Latin American Journal of Pharmacy
(formerly *Acta Farmacéutica Bonaerense)*
Lat. Am. J. Pharm. **29** (6): 1024-8 (2010)

Short Communication

Received: December 8, 2009
Accepted: January 5, 2010

Antidiarrheal activity of *Guazuma ulmifolia* Lam. (Sterculiaceae)

Daniele C. MICHELIN [1], Glalber C. de ALMEIDA [3], Karen J. GALINA [1], Gisely C. LOPES [2], Celso V. NAKAMURA [2], Benedito P. DIAS FILHO [2], Tânia UEDA-NAKAMURA [2], Hérida Regina N. SALGADO [1] & João C. PALAZZO de MELLO [2]*

[1] *Programa de Pós-graduação em Fármacos e Medicamentos, Universidade Estadual Paulista, Rodovia Araraquara-Jaú km1, BR-14801-902, Araraquara, São Paulo, Brazil.*

[2] *Programa de Pós-graduação em Ciências Farmacêuticas, Universidade Estadual de Maringá, Av. Colombo, 5790, 87020-900, Maringá, Paraná, Brazil.*

[3] *Acadêmico de Farmácia, Universidade Estadual de Maringá, Av. Colombo, 5790, BR-87020-900, Maringá, PR, Brazil.*

SUMMARY. **The high incidence of diarrhea in the population demands a search for new therapeutic options and easy access, mainly from plant-based sources. Leaves and bark of *Guazuma ulmifolia* Lam. (Sterculiaceae) are popularly employed against diarrhea. However, no information was found in the literature about this supposed property of the drug. In this study we evaluated *in vivo* antidiarrheal activity of stem bark extracts from *G. ulmifolia* in mice, and *in vitro* antimicrobial activity against *Staphylococcus aureus, Escherichia coli, Bacillus subtilis, Salmonella* sp., *Shigella flexneri,* and *Pseudomonas aeruginosa* by using the microdilution method. The *n*-BuOH semipurified fraction (GU#3) significantly reduced intestinal motility. The extracts did not show antimicrobial activity. *G. ulmifolia* Lam. had non-specific antidiarrheal, and antimotility activity in the experimental models studied, and could be used as an alternative treatment for non-infectious diarrhea.**

KEY WORDS: Antidiarrheal activity, Antimicrobial screening, Condensed tannins, *Guazuma ulmifolia,* Sterculiaceae.

* Author to whom correspondence should be addressed. *E-mail:* mello@uem.br

ISSN 0326-2383