Editorial

The modern pharmacognosy and the ethnopharmacological approach on natural products research

This second issue of the “new” RBFAR - Revista Brasileira de Farmacognosia/Brazilian Journal of Pharmacognosy celebrates a subject that is one of the axes of modern Pharmacognosy: the ethnopharmacology approach on natural products research. Ethnopharmacology was once cited as “the oldest modern science” (J. Ethnopharmacol, 1984, 11(1):1-16). Nevertheless, there is still much to be studied in terms of popular knowledge or traditional knowledge associated with natural products. Plants, animals, animal products, algae, fungi, microorganisms or minerals are often employed with therapeutic purposes in many places of the world, by urban and rural societies. In this sense, ethnopharmacology can be an important tool in the recovery of the millennial and secular knowledge, and even contemporary, natural therapeutic resources; allowing to combine empirical knowledge and scientific knowledge, seeking to apply methods that can demonstrate efficacy and safety. So, ethnopharmacology can facilitate the discovery of new biologically active agents by reducing the time and cost of pharmacological and toxicological screening. Additionally, through the implementation of international agreements, such as the Convention on Biological Diversity and the Nagoya Protocol, this science can still contribute to share benefits between bioprospectors and the providers of genetic resources and associated traditional knowledge. Accordingly, further studies should be stimulated and encouraged in the field of ethnopharmacology. However, it is important to discuss the advances, advantages and limitations, as well as the problems identified in this contemporary science and its publications. In recent decades numerous articles on ethnobotany/ethnopharmacology have been published around the world with different approaches and methodologies, many of them possibly trying to transform “the old science into a new science”. But the respect and recognition of ethnopharmacology as a discipline depends on the quality and methodological rigor in the research and the publications regarding the selection and sampling criteria; by the methods employed in field work as well as the registration and documentation of data; the coherent application of qualitative and/or quantitative approaches, among others.

The purpose of this issue was to bring up-to-date knowledge of ethnopharmacology research in Brazil and abroad. The contributions received after the call for papers went through the RBFAR regular peer review process and followed the same norms and processes. Following the review, seventeen papers from different Universities of Argentina (1), Brazil (11), Hungary (1), Ireland (1), Italy (1), Mexico (1), and UK (1) were accepted for publication, covering several aspects of ethnopharmacology. A very interesting commentary on the challenges for the future of ethnopharmacology by Dr. Michael Heinrich opens the issue, followed by two articles from the group of Dr. Albuquerque concerning methodology in ethnopharmacological studies in Brazil (sampling problems) and the usefulness of this science in drug discovery. In the following articles, Dr. Monteiro et al. discuss the presence of tannins and their relationship with medicinal plants choice, and Dr. Coutinho and coworkers present the results from their group on the ethnopharmacology of a tannin-rich plant in the northeastern region of Brazil. From Italy, Dr. Nicoletti and coworkers contributed with a nice historical review on the use of Henna and propose a quick HPTLC analysis to check its identity. From Hungary and Mexico, Dr. Papp and Dr. Solano along with colleagues present, respectively, works documenting ethnomedicine in Transylvania; and medicinal uses of an Orchidaceae in a Mixtec community. From Brazil, three works from Dr. Silva, Dr. Almeida and Dr. Rattes and coworkers documented the knowledge and plant uses from communities in the States of Minas Gerais, Bahia and Rio Grande do Sul, respectively. From Ireland, Dr. Coady and Dr. Boylan contributed with a review on the medicinal plants traditionally used in that country. A subsequent article from Dr. Oliveira and coworkers describes the pharmacological properties of Lippia origanoides supported by previous ethnopharmacological surveys, and work from Dr. Nascimento and colleagues describes the plants traditionally used in Brazil for Giardiasis treatment. Last but not least, the final three articles review, respectively, the botanical diversity and toxicological potential of plants sold in open-air markets in the state of Rio de Janeiro, Brazil by Leitão and coworkers; the safety of medicinal herbs traditionally used in Brazil, by Moreira et al.; and the commercialization of medicinal herbs in Buenos Aires, Argentina, by Bach and coworkers.

This RBFAR special issue provided an opportunity for publication of original, peer-reviewed, full-length articles on new research on ethnopharmacology; and we hope that this will serve to stimulate the studies in this area.
The Guest Editors would like to thank the contributors who gave their time and experience so generously and who made this publication a valuable tool for scientists in the field of ethnopharmacology. Thanks are also due to the referees for their valuable comments and for the very detailed and accurate review of manuscripts; their comments certainly helped improve the papers. We are also very grateful to Prof. Cid Santos, Editor-in-chief of Revista Brasileira de Farmacognosia - Brazilian Journal of Pharmacognosy for embracing this project with interest and enthusiasm, and for the opportunity to publish this special issue.

Suzana Guimarães Leitão,
Danilo Ribeiro de Oliveira
E-mail: sgleitao@pharma.ufrj.br (S.G. Leitão);
oliveiradr@pharma.ufrj.br (D.R. Oliveira).