeastern Brazil is widely used in folk medicine. The present work evaluated the cytotoxicity of kaempferol, isokaempferide, amburoside A and protocatechuic acid isolated from the ethanol extract of the trunk bark of *A. cearensis*. The compounds were tested for their cytotoxicity on the sea urchin egg development, hemolysis assay and 3-(4,5-dimethyl-2-thiazolyl)-2,5-diphenyl-2*H*-tetrazolium bromide assay using tumor cell lines. Isokaempferide and kaempferol, but not amburoside A and protocatechuic acid, inhibited the sea urchin egg development as well as tumor cell lines, but in this assay isokaempferide was more potent than kaempferol. Protocatechuic acid was the only compound able to induce hemolysis of mouse erythrocytes, suggesting that the cytotoxicity of kaempferol and isokaempferide was not related to membrane damage.

*Key words:* *Amburana cearensis*, Kaempferol, Isokaempferide