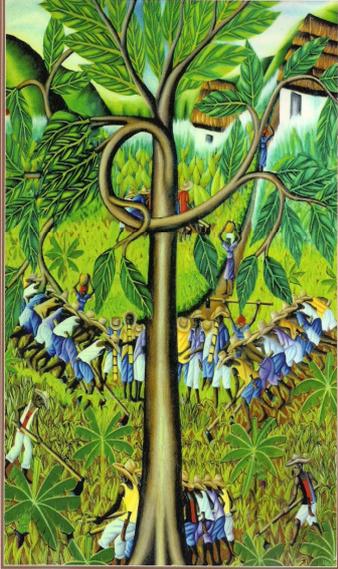


ETHNOBOTANY
EVOLUTION OF A DISCIPLINE
Edited by Richard Evans Schultes & Siri von Reis



cee
CENTRO DE ESTUDOS E INVESTIGAÇÕES EM ETNOBIOLOGIA E ETNOFARMACOLOGIA

UNIFESP
UNIVERSIDADE FEDERAL DE SÃO PAULO
1950

Etnobotânica

Definições, histórico,
abordagens, aplicações e sub-
disciplinas.

Eliana Rodrigues

ZOOFARMACOGNOSIA



Parque Estadual Fontes do Ipiranga
Luciano Zandonade

BIBO143

Revista Brasileira de Farmacognosia 27 (2017) 135–142



**Brazilian Journal
of Pharmacognosy**
REVISTA BRASILEIRA DE FARMACOGNOSIA

www.elsevier.com/locate/bjph



CrossMark

Original Article

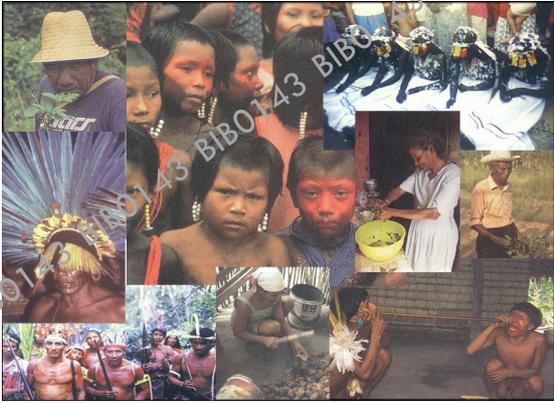
Medicinal plants in the diet of woolly spider monkeys (*Brachyteles arachnoides*, E. Geoffroy, 1806) – a bio-rational for the search of new medicines for human use?

Liège M. Petroni^a, Michael A. Huffman^b, Eliana Rodrigues^{a,*}

^a Centro de Estudos Etnobotânicos e Etnofarmacológicos, Departamento de Ciências Biológicas, Universidade Federal de São Paulo, São Paulo, SP, Brazil
^b Primate Research Institute, Kyoto University, Kyoto, Japan

Ao longo da história o ser humano teve e tem a necessidade de:

- Estimulante;
- Medicamento;
- Alimento;
- Combustível;
- construção naval e civil;
- “alucinógenos” - entrar em contato com o sobrenatural....



ETNOBOTÂNICA

PLANTAS ALIMENTARES

ÓLEOS E CERAS

PLANTAS MEDICINAIS

BEBIDAS SOCIAIS

CONSTRUÇÃO CIVIL

CONSTRUÇÃO NAVAL

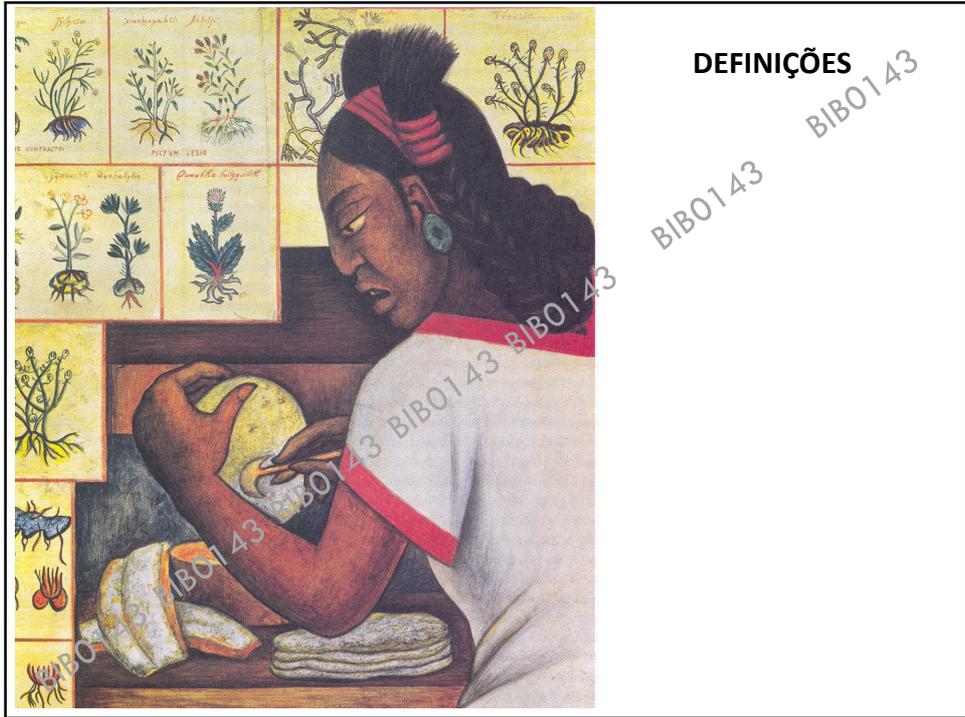
CORANTES

BORRACHA E RESINAS

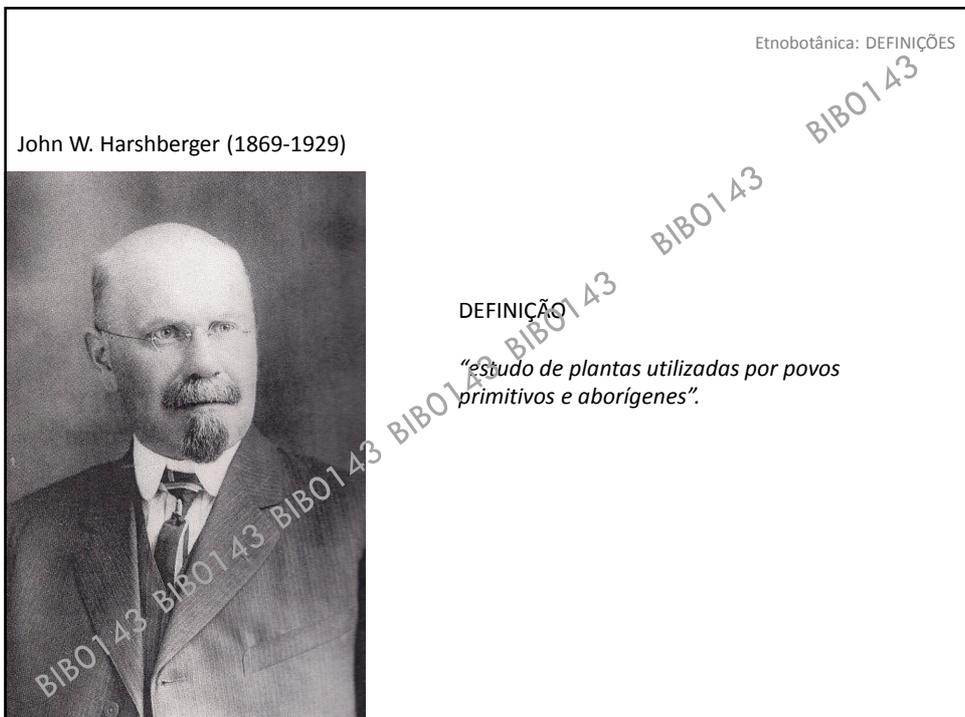
ARTESANATOS

COMBUSTÍVEIS

FIBRAS



DEFINIÇÕES



John W. Harshberger (1869-1929)

DEFINIÇÃO

"estudo de plantas utilizadas por povos primitivos e aborígenes".

