

Isolation, Identification of a Flavonoid and Antitumor Activity in Lung Cancer

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The use of Traditional Medicine in Mexico is an economic and affordable alternative. There are several species used to treat different disease such as *Annona muricata*, commonly know as Guanabana that is used for different diseases as anticonvulsant, antiparasitic, antimalarial, hepatoprotective, antidiabetic, etc. It has been reported that various parts of the plant have antiproliferative activity in diferent cancer cells lines, so in this work the objective was to study the anticancer activity of *Annona muricata* skin in vitro in A549 cell lines of lung cancer. An ethanolic crude extract was prepared from the Guanabana skin. The crude extract was subjected to preliminary chemical tests, to know the chemical content of the extract and was subjected to several chromatographic techniques using different stationary and mobile phases. Biological tests were carry out using lung cancer cells A549usin Paclitaxel as a positive control. From the ethanolic extract was isolated a flavonoid that was identified by nuclear magnetic resonance as 2-(4'hydroxyphenil)-5,7—dihydroxy-chromone. The results of the activity. The results of the activity on the viability of the lung cells cancer showed that a 300 µg/mL induces a cytotoxic action in the A549 cell line presenting a similar effect to the drug Paclitaxel which is a broad spectrum anticancer compound.

Biography:

Rafael Silva Torres has completed his PhD. From Escuela Nacional de Ciencias Biológicas of National Polytecnic Institute and abroad studies M. Phil of Medicinal Chemistry from Loughborough University of Technology Great Britain and sabbatical year from Museum Nacional D'Histoire Naturelle Paris France. He has been working on lung, cervical and breast cancer since 2008. He is membership of American Association of Pharmaceutical Scientists and American Chemical Society. He is investigating the antitumor properties of medicinal plants such as: *Sedum praealtum* DC. *Stenocereus griseus* an *Annona muricata*.