

Native Trees from Amazon Forest Fragments with Medicinal Potential

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ISSN: 2637-7802



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Submission: 📅 November 03, 2020

Published: 📅 November 30, 2020

Volume 1 - Issue 2

How to cite this article: Aline Gonçalves Spletozer. Native Trees from Amazon Forest Fragments with Medicinal Potential. Part Two. Biodiversity Online J. 1(2). BOJ.000510.2020.

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Abstract

The impacts on the Amazonian flora bring a significant reduction of plant species considered medicinal, even before being studied. In this mini review we show several medicinal tree species from forest remnants in the Amazon. Of the 60 species recorded in the two fragments, 22 showed medicinal use registered in the literature. The greatest use found was anti-inflammatory, followed by antioxidant and ulcer. The results show that the tree species occurring in the studied fragments have wide medicinal use, being, therefore, a possible source of extraction of compounds for pharmacological use. Evidencing the importance of the conservation of these habitats for the preservation of the flora and for the health.

Keywords: Amazonian flora; Livestock; Antimicrobial; Antioxidant

Introduction

The loss and fragmentation of forest habitats is one of the most important and invasive consequences of the current dynamics of land use. The change generated by agriculture, livestock and urbanization is responsible for major changes in natural landscapes in all biomes, transforming continuous areas into isolated fragments, threatening the integrity of ecosystems [1]. All these impacts on flora bring a significant reduction of plant species considered medicinal, even before being studied [2].

Establishing species of medicinal plants as a target for research, defining their potential and use, becomes a means of conserving the remaining resources. [3] emphasize that the knowledge of the diversity of tree species is an important instrument for the screening of botanical material in analyzes of potential use, especially for pharmacological evaluation. A little explored theme in forest remnants, which allows the sustainable use of natural resources contained in these environments and can generate proposals for public policies that regulate the reduction of these areas, due to the importance of species that can be used medicinally by the population. Therefore, in this mini review we show several medicinal tree species from forest remnants in the Amazon. Studies like this are essential, both for the subsistence of fragments and protection of natural resources, as well as for the development of safe and rational use of these plants to treat basic health needs.

Trees with Medicinal Potential

From a list of species occurring in two forest fragments located in the south of the Amazon, with vegetation characterized as Dense Ombrophylous Forest, the medicinal use registered for these species was researched [4]. Of the 60 species recorded in the two fragments, 22 showed medicinal use registered in the literature (Table 1). The greatest use found was anti-inflammatory, cited for about 37% of the species (8 species), followed by antioxidant and ulcer use and other stomach problems with 5 registered species. Three species were also found with diuretic use and three with antimicrobial use. *Lindackeria paludosa* (Benth.) Gilg presented indication against primary tumors, already *Cedrela fissilis* Vell is indicated as antimalarial [5,6].

Among the researched species *Bauhinia forficata* Link and *Jacaratia spinosa* (Aubl.) A.DC. presented with hypoglycemic and diabetes properties, respectively [7-9] mention several species used in Brazilian popular medicine, similar to the review presented by the present study, highlighting the importance of a study like this to enhance information on the uses of the native flora.

Table 1: Species present in forest fragments in the Amazon with medicinal uses mentioned in the literature.

Families	Species	Medicinal Use
Achariaceae	<i>Lindackeria paludosa</i> (Benth.) Gilg	Anti-inflammatory
Annonaceae	<i>Anaxagorea dolichocarpa</i> Sprague & Sandwith	Headaches
Apocynaceae	<i>Aspidosperma carapanauba</i> Pichon	Anti-inflammatory
Bignoniaceae	<i>Jacaranda copaia</i> (Aubl.) D.Don	Fungal infection
Boraginaceae	<i>Cordia exaltata</i> Lam.	Antimicrobial activity
Burseraceae	<i>Protium sagotianum</i> Marchand <i>Protium unifoliolatum</i> Engl.	Painkillers, ulcers and anti-inflammatory Ulcers and anti-inflammatory
Caricaceae	<i>Jacaratia spinosa</i> (Aubl.) A.DC.	Vermifuge, diuretic, asthma, diabetes, infectious diseases
Celastraceae	<i>Cheiloclinium cognatum</i> (Miers) A.C.Sm.	Antioxidant
Euphorbiaceae	<i>Croton urucurana</i> Baill. <i>Sapium marmieri</i> Huber	Painkillers and anti-inflammatory Purgative
Fabaceae	<i>Bauhinia forficata</i> Link <i>Schizolobium parahyba</i> (Vell.) Blake	Anti-inflammatory, diuretic, hypoglycemic Astringents
Malvaceae	<i>Apeiba tibourbou</i> Aubl.	Stomach stimulant, anti-inflammatory, anti-oxidant
Meliaceae	<i>Cedrela fissilis</i> Vell. <i>Guarea guidonia</i> (L.) Sleumer	Astringent, antimalarial, healing and ulcers Astringents, purgatives, febrifuges, emetics and anti-inflammatory
Moraceae	<i>Sorocea guillemianiana</i> Gaudich.	Stomach problems
Rosaceae	<i>Prunus myrtifolia</i> (L.) Urb.	Antioxidant, antifungal and antimicrobial
Rubiaceae	<i>Palicourea guianensis</i> Aubl.	Antioxidant
Rutaceae	<i>Zanthoxylum rhoifolium</i> Lam.	Antioxidant and antimicrobial
Simaroubaceae	<i>Simarouba amara</i> Aubl.	Anti-inflammatory
Siparunaceae	<i>Siparuna guianensis</i> Aubl.	Muscle aches and diuretic

Conclusion

The results show that the tree species occurring in the studied fragments have wide medicinal use, being, therefore, a possible source of extraction of compounds for pharmacological use. Evidencing the importance of the conservation of these habitats for the preservation of the flora and for the health.

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