Etnobotânica: DEFINIÇÕES

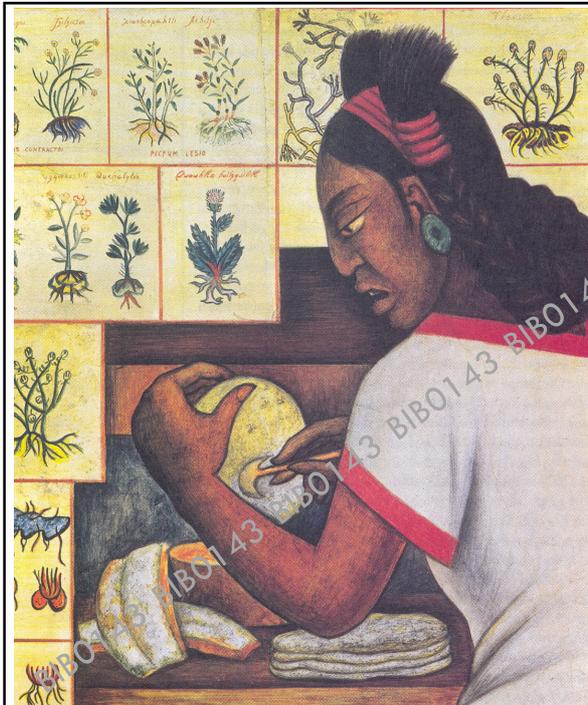
Richard Evans Schultes (1915-2001)



"O estudo da avaliação e manipulação humana de materiais vegetais e substâncias pelas sociedades primitivas e não letradas"

BIBO143 BIBO143 BIBO143 BIBO143 BIBO143 BIBO143 BIBO143 BIBO143

Etnobotânica: DEFINIÇÕES



ETNO

é uma forma abreviada de dizer como outras culturas enxergam o mundo.

Quando utilizado antes de uma disciplina acadêmica (Ecologia/botânica/zoologia), denota a exploração dos pesquisadores pela percepção dos nativos sobre o conhecimento científico e cultural.

BIBO143 BIBO143 BIBO143 BIBO143 BIBO143 BIBO143 BIBO143 BIBO143

ETNOBOTÂNICA: CARÁTER INTERDISCIPLINAR Etnobotânica: DEFINIÇÕES

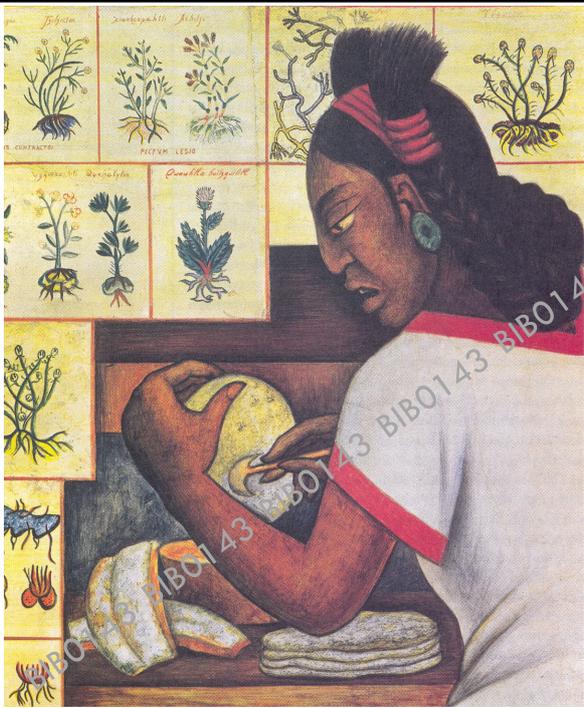
Botânica
Antropologia →
Arqueologia
Fitoquímica
Farmacologia
Medicina
História
Religião
Geografia
outras



"PARA DOR DE CABEÇA"

(Note: The image contains a diagonal watermark reading 'BIBO143' repeated multiple times.)

BREVE HISTÓRICO



(Note: The image contains a diagonal watermark reading 'BIBO143' repeated multiple times.)

Etnobotânica: HISTÓRICO

Primeiros pesquisadores (naturalistas)

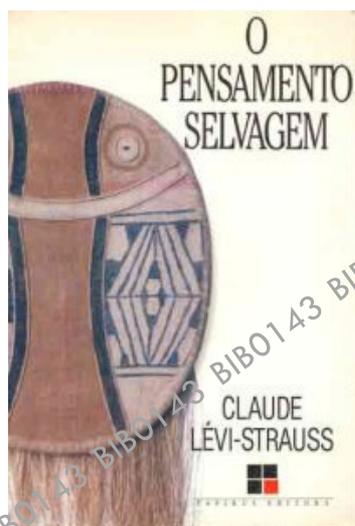
- descobrir novos produtos naturais com valor comercial e
- conhecimento teórico de como as pessoas percebiam e manejavam o ambiente.

apenas no século XX a etnobotânica assumiu o status de **disciplina**

A partir dos anos 60

- aplicação dos resultados de pesquisas nos problemas de conservação e desenvolvimento.

Etnobotânica: HISTÓRICO

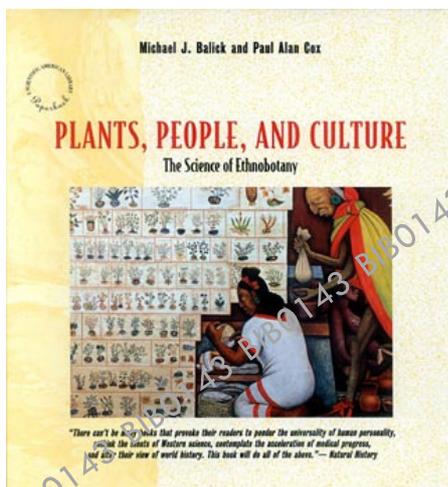


Strauss, 1989

Sistemas de classificação dos recursos naturais por populações indígenas

etnotaxonomia

Etnobotânica: HISTÓRICO

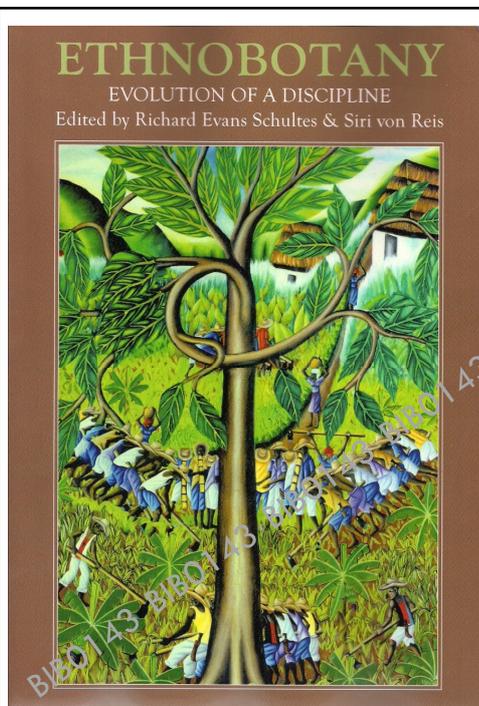


Balick & Cox, 1996

Incorporação do modelo de conservação indígena no manejo de áreas naturais.

