ISSN: 2230-9926

Available online at http://www.journalijdr.com

IJDR

International Journal of Development Research
Vol. 10, Issue, 06, pp. 36590-36591, June, 2020
https://doi.org/10.37118/ijdr.19024.06.2020

RESEARCH ARTICLE OPEN ACCESS

WHITE FOREST AND ETHNOBOTANY: ENDEMIC KNOWLEDGE AS A KEY ELEMENT IN THE TREATMENT OF CORONAVIRUS DISEASE

***Alecksandra Vieira de Lacerda**

Professor at the Federal University of Campina Grande (UFCG), Sumé, Paraíba, Brazil

ARTICLE INFO

Article History:
Received 10th March, 2020
Received in revised form
17th April, 2020
Accepted 28th May, 2020
Published online 25th June, 2020

Key Words:

Plant Resources; Ethnoknowledge; New Coronavirus; Caatinga.

****Corresponding author:***
Alecksandra Vieira de Lacerda

ABSTRACT

This article carefully presents, in a discursive, detailed, and historical perspective, an analysis on traditional groups' knowledge in natural systems of Caatinga ("white forest") and its potential for technological advances in the proposal of phytoproducts to resolve or reduce the negative effects of the new coronavirus (2019-nCoV). Thus, this study is an act of reflection that translates the meaning of the relationship between society and nature, leading us to a field of vision that denotes the relevance of the sustainable use of natural resources as a driver of regional development. In this sense, it is recorded that the knowledge in areas of Caatinga developed from the experience of social groups with their plant resources. It is noteworthy that the species endemism in this region also determines endemic knowledge, i.e., exclusive of a relationship developed in natural systems and marked in short rainy seasons and long periods when the sun shows itself as the master and author of the present reality. Therefore, ethno botanical studies have proved to be valuable for recording this endemic knowledge, which can indicate important species to be used in the treatment of coronavirus disease.

Citation: ***Alecksandra Vieira de Lacerda.*** "White forest and ethnobotany: endemic knowledge as a key element in the treatment of coronavirus disease*", International Journal of Development Research*, 10, (06), 36590-36591.

INTRODUCTION

The caatinga vegetation, referenced in this paper as "white forest", is defined by its high potential in natural systems in the semi-arid region of Brazil. In this sense, the relevance of ethnobotanical knowledge in the treatment of the new coronavirus (2019-nCoV) disease has been highlighted. Thus, it is initially necessary to define in this reflection the historical context ofthe occupation of the Caatinga, where man, over time, sought to unravel its secrets, modifying ecological systems and dominating its environment. In this process of permanent relationships, the knowledge of the potential of this biome was generated. Records were made and remade in time bands, in which long periods of drought and low rainfall determined human survival strategies in areas of Caatinga (Lacerda *et al*., 2015). Thus, social actors (traditional groups) learned to observe nature, making connections between the various biotic and abiotic components. In this way, it was molded a territory marked by humans' needs, who were constantly being challenged to take daily readings to order their work and guarantee their survival. In this context, it is emphasized that the species endemism in this region also determine endemic knowledge, i.e., exclusive of a relationship developed in natural systems. The current scenario is characterized by a great concern regarding the loss of biodiversity in natural systems in areas of Caatinga. However, it is warned that the negative impacts also increase as the ethnobotanical knowledge erodes, especially that relating to knowledge endemic to these areas. The rupture of corridors of endemic knowledge, from which the flow of information between different age groups was perpetuated, has significantly affected the advancement of technological scales for recognizing the high potential of plant resources in this biome. The propositions of phytoproducts obtained from the Caatinga have been discussed over time, and among the various actions to achieve these objectives, the incorporation of the "way of looking and acting" of traditional cultures has stood out. The practical meaning of this traditional knowledge is its possibility of being translated into information on biological connections, ecological principles, and the management of natural systems. Thus, the importance of ethnoecology in areas of Caatinga is ratified. This multidisciplinary field has a function to unveil, understand, and systematize, scientifically, a whole set of theories and

practices related to the biotic and abiotic ecosystem components, arising from empirical experimentation by traditional groups. Within this discursive approach, it is then perceived that ethnoecological and ethnobiological studies cover an extensive domain, due to their interdisciplinary character, which increasingly involves approaches of areas such as botany. Ethnobotany, when related to areas of Caatinga, is characterized by its significance in the elaboration of products, which can be used, e.g., in the treatment of the new coronavirus (2019-nCoV) disease. In this regard, from the relationships between traditional groups and plant resources, cognitive models of vegetation manipulation are developed, which may indicate alternatives for the use of such environmental services to combat the negative impacts caused by the coronavirus. In this context, some questions, which can help resolve or reduce the abovementioned negative effects on human society, need to be answered in studies to be expanded by ethnobotany. Thereby, the following questions can be raised: (1) What are the plant species with antiviral and anti-inflammatory potentialsable to strengthen the immune system? (2) What are the biotic and abiotic factors of natural systems that determine the distribution of plants with such potentials? (3)How is this knowledge distributed among traditional groups?(4) How is the management of plant resources with these potentialities? Answering these questions, it will be possible to strengthen technological advancement for the preparation of phytoproducts derived from the Caatinga to be used in the treatment of the new coronavirus (2019-nCoV). Thus, considering the potential of plant resources and the knowledge of social actors living in the Caatinga, it is necessary to invest in measures to reduce the ecological simplification of natural systems and the loss of endemic knowledge in this biome. A form of use respecting the principles of sustainability must be assumed and, in this way, guarantee access to the potentials of this biome without affecting the factors of existence and permanence of its natural wealth. In this sequence, for the advancement of development strategies in the Caatinga biome, application of the Eco-Sustainability precepts has been ratified, which is defined by the principles that seek to ensure the systemic balance through the permanence and renewal of functional values resulting from the relationship between the biotic and abiotic components (Lacerda, 2016). Therefore, the challenge is to write the history of the "white forest" using ethnobotanical studies as one of the descriptive lines. These studies have proved to be valuable for recording endemic knowledge, which may indicate important species to be used in the treatment of coronavirus disease.

REFERENCES

Lacerda, A. V. *Oscílios das águas*: espaçosplurais no contexto do semiáridobrasileiro. Campina Grande: EDUFCG, 2016.

Lacerda, A. V.; Barbosa, F. M.; Dornelas, C. M. S.; Gomes, A. C.; Lima, L. H. C.; Silva, C. E. M. O Homem e o Ambiente Semiárido: um Exercício Educativo Inserido no Campo da Biologia da Conservação In*: Metodologias e Práticas*: Experiências no Semiárido Brasileiro.1 ed. Cachoeirinha: Everprint Indústria Gráfica Eireli, 2015, p. 165-175.

****