

عنوان مقاله:

Anti-hyperglycemic, lipid-lowering, and anti-obesity effects of the triterpenes α and β -amyrenones in vivo

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تعداد صفحات اصل مقاله: 13

نویسندگان:

Rosilene Ferreira - *Superior Normal School, Amazonas State University, Djalma Batista ۲۴۷۰, Chapada, ۶۹۰۵۰-۰۱۰, Manaus, Manaus, AM, Brazil*

Fernanda Guilhon-Simplicio - *Faculty of Pharmaceutical Sciences, Federal University of Amazonas, General Rodrigo Otávio ۶۲۰۰, Coroado 1, ۶۹۰۸۰-۹۰۰, Manaus, AM, Brazil*

Leonard Acho - *Faculty of Pharmaceutical Sciences, Federal University of Amazonas, General Rodrigo Otávio ۶۲۰۰, Coroado 1, ۶۹۰۸۰-۹۰۰, Manaus, AM, Brazil*

Nayana Yared Batista - *Institute of Biological Sciences, Federal University of Amazonas, General Rodrigo Otávio ۶۲۰۰, Coroado 1, ۶۹۰۸۰-۹۰۰, Manaus, AM, Brazil*

Frank Guedes-Junior - *Faculty of Pharmaceutical Sciences, Federal University of Amazonas, General Rodrigo Otávio ۶۲۰۰, Coroado 1, ۶۹۰۸۰-۹۰۰, Manaus, AM, Brazil*

Mayla Ferreira - *Institute of Biological Sciences, Federal University of Amazonas, General Rodrigo Otávio ۶۲۰۰, Coroado 1, ۶۹۰۸۰-۹۰۰, Manaus, AM, Brazil*

José Fernando Barcellos - *Institute of Biological Sciences, Federal University of Amazonas, General Rodrigo Otávio ۶۲۰۰, Coroado 1, ۶۹۰۸۰-۹۰۰, Manaus, AM, Brazil*

Valdir Veiga-Junior - *Department of Chemistry, Military Institute of Engineering, Praça General Tibúrcio ۸۰, Urca, ۲۲۲۹۰-۲۷۰, Rio de Janeiro, RJ, Brazil*

Emerson Lima - *Faculty of Pharmaceutical Sciences, Federal University of Amazonas, General Rodrigo Otávio ۶۲۰۰, Coroado 1, ۶۹۰۸۰-۹۰۰, Manaus, AM, Brazil*

خلاصه مقاله:

Objective: Diabetes, obesity, and their associated metabolic disorders are public health problems that require prevention and new efficient drugs for treatment. We evaluated the anti-hyperglycemic, lipid-lowering, and anti-obesity effects of semisynthetic α , β -amyrenones (ABA). Materials and Methods: BALB/c mice were used for performing an acute model of oral carbohydrate and triglyceride tolerance, and in a streptozotocin-induced diabetes model, where glycemia and body weight changes were measured during ten days. C57BL/6 strain mice were used in the diet-induced obesity model, where lipidemia and body weight were measured during four weeks, and biochemical and histological parameters were analyzed after euthanasia. The doses considered in this study were ۲۵, ۵۰, and ۱۰۰

mg/kg of ABA, used following some criteria for each experiment. Results: ABA ۲۵ mg/kg reduced the postprandial glycemia peak higher than acarbose ۵۰ mg/kg ($p < 0.05$). ABA ۵۰ mg/kg significantly reduced glycemia in diabetic mice compared to acarbose ۵۰ mg/kg ($p < 0.05$). There was a reduction in the weight of the obese animals treated with ABA ۲۵ and ۵۰ mg/kg ($p < 0.05$). ABA ۵۰ mg/kg also significantly reduced lipidemia in these animals compared to orlistat ۵۰ mg/kg. Conclusion: This study presents evidence of ABA's action in reducing postprandial glycemia and obesity in mice.

کلمات کلیدی:

Amyrenone, Obesity, Diabetes, Glycemia

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