etnoconservação

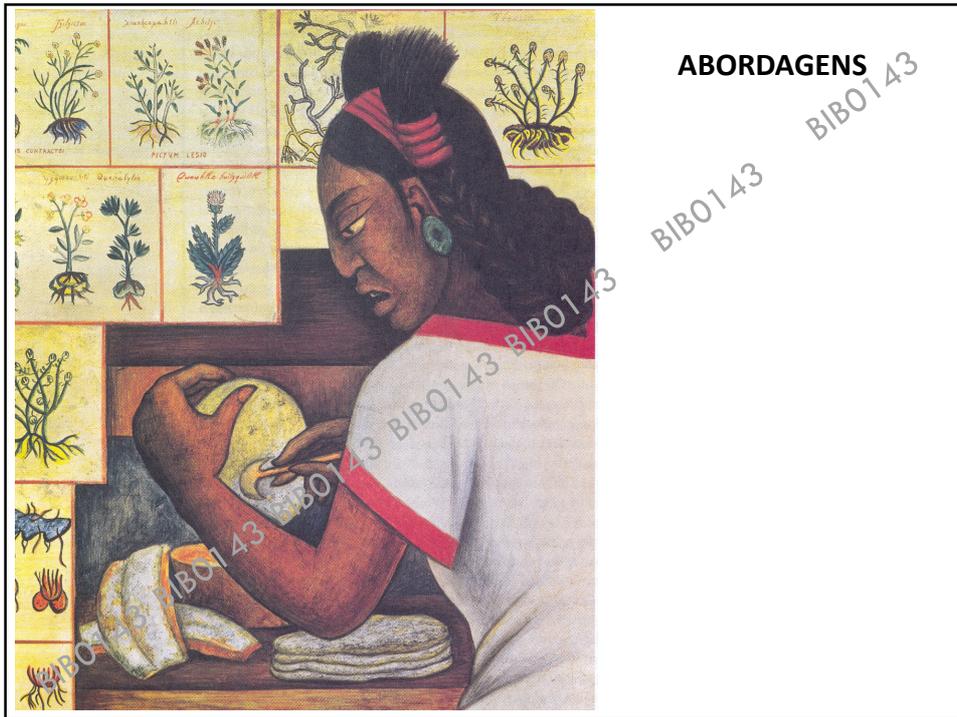
Etnobotânica: HISTÓRICO



Seu constante crescimento promoveu a formação de outras sub-disciplinas:

SÓ PLANTAS?????

- Etnofarmacologia
- Etnomicologia
- Etnobotânica e Conservação
- Etnobotânica e Literatura Antiga
- Etnobiologia
- Arqueoetnobotânica/Paleoetnobotânica
- Etnotaxonomia
-



Etnobotânica: ABORDAGENS

O QUE É ETNOBOTÂNICA HJ ?

O que as pessoas pensam sobre as plantas?

Como as pessoas diferenciam e classificam as plantas?

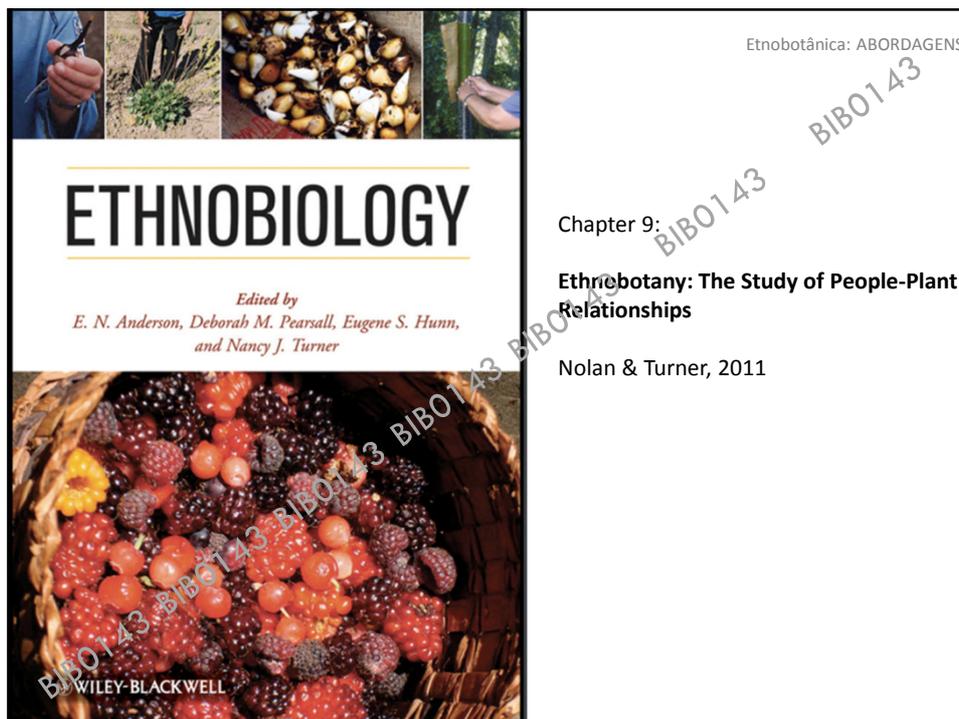
Quais e por que certas plantas estão disponíveis?

De quais regiões as plantas são extraídas?

Como as atividades humanas e suas consequências influenciam na evolução das populações de plantas locais?

Que efeito seus manejos têm na estrutura da vegetação local?

BIBO143



Etnobotânica: ABORDAGENS

Table 9.1 Examples of Some Contemporary Ethnobotanical Research

Topic within ethnobotany	Notes on topic	Some example references
Paleoethnobotany	Ethnobotany of past cultures, including traditional management systems for plant resources	Ford 1978, 1985; Fritz 2005; Lepofsky et al. 2003; Minnis 1991; Minnis and Elisens 2000; Peacock 1998; Pearsall 2001
Historical ecology	Understanding people–plant relationships through time and space	Balée 1998; Ellen 2006; Minnis and Elisens 2000
Nutritional ethnobotany and foodways	Identification and description of nutritional components of native plants in human diet and medicine	Anderson 2005a; Etkin 2006; Johns 1996; Pieroni and Price 2006
Medical ethnobotany	Assessing bioactivity of medicinal plant compounds; designating the cross-cultural applications and significance of botanical families	Etkin 1990; Moerman 1991, 1996; Quinlan 2004; Quinlan et al. 2002; Stepp 2004
Ethnobotanical classification systems	Discovering universal systems of naming and categorizing living things; calibrating folk and scientific thought	Berlin 1992; Brown 1984; Hunn 1982, 1990

