Plants used in the traditional medicine of Mexico, Central America and the Caribbean for the treatment of obesity: Preclinical evidence and ethnobotanical information

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Obesity is a worldwide medical concern. New ethnobotanical information regarding the anti-obesity effect of medicinal plants has been obtained in the last 30 years in response to socio-demographic changes and the consumption of high-fat diets. Anti-obesity agents, obtained from natural products are gaining more interest in the scientific community. A total of 139 plant species, belonging to 61 families, native to Mexico, Central America and the Caribbean are used for the empirical treatment of obesity. From these plants, 33 have been investigated in scientific studies and 106 plants lack scientific investigation. A total of 4 compounds isolated from medicinal plants used for the empirical treatment of obesity have been tested in vitro (2 compounds) and in vivo (4 compounds) studies. There are no herbal-based products approved in Mexico for the treatment of obesity. There are a limited number of scientific studies published on medicinal plants from Mexico, Central America and the Caribbean used for the treatment of obesity. Therefore, there is an extensive need to perform pharmacological, phytochemical, toxicological and ethnobotanical studies with medicinal flora to obtain new anti-obesity agents.

Biography
Angel Josabad Alonso Castro has completed his PhD in 2012 in the National Autonomous University of Mexico. He was a Titular Professor (part time) in Metropolitan Autonomous University at Cuajimalpa from March 2013 to June 2013. His Postdoctoral position was in the Metropolitan Autonomous University at Xochimilco from June 2013 to December 2014. Since January 2015, he is an Associate Professor (full time) at the Department of Pharmacy, University of Guanajuato, Mexico. He has published 35 research articles and 2 book chapters. His research interest is the pharmacology of natural products.

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