

Pharmacognosy, Phytochemistry & Natural Products

August 29-31, 2016 Sao Paulo, Brazil

Allelochemicals of three Amazon plants identified by GC-MS

Victor Sotero, Dora Garcia de Sotero, Priscila Suarez, Jorge Elias Vela and Yoshiharu Fuji
FUNDESAB, Peru

The aim of this study was to realize the evaluation of the allelopathic activity of 83 vegetable species from Allpahuayo-Mishana Reserve in Peruvian Amazon and to determine the main polar components of three species of that showed high activity. Leaves samples were collected, which were subjected to elution for two weeks to get the methanol extracts to test the inhibition of the roots of pre-germinated seeds of *Lactuca sativa*. These extracts were dried in a rotary evaporator and the product subjected to column fractionation opened using silica gel No. 100, using as mobile phase methanol and obtaining the fractions according to the appropriate retention time and meet the fractions containing similar molecules through analysis of thin layer chromatography; which were tested to evaluate their allelopathic activity against pre-germinated seeds of *Lactuca sativa*. In this way it was found that three species showed activity in extracts, these were the *Iryanthera ulei*, *Duroia hirsuta* and *Theobroma obovatum*. When performing the analysis on GC-MS was found compounds as terpenes, phenolics and organic acids, as the following: Isoeugenol, catechol, humulene in *I. ulei*; limonene, geranic acid, neric acid, homovanillyl alcohol in *D. hirsute*; phenol, 2,4-bis (1,1-dimethylethyl), α ionone in *T. obovatum* and phytol in each.

Biography

Victor Sotero has obtained his Doctorate in Pharmaceutical Biochemistry at FCF-USP. He is the Director of the Circle of Medicinal Plants at FUNDESAB, Peru. He has published more than 30 papers in several scientific journals.

proyectopalmeras@gmail.com

Notes: