



To
IANAS-OWSD RESEARCH PRIZE
For a Female Graduate Student in the Sciences
Committee

Herewith is confirmed the intention for collaboration, between the Ethnopharmacological laboratory of the School of Science, National Autonomous University of Mexico and the School of Medicine, University of San Carlos, Guatemala, through the support of the female student ELDA CAROLA CRUZ.

The student Cruz, actually under my supervision, is performing the research for her Doctor degree in a collaboration program between both institutions, for this reason the possibility to have the IANAS-OWSD support to carry on a three-month scientific visit to our school will be essential for her studies.

The main topic of the Doctoral thesis of Carola is to select and prove potential hypoglycemic plants traditionally used by the native population of Guatemala, especially among the “Cachiquel” group.

The ethnobotanical selection of the plants has to be done *in situ*, in Guatemala, for this work, she uses a series of ethnopharmacological field tools, based on mathematical analysis of the field data; this selection will allow us to choose between the traditional used plants, the ones with the most consensus of use among the diabetic population. We expect to select a maximum of five plants.

After this selection, the traditional used tea will be tested in type 2 diabetic patients, in the same way as the people use the plant, but before the test, the plants will be analyzed to discard the presence of possible harmful products, such as toxic compounds. The proposed screening will be done at our laboratory.

Three months Objective

For the selected medicinal plants, analyze the secondary metabolic composition in relation with; Alkaloids, Flavonoids and Terpens.

Work stages

First month; elaboration of the hidro-alcoholic extracts, learning of the TLC technics, concepts and basis.

Second month; perform the TLC analysis of the control drugs and the extracts.

Third month; finish the TLC analysis of the extracts and perform the HPLC analysis of the interesting extracts.

Type and level of support.

For this project, we can support the student with the main infrastructure of our laboratory, this means, she can use our equipment to perform the objective; we can provide; specialized extraction equipment, rotavapors, equipment to perform thin layer chromatography, and if it is necessary column and high-performance liquid chromatography, we will also provide all the reagents and solvents.



Dr. Adolfo Andrade Cetto
Prof. Titular "B" Def.
e-mail: aac@ciencias.unam.mx
Telephone +52 5556224834

Ciudad Universitaria, D.F. a 9 de diciembre de 2011