

### A001 Interpreting emic categories in ethnopharmacological research for anti-inflammatory natural products in etic terms

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The research for new anti-inflammatory natural products is approached through the study of the traditional uses in the Mediterranean Region of plants as remedies for inflammation-related pathologies. The concept of inflammation is not generally understood by local population in the same sense as pathologists. Therefore it is necessary to look more closely at the local concepts that means the use of remedies for inflammatory diseases.

The terms emics and etics were coined four decades ago by Kenneth L. Pike for defining the insider/outside debate in anthropology and further reinterpreted by Marvin Harris for ethnolinguistic research (1). The use of the emic/etic approach for understanding the local categories of diseases has been explored in our study of three mountain areas of Central Spain (2). We have determined as promising emic terms for anti-inflammatory research: *carne cortá*, *carne ruida*, *hinchazones*, *artrosis*, *ciática*, *dolor de huesos*, *dolor de riñones*, *ojos sucios*, *dolor de oídos*, *flemones*. These correspond in some cases with precise pathologies.

The repertory of remedies includes a wide list of plants ranging from Cistaceae of genus *Helianthemum* to many Compositae and Labiatae species.

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**References:** 1. Pike K (1993) *Talk, thought, and thing. The emic road toward conscious knowledge*. Dallas: Summer Institute of Linguistics, 85 p. 2. Verde A (2002) *Estudio etnofarmacológico de tres áreas de montaña de Castilla La Mancha*. Murcia: Universidad de Murcia.

### A002 Evaluation of analgesic and topical anti-inflammatory activities of *Hypericum canariense* L. and *H. glandulosum* Ait. in mice

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*Hypericum* genus (Hypericaceae) is represented by 10 species of flora in the Canary Islands. Some of these species have been used as a vermifuge, diuretic, as well as wound healing, sedative, antihysterical and antidepressant agent (1,2). In a previous study we reported that the methanol extracts from the aerial parts of *Hypericum canariense* L. and *Hypericum glandulosum* Ait., endemic species of the Canary Islands, showed antidepressant activity in mice (3). The aim of the present study was to investigate potential analgesic and anti-inflammatory activities for the methanol extract from the aerial parts in blossom of these species and for the chloroform, water and butanol fractions obtained from them. Analgesic activity was assessed by the acetic acid-induced writhing test and the tail flick test in mice. To evaluate the topical anti-inflammatory activity we used the acute tetradecanoylphorbol acetate (TPA)-induced ear inflammation model in mice. Statistical analysis was performed with the Student's t-test.

Our findings showed that the methanol extracts (1000 mg/kg p.o.) and the butanol and chloroform fractions (500 mg/kg p.o.) of both species studied inhibited acetic acid-induced writhing with values ranging from 26 to 49 %. Only the methanol extract, butanol and chloroform fractions from *H. glandulosum* were significantly active in the tail flick assay, suggesting that they may have central analgesic properties. On the other hand, all the extracts tested, with the exception of the aqueous fractions, significantly reduced the TPA-induced ear oedema with values ranging from 49 to 78 % when they were administered topically at 1 mg/ear. In conclusion, the results indicate analgesic and topical anti-inflammatory activities in mice for the *Hypericum* species studied.

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