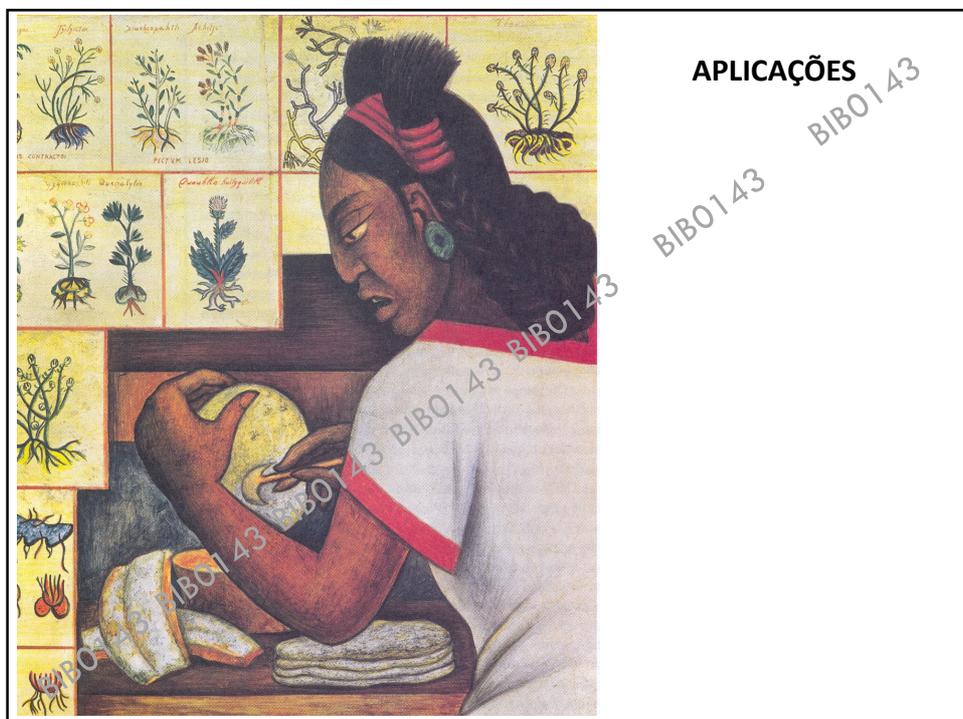
(Continued)

Nolan & Turner, 2011

Etnobotânica: ABORDAGENS

Topic within ethnobotany	Notes on topic	Some example references
Cognitive ethnobotany	Studying distribution and forms of plant knowledge, learning styles, knowledge transmission	Ingold 2004; Nolan 2002, 2007; Sanga and Ortali 2004; Zarger and Stepp 2004
Symbolic ethnobotany	Examines plants through ritual in folkloristics and ceremonial healing	Quave and Pieroni 2007; Vildarich 2007
Sensory and perceptual ecology	Focuses on human sensory recognition of plants and perceptual distinctiveness	Alcorn 1994, 1995; Boster 1985; Casagrande 2004; Jernigan 2006
Quantitative and experimental ethnobotany	Measuring biodiversity within geographic regions, applying multivariate statistics to assess the use potential of botanical families, genera, and species	Anderson 1993a,b; Martin 1995; Prance et al. 1987; Stepp et al. 2005; Ticktin et al. 2002
Intellectual property rights	Negotiation of legal rights pertaining to Indigenous botanical wisdom, building equitable partnerships	Brush 1996; Moran et al. 2001
Evolutionary ecology	Demonstrates how ethnobotanical knowledge relates to human cognitive development, adaptation, and survival through time and space	Atran et al. 2004; Ellen 2006; Mithen 2006
Interpretive ethnobotany and traditional ecological knowledge	Emphasize traditional wisdom and philosophies, highlights Indigenous teachings and narratives regarding native plant sustainability	Turner 2006, 2008
Ethnobotany and agrobiodiversity	Investigating germplasm conservation; implementing "seed banking" of local cultivars to propagate variation and choice in regional cultures	Balick 1996; Brush 2004; Campbell 2005; Nazarea 1999; Veteto and Skarbo 2009
Traditional agricultural systems	Interprets traditional cultivation strategies for selected cultivars, shifting subsistence practices, adaptations to seasonal stress	Estabrook 1998; Nabhan 1989
Ethnobotany and conservation	Identifying and safeguarding biota in accordance with Indigenous priorities	Cunningham 2001; Minnis 2000; Rea 1997
Political ecology	Examines local access to plant resources, institutional policies, dimensions of management and control, grassroots activism	Anderson 2000; Nabhan 2002
Historic migrations and ethnobotany	Analyzes how human movements relate to ethnobotanical cultural memory of economic botany	Pieroni and Vanderbroek 2007; Ramirez-Sosa 2009

Nejari & Turner, 2011



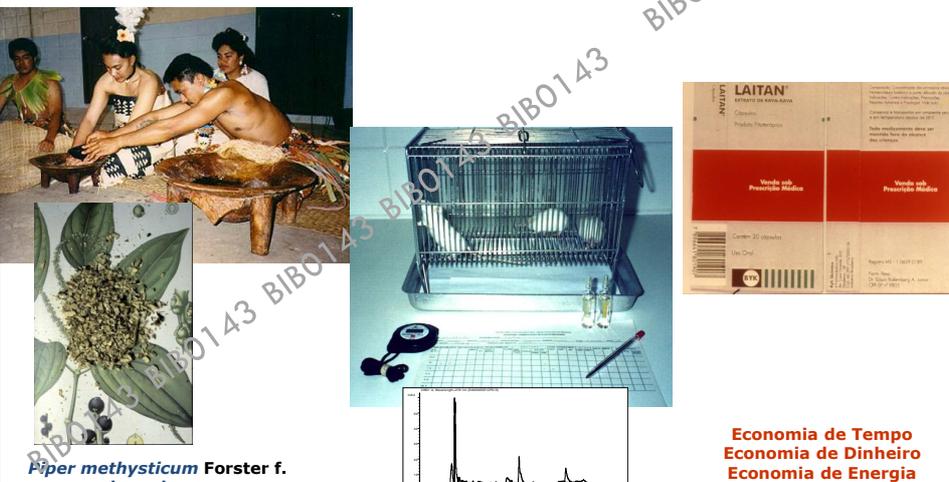
Etnobotânica: APLICAÇÕES



- Desenvolvimento de medicamentos
- Novas práticas agrícolas - Agroecossistemas
- Modelos para planos de manejo
- Modelos para conservação da biodiversidade

Etnobotânica: APLICAÇÕES - Desenvolvimento de medicamentos

Lev. Etnofarmacológico → estudos de farmacologia e fitoquímica → desenvolvimento de medicamentos



Piper methysticum Forster f.
kava-kava

**Economia de Tempo
Economia de Dinheiro
Economia de Energia**

Etnobotânica: APLICAÇÕES - Novas práticas agrícolas - Agroecossistemas

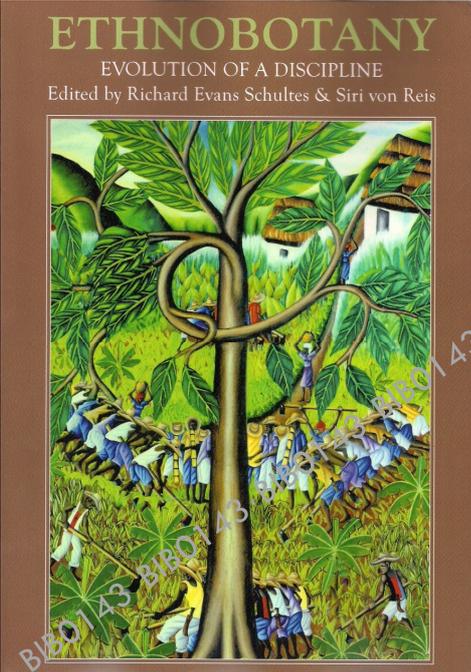
SISTEMAS AGROFLORESATIS TRADICIONAIS
Kayapó - Ilhas de florestas (Apêtê)



As agriculturas: permacultura e agrofloresta se basearam nas práticas agrícolas dessa etnia.



