

# JOURNAL OF ETHNOPHARMACOLOGY

## The “Rules of 5”

The Editors and Editorial Board have developed the “Rules of 5” (Editorial, Volume 103, Issue 3, 20 February 2006, Pages 309-310) for publishing in *JEP*. We have produced five clear criteria that each author needs to think about before submitting a manuscript and setting the whole process of editing and reviewing at work. The rules should also be useful for the reviewing of papers.

The rules are the following.

### 1. Out of scope

The paper should report on traditional use or present results on pharmacological or toxicological studies (positive or negative) that are directly related to the traditional use. These data should eventually contribute to evidence-based traditional medicines.

Immediate rejection criteria:

- I. Papers that use ethnopharmacology as an excuse to study an activity which is not related to the traditional use are not accepted, e.g. antitumor effect of plant used against diabetes.
- II. Testing of extracts or plant parts that have no relation to the traditional use, e.g. pharmacological and phytochemical studies on a series of plants of one genus, of which only a few are actually used traditionally, do not fit in the scope.
- III. Papers on health effects of food are not in the scope of the journal.
- IV. Studies on pure compounds are not accepted if not clearly related to a plant and its traditional use.
- V. At random screening of plants for activity.

### 2. Too preliminary

A paper must be based on a thorough and extensive study, using proper controls.

Immediate rejection criteria:

- I. Antimicrobial activity with single dose, or very high concentration, measuring only inhibition zones and no MIC values, no information on type of activity (-cidal or growth inhibition), microorganisms not relevant for use.
- II. Single dose studies with very few animals, no dose-response studies.
- III. In-vitro assays with single dose or very high concentration.
- IV. No proper controls.
- V. Repetition of a simple bioassay for yet another extract or plant.

### 3. In-vitro antioxidant activity

Antioxidant activity is present in all plants. Screening with in-vitro assays thus has little meaning if no clear evidence is given for in-vivo activity.

Immediate rejection criteria:

- I. Only chemical in-vitro assays
- II. No direct connection with claimed traditional use
- III. No positive controls

- IV. Isolation of very common antioxidant compounds (e.g. flavonoids)
- V. Not at a relevant dose in in-vivo situation

**4. Ethnopharmacological and ethnobotanical surveys normally need to report primary (absolute) data reporting how many times a (botanical) drug has been cited for a certain use and application.**

Authors must comply with all relevant standards in the field.

Immediate rejection criteria:

- I. Species are listed without presenting the primary data including details about their therapeutic use in the region/culture of study.
- II. No information about the ethnographic background of the study or about the methods used.
- III. No information about identification and documentation of the plants (voucher specimen).
- IV. The ethnopharmacological frame of reference/theory that forms the basis of the study is not spelled out, e.g. no information about how disease diagnosis and practices related to specific plant medical uses were observed and verified.
- V. No information on the protection of the biodiversity rights of indigenous people or local government.

**5. Lack of novelty**

The study must represent a novel approach to the study of the activity, i.e. not more or less repeating what has already been published with similar results, but e.g. only using another extract of the same plant, or, in case of antimicrobial activity, some other microorganisms.

Immediate rejection criteria:

- I. Repetition of well-known data
- II. Use of non-specific pharmacological test methods or of phytochemical screening methods
- III. Use of pharmacological assays or clinical trials which are not internationally recognized as valid and relevant
- IV. Identification of only well-known ubiquitous compounds with little or no relation to activity (e.g. vitamins, sitosterol)
- V. List of use of plants in certain area that confirms already known regional practices