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Effect of *Opuntia joconostle* Fraction Rich in Flavonoids on Pulmonary Adenocarcinoma Cells A549

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There is great diversity of flora and fauna species in Mexico that remain to be studied. One example is *Opuntia joconostle*. An ethanolic extract from its fruit was prepared and its chemical composition showed several secondary metabolites. In addition since cancer is a disease with high incidence rate and mortality. Therefore there is great interest in developing new treatments for chemotherapy or chemoprotector, based in mexican plants.

Lung cáncer represents the third leading cause of death in Mexico and the leading cause of death in the world. According to the above, there is currently an increasing number of results in basic research that used compounds of plant origin and that have been proposed in alternative therapies, these are oriented towards chemoprevention of cancer.

A probable antitumor effect of the fruit of *Opuntia joconostle* (locally named xoconostle), is currently being conducted in our lab, using A549 cells *in vitro* model. The ethanolic extract from the fruit was further chromatographed on a dry silica gel column. The fraction were obtained using 80-20 % metanol-acetone and numbers 4-8 tested positive for flavonoids. The fractions were chemically and biological tested for their content. The fraction was tested for treatments to the A549 cells *in vitro* and the cytotoxic effect was observed. The fraction showed cytotoxic effect in 99.9%.

Biography:

Dr. Rafael Silva Torres has completed his PhD from Escuela Nacional de Ciencias Biológicas of National Polytechnic Institute an abroad studies M. Phil.; from Loughborough University of Technology Great Britain and sabbatical year from Musseum National Natural History Paris France. He has published more than 17 papers in reputed journals and 4 book chapters and has been serving as editorial board member of reputed journals. He has been director of more than 50 Bsc. tesis and participated in more than 150 national and international congresses. He holds a membership of National Association of Pharmaceutical Sciences and American Chemical Society. He is investigating the properties antitumor of medicinal plants and fruits suchs as: *Sedumpraealtum* DC, *Annonamuricata*, *Opuntia joconostle* and *Stenocereusgriseus* H.