

TROPICAL BOTANY: A BRIEF INTRODUCTION

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Summary

This Chapter introduces the volume on Tropical Botany of the Encyclopedia of Life Supporting Systems (EOLSS/UNESCO). The choice of chapters was primarily focused on major vegetation types, and secondarily on peculiar plant functional types of the tropical world. A very brief historical overview is given so as to argue that Botany has reached a postmodern era, where it has to reconcile scientific uncertainty with political decision-making regarding biodiversity issues and, ultimately, recognize man and nature as inseparable parts of a same unit.

1. Introduction

Tropical Botany is rich, complex and diverse to an extent that any encyclopedic effort, such as this one, is most surely non-exhaustive. Human knowledge on tropical botany amounts to so much that anyone who attempts to provide a synthesis has to make tough choices during the process of building up a strategy to approach the matter. Paradoxically, although much knowledge has been accumulated, gaps are still immense.

Our first choice was to focus on **normal knowledge**, rather than on gaps (but these are surely mentioned in all Chapters), since encyclopedias are supposed to gather well-established knowledge, while classifying things. World's first encyclopedia was organized and produced by Denis Diderot (1713-1784) and Jean le Rond D'Alembert (1717-1783), in the period ranging from 1746 to 1772. It was called "*Encyclopédie, ou Dictionnaire Raisonné des Sciences, des Arts et des Métiers*" and aimed to gather all knowledge available about all things up to that point in history. This time in history is

known as Illuminism or the Age of Enlightenment, when classifying things was a key intellectual activity in society.

Thus classification is our first keyword here. Ernst Walter Mayr (1904-2005) defined “class” as a group of inter-related entities that resemble each other and argued that all classification systems play two roles: to facilitate access and retrieval of information, and to provide a background for comparative research. Mayr (1997) argued that whoever aims to classify anything must attend to four principles: (1) items to be subjected to classification must be grouped in classes as homogeneous as possible; (2) an individual item must be included in a class with which it shares a high number of attributes; (3) a separate class must be established to any item that is so different that it cannot be allocated to any of the available classes; and (4) the degree of difference between classes is expressed by their arrangement along a hierarchy of classes or sub-classes.

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Biographical Sketches

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