SUB-DISCIPLINAS



ETHNOBOTANY
EVOLUTION OF A DISCIPLINE
Edited by Richard Evans Schultes & Siri von Reis

Etnobotânica: Sub-Disciplinas

- Etnofarmacologia
- Etnoveterinária
- Etnobotânica e Literatura Antiga
- Etnobotânica, Desenvolvimento Local e Conservação
- Etnobotânica: Alimentos x medicamentos
- Etnomicologia



UNIFESP
UNIVERSIDADE FEDERAL DE SÃO PAULO
1909

....Desde 2006

Doutorado (3)
Pós-Doutorado (2)
Mestrado (15)
Iniciação científica (15)
Artigos (51)
Capítulos de livro (13)
Auxílios à Pesquisa FAPESP (6)
Outros auxílios (10)



cee
CENTRO DE ESTUDOS
ETNOBOTÂNICOS E
ETNOFARMACOLÓGICOS

Colaborações

botânico, zoólogo, farmacólogo, químico, agrônomo, antropólogo, geólogo, microbiologista, veterinário, primatólogo e médicos.

(UNIFESP, USP, UNESP, UNITAU, UNICAMP, ADOLFO LUTZ, Jardim Botânico do RJ e de SP, Universidade do Hawaii, Universidade de Kyoto, Universidade de Auckland)

UNIFESP UNIVERSIDADE FEDERAL DE SÃO PAULO

Pró-reitorias - Campi - Unidades acadêmicas -

Pesquisar

Centro de Estudos Etnobotânicos e Etnofarmacológicos



<http://www.cee.sites.unifesp.br/index.php/pt/>



cee
CENTRO DE ESTUDOS
ETNOBOTÂNICOS E
ETNOFARMACOLÓGICOS

Centro de Estudos Etnobotânicos e Etnofarmacológicos - CEE

@CentroDeEstudosEtnobotanicosEEtnofarmacologicos Cee

Curtiu - Seguindo - Compartilhar -

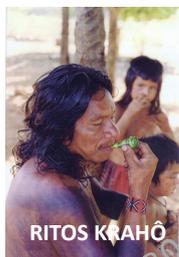
Ligar agora

FOTOS DE TRABALHOS DE CAMPO E NOTÍCIAS SOBRE A ÁREA.....

DOCUMENTÁRIOS PRODUZIDOS PELO CEE



2012



2013



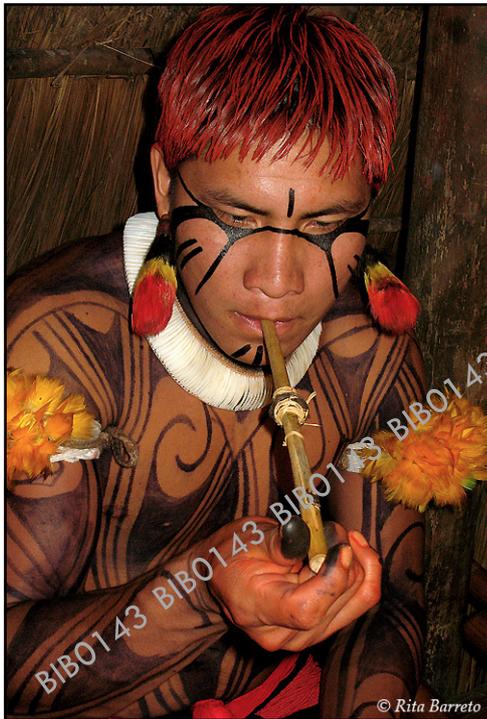
2016



2018

SUB-DISCIPLINA:

ETNOFARMACOLOGIA



ETNOFARMACOLOGIA

**FAZ O RESGATE DAS
MEDICINAS DE DIFERENTES
CULTURAS.**

*...utilizando métodos da
antropologia cultural, botânica e
zoologia*

Entrevistas (xamã, curador, rezador, parteira,...)
Coleta de plantas, animais, minerais, fungos

© Rita Barreto



Etnobotânica: SUB-DISCIPLINAS- ETNOFARMACOLOGIA

ESTUDOS DE ETNOFARMACOLOGIA DESENVOLVIDOS PELO CEE

BRASIL

CABOCLOS - RIO JAÚ (1995)
CABOCLOS - RIO UNINI (2010)

SERTANEJOS (2007)

ÍNDIOS KRAHÔ (2001)

AFRO-DESCENDENTES (2001)

MIGRANTES P. BORORÉ (2007)
UMBANDISTAS (2008)
MIGRANTES DIADEMA (2008)
ÍNDIOS GUARANI (2009)
COMERCIANTES DE D.V. (2009)
QUILOMBOLAS, Ubatuba (2015)

ESTUDOS DE ETNOFARMACOLOGIA DESENVOLVIDOS PELO CEE

Colaboração - UNIFESP x Men-Tsee-Khang

MÉDICOS TIBETANOS NA ÍNDIA - DHARAMSALA (2010)

Etnobotânica: SUB-DISCIPLINAS - ETNOFARMACOLOGIA

PHYTOTHERAPY RESEARCH
Phytother. Res. 27: 552–563 (2013)
 Published online 7 June 2012 in Wiley Online Library
 (wileyonlinelibrary.com) DOI: 10.1002/ptr.4749

**Formulas Used by Tibetan Doctors at
 Men-Tsee-Khang in India for the Treatment of
 Neuropsychiatric Disorders and Their Correlation
 with Pharmacological Data**

**Raquel Luna Antonio,^{1,3} Elisa H. Kozasa,¹ José Carlos F. Galduróz,¹ Dawa,² Yeshi Dorjee,²
 Tsultrim Kalsang,² Tsering Norbu,² Tashi Tenzin² and Eliana Rodrigues^{3*}**

¹Department of Psychobiology, Universidade Federal de São Paulo, Brazil – Rua Botucatu, 862, 1º andar, CEP 04023-062, São Paulo, SP, Brazil
²Men-Tsee-Khang – Gangchen Kyishong, Dharamsala, Distt. Kangra, 176215, HP, India
³Center for Ethnobotanical and Ethnopharmacological Studies, Department of Biological Sciences, Universidade Federal de São Paulo, Brazil – Rua Prof. Artur Riedel, 275, CEP 09972-270, Diadema, SP, Brazil

Etnobotânica: SUB-DISCIPLINAS - ETNOFARMACOLOGIA

RIBEIRINHOS AMAZÔNICOS

Amazonas
 Bioma floresta Amazônica

**Parque Nacional do Jaú e
 Reserva Extrativista do rio
 Unini,
 AMAZONAS**




PHYTOTHERAPY RESEARCH
Phytother. Res. 20, 378–391 (2006)
 Published online in Wiley InterScience (www.interscience.wiley.com) DOI: 10.1002/ptr.1866

Plants and Animals Utilized as Medicines in the Jaú National Park (JNP), Brazilian Amazon

Eliana Rodrigues*
 Department of Psychobiology, Universidade Federal de São Paulo, Rua Botucatu, 862-1 andar Edifício Biomédicas CEP 04023-062, São Paulo, S. P., Brazil

Revista Brasileira de Farmacognosia 26 (2016) 379–384



Brazilian Journal
of Pharmacognosy

REVISTA BRASILEIRA DE FARMACOGNOSIA

www.elsevier.com/locate/bjfp



Original Article

Exudates used as medicine by the “caboclos river-dwellers” of the Unini River, AM, Brazil – classification based in their chemical composition

