

# Amazonian Biodiversity & Socio-Bioeconomy — The Natura Model — Market & Science Review 2025

Por Cristiano Ricardo · Publicado em 16/08/2025

University lecture by Prof. Cristiano Ricardo on cosmetic science and consumer behavior in Brazil and Latin America, exploring amazonian biodiversity & socio-bioeconomy: the natura model with colorful schematics and market cases.

Versão online e eventuais atualizações:

<https://cristianoricardo.com/post/amazonian-biodiversity-socio-bioeconomy-the-natura-model-2025-08-16>

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Sustainable Sourcing & Raw Material R&D · Brazil & Latin America Insights

Latin American consumers increasingly scrutinize cosmetic botanical sourcing, demanding genuine ethical partnerships with traditional forest communities.

## Market Dynamics & Formulation Architecture

Forest Standing (Standing Forest)

Copaíba (Healing Oleoresin)

Andiroba (Limonoid Anti-inflammatory)

Direct income to riverine communities

Chemical Profiling & Clinical Data

Ucuuba Butter: High Myristic Acid

Açaí Extract: Anthocyanin ORAC leader

Nagoya Protocol & ABS Verification

## Copaiba Oleoresin & Beta-Caryophyllene

Tapped sustainably from the trunk of *Copaifera langsdorffii*, this natural oleoresin contains up to 50% beta-caryophyllene, a phytocannabinoid that binds to cutaneous CB2 receptors, exerting potent anti-inflammatory and soothing activity in acneic and sensitive skin formulations.

## Ucuuba Butter (*\*Virola surinamensis\**): The Natural Silicone Alternative

Harvested from riverbank tree seeds that were previously logged for timber, Ucuuba butter is naturally rich in myristic and lauric fatty acids with an exceptionally high melting point (45°C), conferring remarkable structural firming and cellular matrix recovery without petrochemical waxes.

## The Nagoya Protocol & Access and Benefit-Sharing (ABS)

Formulating with native Brazilian biodiversity legally requires registration in SisGen (National System for the Management of Genetic Heritage), ensuring royalties flow back to indigenous and traditional ribeirinho communities.

Prof. Cristiano Ricardo

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