

Workshop 4

Poster presentation

Email to Isabel Martínez Solís [isolis@uch.ceu.es]

KNOW TO PROTECT And CONSERVE TO USE. MORE MEDICINAL SPECIES IN MEDITERRANEAN SCRUB

P. Soriano¹, I. Martínez-solís², L. Moreno², A. Serrano,² T. Olivar², A. Sanahuja², L. Adzeta², A. Blanquer² & E. Castillo²

¹ Jardí Botànic. Universitat de Valencia

² Universidad Cardenal Herrera-CEU. Facultad de CC EE y de la Salud

Within the plans of protection of the flora also it is included the objective to protect for use and thus carry out a sustainable development. In this sense, results of medicinal and toxic properties of species are exposed. These species grow in the mediterranean scrub and there are not mention utility of them. An integral study of each plant is made as, the vegetal community or communities in which they live, the taxonomic situation, the morphology and the anatomy, the pharmacology and the toxicology and, in case of they show medicinal activity, the phytochemistry studies were made. Of this form the meant will be characterized, the drug (organs of the plant with activity) and, in many cases, the chemical substance responsible for this activity. This form of investigation facilitates the rational use of the medicinal plants, avoiding the confusion of species or the organs with properties, and provides the possibility of finding molecules that serve as model for the natural product synthesis.

The analgesic and anti-inflammatory activities of different extracts of *Erica scoparia* have been studied "in vivo" in rodents. Methanol and hexanic extracts (200 mg/kg, i.p.) of *E. scoparia* could present an antinociceptive effect in the writhing and hot plate test. At the moment, in vitro studies to study smooth muscle activity are doing. In *E. scoparia* several substances are had isolated, these substances have been analyzed with spectroscopy of nuclear magnetic resonance of proton and carbon 13 and spectroscopy of masses, these substances are lupeol and β -amirina that they have analgesic and antiinflammatory activity. The characteritation of the drug (leaves) is made comparing with species that can be adulteration (*Erica arborea*, *Erica multiflora* and *Erica cinerea*), the study is centered in the foliar anatomy. In addition the result is exposed on the toxicity of the leaves of *Cistus crispus*, acute oral toxicity study was performed in accordance with OECD guidelines (OECD, 2000), the animals treated with *Cistus crispus* showed clinical signs of toxicity, so we didn't continued with the rest of pharmacological assays. In *Cistus crispus*, the study of drug is centered in the indument of the leaf.