

# THE CORAL OF EMBRYOPHYTE LIFE

A preliminary sketch on

J. Podani, Department of Plant Systematics, Ecology and Theoretical Biology, Institute of Biology, Eötvös University

Budapest, Hungary

E-mail: [podani@ludens.elte.hu](mailto:podani@ludens.elte.hu)

*"The tree of life should perhaps be called the coral of life, base of branches dead; so that passages cannot be seen."*  
Darwin (1837-1838): Notebook B

## Main features of a coral diagram

vents;

**Chronological:** Embedded in the time dimension;

**Paleontological:** Extinct lineages, fossils also appear;

**Self-similar:** May be zoomed in to expand branches (see insets).

**Commensurable:** Species richness of groups at the same scale;

*Rank free:* Branches are named:

Continuous in space and time.


Anastomosing segments allowed (fan corals)

*Historical:* Major events of macroevolution noted and other comments included:

*Artistic:* some elements are arbitrary, though.

Why is a branching coral better metaphor of phylogeny than a tree?

1. The tree is alive from the tiniest roots to its uppermost leaves, whereas the coral polyps occur mostly at the tips and dead branches may form several hundred m thick layers under aolts.



3. The tree has a large root system, and as a whole it cannot represent evolution, while a coral is attached to the bottom with its oldest part from which the entire colony develops.