

## Antimutagenicity protection of *Ginkgo biloba* extract (Egb 761) against mitomycin C and cyclophosphamide in mouse bone marrow

J.B. Vilar, K.R. Leite and L. Chen Chen

Departamento de Biologia Geral, Instituto de Ciências Biológicas,  
Universidade Federal de Goiás, Goiânia, GO, Brasil

Corresponding author: L. Chen Chen  
E-mail: chenleego@yahoo.com.br

Genet. Mol. Res. 8 (1): 328-333 (2009)  
Received September 2, 2008  
Accepted January 30, 2009  
Published March 24, 2009

**ABSTRACT.** *Ginkgo biloba* (Egb 761) extract, the most prescribed phytomedicine in Europe for the treatment of cerebral insufficiency and vascular diseases, was tested for its possible protective effects against mitomycin C (MMC)- and cyclophosphamide (CP)-induced mutagenicity using the micronucleus test in mouse bone marrow. The extract was co-administered to mice at doses of 50, 100 and 200 mg/kg (*po*) with 4 mg/kg (*ip*) MMC or 24 mg/kg (*ip*) CP. All doses of Egb 761 were significantly ( $P < 0.05$ ) effective in reducing the frequency of micronucleated polychromatic erythrocytes, when compared with MMC or CP alone. Based on these results, we suggest that Egb 761 possesses both direct and indirect antimutagenic potential.

**Key words:** *Ginkgo biloba*; Egb 761; Antimutagenicity; Mitomycin C; Cyclophosphamide; Micronucleus test