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Short Communication

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Antimutagenic Effect of *Phyllanthus orbicularis* Against γ-Radiation

Alena ALONSO [1], Jorge L. FUENTES [2] *, Angel SÁNCHEZ-LAMAR [3] & Montserrat LLAGOSTERA [4,5]

[1] *Departamento de Radiobiología. Centro de Aplicaciones Tecnológicas y Desarrollo Nuclear (CEADEN) †, Apartado Postal 6122. Calle 30, # 502, e/ 5ta y 7ma, Miramar, Playa, Ciudad de la Habana, Cuba.*
[2] *Laboratorio de Microbiología y Mutagénesis Ambiental. Escuela de Biología. Facultad de Ciencias, Universidad Industrial de Santander, Apartado Aéreo 678, Bucaramanga, Santander, Colombia.*
[3] *Departamento de Biología Vegetal. Facultad de Biología de la Universidad de la Habana, calle 25 e/ I y J, Vedado, Ciudad de la Habana, Cuba.*
[4] *Departament de Genètica i de Microbiologia, Universitat Autònoma de Barcelona, Edificio C, 08193 Cerdanyola del Vallès (Bellaterra), Barcelona, Spain.*
[5] *Centre de Recerca en Sanitat Animal (CReSA), Universitat Autònoma de Barcelona - Institut de Recerca i Tecnologia Agroalimentària (UAB-IRTA), Bellaterra, 08193 - Barcelona, Spain.*

SUMMARY. The present work evaluated the protective effect of aqueous extract of *Phyllanthus orbicularis* against the mutagenicity of γ-radiation. The extract activity was determined in pre- and post-treatment procedures using *Salmonella* reversion assay. In either case, the plant extract protected bacterial cells against the mutations induced by γ-radiation, suggesting that it contains antimutagenic compounds which confer protection by at least two different mechanisms: *i)* as antioxidants targeting the oxidative mutagens induced by γ-radiation and *ii)* by modulation of the cellular repair enzymes acting on damaged DNA. The results are discussed in relation to the chemopreventive and radioprotective potential of *P. orbicularis*.

KEY WORDS: Antimutagenesis, *Phyllanthus orbicularis,* Radioprotection, *Salmonella* assay.

* Author to whom correspondence should be addressed. *E-mail:* jfuentes@uis.edu.co, jlfuentes2005@yahoo.es

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