Abstract

This thesis summarizes the present status of findings of reef ecosystem in the Earth history,

beginning with uncertain discoveries of Precambrian till the end of the Tertiary.

The work is divided into three thematical units, according to the phanerozic erathems. In the

beginning of every unit I describe the reef environment and its geographical presence in that time

period. Next, I mention main groups of reef building organisms and their changes in time. A key

part of each chapter are dedicated to the development of corals of given erathem, their prosperity

during favorable conditions and impact of deteriorating conditions of their occurrence. And so,

the other part of my work is also a description of the decline of coral reefs during the five main

mass extinctions.

The thesis also contains a comparison of the systematic classification of Anthozoa in biological

and geological point of view.

Key words: coral reefs in geological history, evolution, palaeoecology, composition