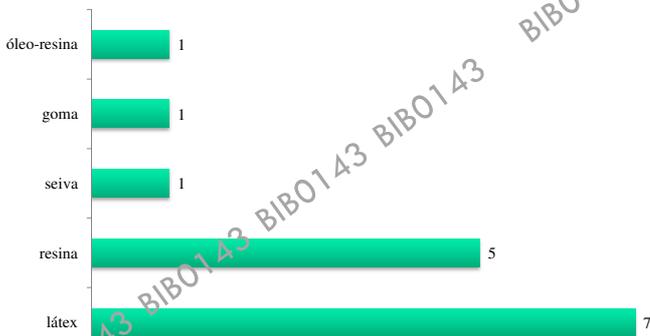
João Henrique G. Lago^{a,b}, Jaqueline Tezoto^a, Priscila B. Yazbek^a, Fernando Cassas^a, Juliana de F.L. Santos^c, Eliana Rodrigues^{a,*}

^a Department of Biological Sciences, Centro de Estudos Etnobotânicos e Etnofarmacológicos, Universidade Federal de São Paulo, Diadema, SP, Brazil
^b Department of Exact Sciences and Earth, Universidade Federal de São Paulo, Diadema, SP, Brazil
^c Coordenação em Ciência e Tecnologia, Universidade Federal do Maranhão, São Luís, MA, Brazil



Etnobotânica: SUB-DISCIPLINAS- ETNOFARMACOLOGIA

15 exsudados - análises químicas (solubilidade e classes químicas) - foram classificados em:



Classificação	Quantidade
óleo-resina	1
goma	1
seiva	1
resina	5
látex	7

11 deles não foram mencionados na literatura farmacológica até o momento...

RESINAS DE PROTIUM – “breu”

Etnobotânica: SUB-DISCIPLINAS- ETNOFARMACOLOGIA



- Protium amazonicum* (Swatrec.) Daly - breu-branco
- Protium aracouchini* (Aubl.) Marchand - breu-preto
- Protium decandrum* (Aubl.) Marchand - chico-da-silva
- Protium heptaphyllum* (Aubl.) Marchand - breu-branco

Burseraceae

Dor de cabeça
Doença-do-ar
Doenças Respiratórias



Etnobotânica: SUB-DISCIPLINAS - ETNOFARMACOLOGIA

“BREU DO SAPO CANUARU”



Secreção do sapo
Trachycephalus resinifictrix Goeldi, 1907

Resina de diversas espécies de
Protium (Burseraceae)

Journal of Ethnopharmacology 144 (2012) 806–808

Contents lists available at SciVerse ScienceDirect

Journal of Ethnopharmacology

journal homepage: www.elsevier.com/locate/jep

ELSEVIER

Ethnopharmacological communication

The mystery of the 'resin-of-canuaru': A medicine used by caboclos river-dwellers of the Amazon, Amazonas, Brazil

E. Rodrigues^{a,*}, J. de F.L. Santos^b, S.M. Souza^c, J.H.G. Lago^a

^a Center for Ethnobotanical and Ethnopharmacological Studies (CEE)-Institute of Environmental Sciences, Chemical and Pharmaceutical, Universidade Federal de São Paulo (UNIFESP), Brazil

^b Department of Psychobiology, Universidade Federal de São Paulo UNIFESP, Brazil

^c National Institute of Amazonian Research (INIA), Brazil

ÍNDIOS KRAHÔ Etnobotânica: SUB-DISCIPLINAS - ETNOFARMACOLOGIA

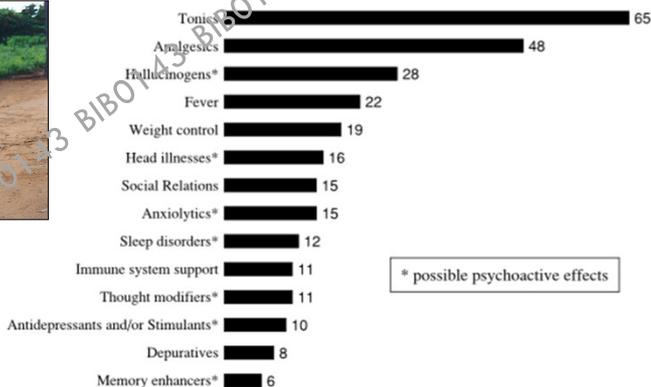
Tocantins
Bioma Cerrado



Ritual Use of Plants with Possible Action on the Central Nervous System by the Krahô Indians, Brazil

Eliana Rodrigues* and E. A. Carlini

Department of Psychobiology, Universidade Federal de São Paulo, Rua Botucatu, 862 – 1º andar Edifício Biomédicas CEP 04023-062, São Paulo, SP, Brazil



Ritual Use of Plants with Possible Action on the Central Nervous System by the Krahô Indians, Brazil

Eliana Rodrigues* and E. A. Carlini

Department of Psychobiology, Universidade Federal de São Paulo, Rua Botucatu, 862 – 1º andar Edifício Biomédicas CEP 04023-062, São Paulo, SP, Brazil

- | | |
|-------------------------------|------------------|
| 17. To lose weight (7) | 5 Weight control |
| 18. To not fatten (1) | |
| 19. To suppress appetite (2) | |
| 20. To stimulate appetite (6) | |
| 21. To fatten (2) | |

- | | |
|------------------------------------|--------------------------------|
| 34. To stop snoring (2) | 9 Sleep disorders ^b |
| 35. To sleep longer (1) | |
| 36. To have premonition dreams (1) | |
| 37. To sleep more lightly (1) | |
| 38. To have good dreams (1) | |
| 39. To induce sleep (5) | |



PHYTOTHERAPY RESEARCH
Phytother. Res. **22**, 1248–1255 (2008)
 Published online 20 June 2008 in Wiley InterScience
 (www.interscience.wiley.com) DOI: 10.1002/ptr.2474

Preliminary Investigation of the Central Nervous System Effects of ‘Tira-capeta’ (Removing the Devil), a Cigarette used by some Quilombolas living in Pantanal Wetlands of Brazil†

Eliana Rodrigues*, Bruno Gizafratti, Ricardo Tabach, Giuseppina Negri and Fúlvio R. Mendes

Department of Psychobiology, Universidade Federal de São Paulo, Brazil

Etnobotânica: SUB-DISCIPLINAS - ETNOFARMACOLOGIA

CIGARRO TIRA-CAPETA

Categoria: Fortificante do cérebro



Sr. Cezário preparando o fumo "Tira Capeta"

SUB-DISCIPLINA:

ETNOVETERINÁRIA

Etnobotânica: SUB-DISCIPLINAS- ETNOVETERINÁRIA

Etnoveterinária





Etnofarmacologia



Plantas:
Dermatites,
Verminoses
febre

Índios Aguaruna – Peru,
administrando planta via
nasal para a caça –
aumenta o olfato.

