



Unusual chemical composition of a Mexican propolis collected in Quintana Roo, Mexico

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Titre	Unusual chemical composition of a Mexican propolis collected in Quintana Roo, Mexico
Type de publication	Article de revue
Auteur	Boisard, Séverine [1], Tho Huynh, Thi Huong [2], Escalante-Erosa, Fabiola [3], Peña-Rodriguez, Luis Manuel [4], Hernandez-Chavez, Luis Ignacio [5], Richomme, Pascal [6]
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Mots-clés	amyrins [7], Bursera simaruba [8], Mexican propolis [9], pentacyclic triterpenes [10], Sterols [11]
Résumé en anglais	<p>Propolis is a resinous natural substance collected by honeybees from buds and exudates of various trees and plants; it is widely accepted that the composition of propolis depends on the phytogeographic characteristics of the site of collection. In this study we have analyzed the chemical composition of a propolis collected in Quintana Roo, Mexico, and evaluated its antioxidant, antifungal and antibacterial activities. Unexpectedly, the chemical analysis showed that the main components of the ethanolic extract of a Mexican propolis appeared to be pentacyclic triterpenoids, such as α and β-amyrin derivatives, and sterols. The crude extract did not show antioxidant activity when tested using the DPPH-reduction assay, and it also proved inactive when tested for antifungal and antibacterial activities using microdilution and agar diffusion assays, respectively. The fact that the presence of both α and β-amyrins and their derivatives have been reported from the resin of <i>Bursera simaruba</i>, one of the plants used by the bees for propolis production in Quintana Roo, Mexico, confirms the relationship that exists between the flora available to bees in a given region and the chemical composition of the propolis that they produce.</p>
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Titre abrégé	Chemical composition of a Mexican propolis

Liens

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