Análisis fitoquímico cualitativo de los extractos acuosos de Thalassia testudinum Banks ex Köning et Sims de la localidad de Champotón, Campeche, México, durante el ciclo anual 2016-2017 [

2019

text (article)

Analítica

ABSTRACT: Thalassia testudinum Banks ex Köning et Sims is a marine phanerogam, monocotyledonous, dioica that is distributed from Florida and Gulf of Mexico, up to the coasts of Colombia and Venezuela. Recent researches have shown that T. testudinum has anti-inflammatory, antinociceptive, antioxidant, antiviral, dermo-regenerative, hypoglycemic, hypolipidemic and neuroprotective activity. The purpose of this investigation was to analyze the seasonal variability in the content of metabolites in the aqueous extracts of the whole plant, the leaves and the rhizome of T. testudinum during the seasons of the year (northern, dry and rainy) in Champotón, Campeche, Mexico. The presence of phenols, flavonoids, phytosterols, coumarins, diterpenes, triterpenes, saponins, and reducing sugars was determined by qualitative tests and the saponins contain in these extracts was quantified, as well as its hemolytic capacity. The extracts of the leaves of the northern period presented the highest concentration of constituents. Reducing sugars content in rhizome extracts was present throughout the annual cycle, while the content of saponins was higher in the leave extracts of the northern season, as well as its hemolytic capacity. The results indicate that the northern season is the most suitable for obtaining biological material of T. testudinum to prepare aqueous extracts with biotechnological or pharmacological applications, collected in Champoton, Campeche, Mexico

ABSTRACT: Thalassia testudinum Banks ex Köning et Sims is a marine phanerogam, monocotyledonous, dioica that is distributed from Florida and Gulf of Mexico, up to the coasts of Colombia and Venezuela. Recent researches have shown that T. testudinum has anti-inflammatory, antinociceptive, antioxidant, antiviral, dermo-regenerative, hypoglycemic, hypolipidemic and neuroprotective activity. The purpose of this investigation was to analyze the seasonal variability in the content of metabolites in the aqueous extracts of the whole plant, the leaves and the rhizome of T. testudinum during the seasons of the year (northern, dry and rainy) in Champotón, Campeche, Mexico. The presence of phenols, flavonoids, phytosterols, coumarins, diterpenes, triterpenes, saponins, and reducing sugars was determined by qualitative tests and the saponins contain in these extracts was quantified, as well as its hemolytic capacity. The extracts of the leaves of the northern period presented the

highest concentration of constituents. Reducing sugars content in rhizome extracts was present throughout the annual cycle, while the content of saponins was higher in the leave extracts of the northern season, as well as its hemolytic capacity. The results indicate that the northern season is the most suitable for obtaining biological material of T. testudinum to prepare aqueous extracts with biotechnological or pharmacological applications, collected in Champoton, Campeche, Mexico

Título: Análisis fitoquímico cualitativo de los extractos acuosos de Thalassia testudinum Banks ex Köning et Sims de la localidad de Champotón, Campeche, México, durante el ciclo anual 2016-2017 electronic resource]

Editorial: 2019

Tipo Audiovisual: Thalassia testudinum análisis fitoquímico pastos marinos saponinas variación estacional Thalassia testudinum phytochemical analysis saponins seagrasses seasonal variation

Documento fuente: Polibotánica, ISSN 1405-2768, Nº. 48, 2019, pags. 151-168

Nota general: application/pdf

Restricciones de acceso: Open access content. Open access content star

Lengua: Spanish

Enlace a fuente de información: Polibotánica, ISSN 1405-2768, Nº. 48, 2019, pags. 151-168