Jernigan, 2009

Contents lists available at ScienceDirect



Journal of Ethnopharmacology

journal homepage: www.elsevier.com/locate/jep



Investigation of urban ethnoveterinary in three veterinary clinics at east zone of São Paulo city, Brazil

RL Antonio ^{a,b,*}, RM Souza ^a, MR Furlan ^c, CR Pedro ^d, F Cassas ^a, S Honda ^c, E Rodrigues ^a

^a Center for Ethnobotanical and Ethnopharmacological Studies-Institute of Environmental Sciences, Chemical and Pharmaceutical, Universidade Federal de São Paulo, Brazil
^b Department of Psychobiology, Universidade Federal de São Paulo, Brazil
^c Universidade Taubaté, Brazil
^d Universidade Paulista, Brazil
^e Herbário Municipal (PMSF)-Prefeitura do Município de São Paulo, São Paulo, Brazil

ARTICLE INFO

Article history:
Received 8 April 2015
Received in revised form 15 July 2015
Accepted 19 July 2015
Available online 21 July 2015

Keywords:
Dogs
Cats
Medicinal plants
Domestic animals
Ethnopharmacology
Ethnoveterinary

ABSTRACT

Ethnopharmacological relevance: Urban Ethnoveterinary should be further explored because of its value as it resists conventional medical care. In addition, the comparison between the resources used by Ethnoveterinary and Ethnopharmacology should be investigated in depth, increasing the availability of new bioactive potential in human and veterinary medicines. This project aimed to determine whether plants are used in the health care of dogs and/or cats in urban area and to compare its uses with other ethnoveterinary and ethnopharmacological data.

Materials and methods: Three veterinary clinics from east area of São Paulo city were selected, in order to record the offering of plants to pets by their owners. Individual interviews were conducted from May to November 2012 and consisted of application of semi-structured interviews and questionnaires. A literature search was performed to compare our findings with other ethnopharmacological and ethnoveterinarian data from the literature.

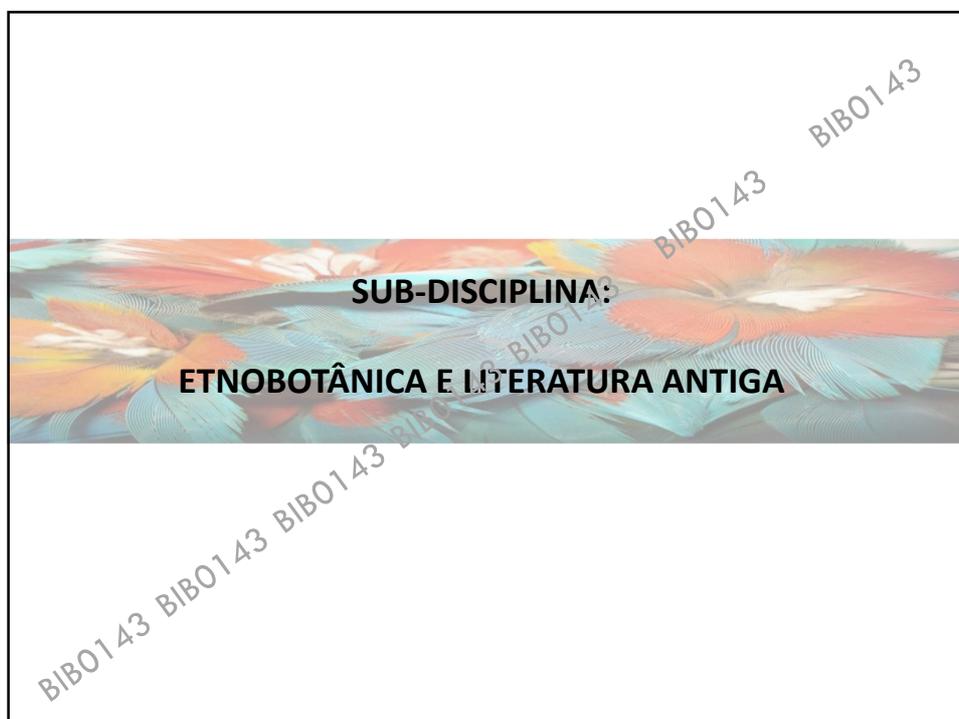
Results: A total of 273 people were interviewed and 46 (16.84%) of them utilize medicinal plants for their pets. Most plant species are exclusively home grown (57.9%). The plants most cited were *Plectranthus barbatus* Andrews, *Matricaria chamomilla* L. and *Foeniculum vulgare* Mill. The most frequent route of administration, part utilized and mode of preparation was oral (80.35%), leaves (89.47%) and infusion (61.90%), respectively. From 19 cited plants, 14 (73.7%) are mentioned in ethnoveterinary literature, whereas 11 (57.9%) are used for the same purposes. All plants reported in our study have at least one common use with ethnopharmacology.

Conclusion: The survey provided evidence of ethnoveterinary use of medicinal plants for dogs and/or cats in urban area of São Paulo, complementarily with the official veterinary, and showed that the plants used in pets are also used in humans with the same purposes and routes of administration, as well as in other animals.

© 2015 Elsevier Ireland Ltd. All rights reserved.

Table 1
Nineteen plant species indicated for the treatment of animal diseases, part utilized, mode of use and route of administration, recipe, ethnoveterinary uses mentioned in the present study, ethnoveterinary and ethnopharmacological uses from the literature.

Botanic and vernacular names, voucher	Part utilized, mode of preparation and route of administration	Recipe	Ethnoveterinary uses (animal; number of citations)	Other ethnoveterinary uses (animal-part of plant utilized)	Ethnopharmacological uses (humans)
1. <i>Aloe arborescens</i> Mill. [Xanthorrhoeaceae]-“babosa” PMSF 8569	Leaf/in natura/topic	Slice the leave lengthwise and use the inner gel directly to the skin	Skin allergy* (dog:1)	Gastro-intestinal parasites (goats-leaves) (Maphosa and Masika, 2010); to drench sick calves (cattle-leaves) (McCaw and Eloff, 2008); control of mastitis (livestock-leaves) (Avancini et al., 2008)	Skin lesions* and infectious diseases (Baptista et al., 2013; Coopoomary and Naidoo, 2013); parasitic diseases, respiratory system, digestive system, neoplasms (Baptista et al., 2013)





Available online at www.sciencedirect.com

ELSEVIER

ScienceDirect

Journal of Ethnopharmacology 109 (2007) 338–347

Journal of
ETHNO-
PHARMACOLOGY

www.elsevier.com/locate/jethpharm

Brazilian plants with possible action on the central nervous system—A study of historical sources from the 16th to 19th century

Melina Giorgetta, Giuseppina Negri, Eliana Rodrigues*

CEPRID, Department of Psychobiology at UNIFESP, Sao Paulo, Brazil

Received 21 April 2006; received in revised form 8 August 2006; accepted 8 August 2006
Available online 12 August 2006

340 *M. Giorgetti et al. / Journal of Ethnopharmacology 109 (2007) 338–347*

Table 1
Thirty-four species native to Brazil cited in historic literature with possible uses/effects on the central nervous system

Species (family)	Vernacular name	Indications in historic literature [part utilized]	Indications by Brazilian communities nowadays
<i>Anacardium occidentale</i> L. (Anacardiaceae)	Cajú (cashew)	"Intoxicating, inebriating" [fruit] (Martius, 1939)	Hemorrhoids, serious diarrhea [bark]—coastal Caiçara fishermen (Di Stasi and Hiruma-Lima, 2002); lower extremity pain, skin injury [bark]—Pataxó Indians (Thomas, 2001); to treat inflammations [bark] (Albuquerque and Andrade, 2002); inflammation—Xucuru Indians (Silva and Andrade, 1998)

SUB-DISCIPLINA:

ETNOBOTÂNICA:

