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**XIII World Forestry Congress
 ABSTRACTS**

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Español

ABSTRACTS

TITLE:



Acre

Produção Científica

AUTHORS:

THEME:

Theme

SUBTHEME:

Subtheme



Title: Production ecology of oleoresin from different species of copaiba (*Copaifera* spp) in the Brazilian Amazon

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Thema: 2. Producing for development

Subtheme: 2.7 Non-wood forest products

Abstract of the paper: *Copaifera* species produce a type of oleoresin, popularly known as copaiba oil that is used in traditional medicine mainly as an anti-inflammatory and to speed the healing of wounds. It is also widely commercialized in pharmaceutical and cosmetic industries, which makes it an important source of income for many Amazonian extractive communities. However, the production ecology of copaiba oleoresin remains unknown, due in part to the lack of comparative studies about the productive potential of different species and the factors that influence its production. A better understanding of its ecology is necessary to develop management plans that guarantee the sustainability of extraction, under current scenarios of increasing extraction pressure. The present work is being conducted to answer three questions: (a) Is there a difference in the volume of oleoresin produced by the various existing *Copaifera* species in Amazonia? (b) Which of the tree characteristics influence oleoresin production? (c) How do different extraction events affect oleoresin production? A total of 111 *Copaifera* trees above 40 cm DBH belonging to three species (*C. reticulata* Ducke, *C. pubiflora* Benth and *C. sp.*), were selected in four Brazilian Amazonian States. Variables considered affecting oleoresin production, such as crown form and position, DBH, height, presence of hollows, termites or lianas, were recorded. Trunks were drilled and the oleoresin flow was collected during 24 hours. To test the influence of season and the frequency of extraction on oleoresin production, trees were tapped either every 6 or 18 months, alternating rainy and dry seasons during a 2.5-year period. We analyzed the effect of measured variables on oil production, considering all volumes above 0 mL, categorizing production of 50 mL as commercially viable. The proportion of *Copaifera reticulata* trees that produced some oleoresin (54,2%), was significantly higher than that of *C. sp.*, where only 18,8% of trees produced oil 0mL. Considering commercial production (50mL), however, this difference disappeared. Oleoresin volumes obtained from productive trees of *C. pubiflora* were significantly higher than those obtained from the other two species. None of the variables had a significant effect on the proportion of productive trees, though the presence of hollows did negatively influence the volumes obtained. Consecutive extraction events diminished the proportion of productive trees and the volumes collected. It is still not possible, however, to determine the best time interval between successive collections, and whether rates of oil decrease differ among species. Support: Projeto Kamukaia/EMBRAPA, Projeto Floresta Em Pé.

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Full paper: -

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