

Study of the potential value of *Ilex* species as novel sources for the food and pharmaceutical industries

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Ilex paraguariensis St. Hil. (Aquifoliaceae) (mate), is a native species from South America, growing naturally in North-Eastern Argentina, South-Eastern Brazil, Eastern Paraguay and Uruguay. The dried and ground leaves are industrialized to obtain the commercial product known as “Yerba mate” which is used as a folk beverage. The main traditional effects of mate include: Stimulant, diuretic, antioxidant, antiulcerous, choleric, antirheumatic, analgesic, glycogenolytic, lipolytic, weight reducing, etc.

Nowadays, this product is exported to United States, Europe and Asia where it is sold as vegetal drug or as extracts in different medicinal preparations or as ingredients in functional foods. “Yerba mate” contains vitamins and minerals and a growing number of studies have attributed its functional properties to the bioactive compounds present in this species (xanthines, saponins and polyphenols).

Additionally, several other co-generic species growing in the same habitat have been historically used to substitute and/or to adulterate genuine *I. paraguariensis*. These species are: *I. argentina*, *I. brasiliensis*, *I. brevicuspis*, *I. dumosa* and *I. theezans*, among others.

This presentation describes the results of our studies about the phytochemistry and bioactivity of extracts of “Yerba mate”. Comparative results between “yerba mate” and the main substitutes or adulterants are also presented. Promising areas of research related to the high polyphenols content, the possibility of developing new products with functional properties and the potential use of “mate” and some of its related co-generic species as sources of biologically active compounds are highlighted.

Biography

Rosana Filip has completed her Ph.D in 2000 at the University of Buenos Aires. She is Professor and Director of Research Projects related with “phytochemical and pharmacological study of plant species for the food and pharmaceutical industries”. She is a consultant for national and International companies and participates as a representative of Argentina in bilateral Projects (Argentina-Japan) in the area of “Food Production”. She has won nine national awards, has edited a book and is the author of four book chapters. She has published more than 40 papers in reputed journals and serving as an editorial board member of reputed journals.

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