ANTI-INFLAMMATORY CONSTITUENTS FROM DIFFERENT PLANT SPECIES

Ruxanda Bodîrlău¹, Iuliana Spiridon¹, Carmen Alice Teacă¹, Narcis Anghel¹*, Maria Ichim², Svetlana Colceru³, Alice Armatu³

¹“Petru Poni” Institute of Macromolecular Chemistry, 41A Gr. Ghica-Voda Alley, Iasi, 700487, Romania
²S.C. BIOING S.A. Institute of Bioengineering, Biotechnology and Environmental Protection, Bucureşti, Romania
³National Institute for Chemical Pharmaceutical Research and Development, Bucureşti, 031299, Romania

Abstract

Herbs have been used as food and for medicinal purposes for centuries. In recent years, natural compounds such as phenolic acids, phenolic diterpenes and triterpenes, present in various plants, have been the subject of intense research due to their potential benefits for human health. It has been demonstrated that the antioxidant and radical scavenge activities are the main properties of these compounds.

The main difficulties in using natural products as a source for pharmaceutical lead compounds involve separating the compounds from the original extract, as well as the cost of time and money invested in an activity that may not yield a novel compound. Herbal remedies that treat many inflammation-related disorders are typically based on plant bioactive water extracts. Studies have shown that active anti-inflammatory ingredients in water extracts include many natural chemicals such as phenols, alkaloids, glycosides, and carbohydrates. In this paper, data on different plant species having anti-inflammatory activity are presented, as well as their chemical constituents involved in this action.

Key words: anti-inflammatory action, phenolic compounds, plant species

* Author to whom all correspondence should be addressed: e-mail: narcisanghel@yahoo.com