DESENVOLVIMENTO LOCAL E CONSERVAÇÃO



Biodivers Conserv

Table 1 Scoring criteria used to identify species with conservation priority

Criterion score	Points
A. Density in the area (average number of individuals/0.1 ha.) (D)	
Not recorded—very low (0-1)	10
Low (1.1 < 3.5)	07
Medium (3.6 < 7)	04
High (≥7.1)	01
B. Harvesting risk (C)	
Destructive collection of the entire plant, bulbs and stalks, removal of cork-tissue, bark, or roots. Represents the removal of the individual and its future offspring from the population	10
Removal of the perennial structures, such as roots and bark without causing individual mortality	07
Removal of the permanent aerial structures such as leaves, stems, and sap, affecting plant energetic investments, survival, and reproductive success	04
Removal of transitory aerial structures, such as flowers and fruits. Population regeneration may be altered in the long-term as these produce or hold seeds but the individual plant, particularly where asexual reproduction is possible, is not affected	01
C. Local use (L)	
High (cited by more than 20% of the informants)	10
Moderately high (10-20%)	07
Moderately low (<10% of all citations)	04
Low (only referred to in the literature)	01
D. Use-diversity (Div)	
For each use, add one point to maximum	10

Plant density, harvesting risk, local importance and diversity of use (modified from Dzerfos and Witkowski 2001)

Biological value (B) = D × C

Use-risk (RU) = 0.5(C) + 0.5(U) × 10

U = use-value, determined by the largest value between L or Div (Mander et al. 1997 apud Dzerfos and Witkowski 2001)

Conservation Priority (PC) = 0.5 (B) + 0.5 (RU)

Category 1 (species with rating ≥85) require conservation priority and should not be harvested until a management regime is instituted

Category 2 (species with rating between 85 and 60) can be harvested moderately

Category 3 (species with rating ≤60) are appropriate for harvesting Plant density, harvesting risk, local importance and diversity of use (modified from Dzerfos and Witkowski 2001)

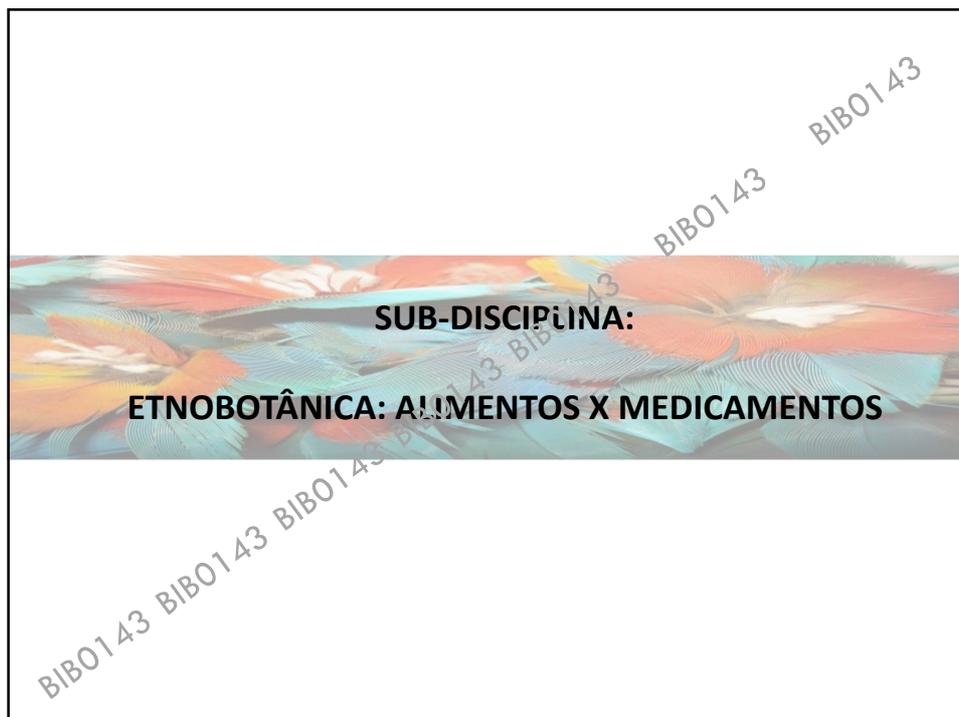
Ethnobotanical and Ecological data are used to evaluate the plant's Conservation Priority Index (CPI).

142 espécies

Category 1 – 73%
104 espécies
plants should not be collected until the elaboration of a management plan is done

Category 2 - 34
plants could be collected, with moderation

Category 3 - 8
plants could be freely collected



Etnobotânica: SUB-DISCIPLINAS – ALIMENTOS X MEDICAMENTOS

Public Health Nutrition: 16(10), 1820-1826 doi:10.1017/S136898001200434X

Changes in the acquisition and consumption of food plants and their relationship with indigenous perceptions of health in a Guarani village, São Paulo, Brazil

Nayara Scalco^{1,2} and Eliana Rodrigues^{2,*}

¹Department of Psychobiology, Universidade Federal de São Paulo, São Paulo, Brazil; ²Department of Biological Sciences, Center for Ethnobotanical and Ethnopharmacological Studies (CEE), Universidade Federal de São Paulo, Rua Prof. Artur Riedel 275, Jardim Eldorado Diadema, São Paulo, CEP 09972-270, SP, Brazil

Etnobotânica: SUB-DISCIPLINAS – ALIMENTOS X MEDICAMENTOS

**ALIMENTAÇÃO:
PASSADO E PRESENTE**

- *Avaxi* (milho),
- *Pety* (tabaco),
- *Caáy* (erva-mate).

- Alimento para Corpo
- Alimento para Alma
- Cozido x fritura
- Açúcar, bolacha, refrigerante.



MUDANÇAS NA ALIMENTAÇÃO, TROUXE:
DIABETES
OBESIDADE
PRESSÃO ALTA

SUB-DISCIPLINA:

ETNOMICOLOGIA



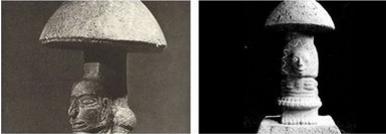
É a disciplina mais recente da Etnobotânica!
Poucos estudos!!!!



BIBO143 BIBO143 BIBO143 BIBO143 BIBO143 BIBO143 BIBO143 BIBO143

Etnobotânica: SUB-DISCIPLINAS - ETNOMICOLOGIA

Os aztecas os chamavam de teonanacatl ou “carne dos Deuses”: **fungo SAGRADO**



Dr. R. Gordon Wasson



Psilocybes spp.
P. mexicana, *P. cubensis*

BIBO143 BIBO143 BIBO143 BIBO143 BIBO143 BIBO143 BIBO143 BIBO143

Etnobotânica: SUB-DISCIPLINAS - ETNOMICOLOGIA

Prejuízos para Maria Sabina – a polícia do México achava que ela era “traficante”

Sua comunidade a expulsou, sua casa foi queimada.



"From the moment the foreigners arrived, the 'holy children' lost their purity. They lost their force, they ruined them. Henceforth they will no longer work. There is no remedy for it."

PRINCIPAIS REVISTAS DA ÁREA

Internacionais:

Journal of Ethnopharmacology
Journal of Ethnobiology and Ethnomedicine
Journal of Ethnobiology
Planta Medica
Economic Botany
Conservation Biology

Nacionais:

Ethnoscintia: Revista Brasileira de Etnobiologia e Etnoecologia
Revista Brasileira de Plantas Mediciniais
Revista Brasileira de Farmacognosia



BIBO143 BIBO143 BIBO143 BIBO143 BIBO143 BIBO143

OBRIGADA!!!!!!!

68.eliana@gmail.com