A103 Advances in the studies of phytomedicines based on the Laurel Oil (*L. azorica* (Seub.) Franco)

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The medicinal flora of Madeira and Porto Santo is composed of 259 species (1), being the *Laurus azorica* (Madeira laurel) one of the 30 considered more relevant (1). The "laurel oil" is externally applied as an anti-infeccious preparation and prescribed by chemists as anti-rheumatic, vulnerary, blood depurative and also for apoplexy (long term use).

As a contribution towards the elucidation of the main chemical profiles of the different oils of Madeira Laurel, the authors investigated the essential oil of the branches of several populations of *Laurus azorica* where 1,8-cineole was identified as the major constituent (12-21%) and elemicine was present in 4-9% (2).

Our further research was focused to the confirmation of therapeutical activities of the fixed oil as anti-fungal, anti-bacterial and anti-inflammatory product. This was performed through an interdisciplinary research where the anti-inflammatory activity of the fixed oil was screened by the use of the rat adjuvant arthritis model (acute phase) (3). 1 h before the induction of inflammation, the oil was orally administered to the animals (Wistar rats) at doses of 0.25 mL, 0.50 mL and 1.0 mL per animal. The parameter of interest was the swelling of the paw during the first 24 h after induction, measured by water displacement. At the 3 doses used a reduction of the swelling was observed being maximal at the highest dose. Other biological activities were screened using *in vitro* standard techniques. The main fractions isolated with different solvents were studied by GLC, IR, NMR and MS hyphenated techniques.

References: 1. D. Rivera, C. Obón, (1995), J. Ethnopharmacol. 46, 73-93. **2.** C. Camacho, A. Rodrigues et al, (2001), Estudos químicos sobre óleos essenciais dos caules do Laurus azorica da ilha da Madeira, XV Encontro Galego Português de Química, La Coruña, 21-23 de Novembro. **3.** Corvo, M.L., Boerman, O.C. et al, (2000), Pharmac. Res., 17, 600-606.

A104 Aphrodisiac herbs used in Traditional Medicine in Jordan

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Jordan traditional medicine is characterized by a unique combination of knowledge and practice of Arabic and Islamic heritage. Medicinal plants represent one of the major components of the traditional medicine in Jordan. This work was designed to document the most commonly used medicinal plants as aphrodisiac and to increase sperm production by Jordanian population.

A questionnaire was prepared to fulfil the requirements of this work. The form contains data on plant material involving the vernacular name, part used, method of preparation, approximate dosage, and administration route. The data were collected from traditional healers, herbalists and midwives. All the informants were above the age of 50 years. In summary, results are: *Alpinia officinarum* and / or *Langnas officinarum*, (Zingiberaceae), *Cinnamomum zeylanicum* (Lauraceae), *Dianthus caryophyllus* (Caryophyllaceae), *Eruca sativa* (Cruciferae), *Hibiscus subdariffa* (Malvacae), *Lepidium sativum* (Cruciferae), *Linum usitatissimum* (Linacae), *Malva parviflora* (Malvacae), *Nigella sativa* (Ranunculaceae), *Pistacia atlantica* (Anacardiaceae), *Raphanus sativus* (Cruciferae), *Trigonella foenum-graecum* (Leguminosae) and *Zingiber officinale* (Zygophyllaceae).

The medicinal plants used were frequently prepared as decoctions and taken orally. In the light of the data presented in this work, the implementation of research programs to study the physiology, pharmacology and toxicity potentials of these herbs would make a real contribution to the welfare of Jordanian population.