SUMMARY

MARINE CRUSTACEANS OF BADEN FLOOR IN KRNDIJA FROM THE COLLECTION OF NATURAL SCIENCES DEPARTMENT IN THE MUSEUM OF SLAVONIA

Layers of the early Tertiary in Krndija have been found on a number of localities with pretty limited expansion, especially when older exemplars are concerned. They were found at brims of Krndija in continued succession and perclinal disposition, depending on structural position and morphology of the ground. According to their relations and fossil contents the layers are divided into the following stratigraphic units: otnag, carpath, upper baden, lower sarmat, lower and upper pannon, lower and upper pont, paladun and pioquadlar layers.

In the collection of invertebrate fossils in the Museum of Slavonia there are numerous examples of Krndija macrofauna. The most represented marine crustaceans of baden floor are Glycemeris, Pecten, Chlamys, Spondylius, Pycnodonta, Ostrea, Lucina, Venus, Panoea. The collection also contains exarnplers of gastropods Conus, Oliva, and Mitra, Clypeaster sea-urchins, and Flabellum coral.

Marine layers of baden floor are lying discordantly across crystal base and are found in the zones from Gradac and Lounčica, across Ljeskovica to Borovik. They developed in various environment of neritic causing heterogeneity of lithofacies. Sedimentation, as a rule, begins with basal polymeric conglomerates in which round shaped pebbles of slate varieties of metamorphism series linked with cement material. In the next superpositional interval we can mostly find fossil biogenetical lime-stone, rugged and semi-rugged facies, in alternation with lime sandstones creating smaller biotomic bodies. During transition into sarmat we can notice only sand or lime marls, accumulated in the protected environment towards from the shore. Thickness of baden floor at the surface is 200-300 m, and the thickness is growing toward north-east.

The elaborated crustaceans systematized according to the classification of Rudolf Sieber from 1955 consists of rare completely preserved bivalvia, and frequent examples preserved as stone hearts and traces which could hardly be specifically determined. Only species with shells are determined on the whole, while some species, not separated from the sediments, could only be determined according to the genus. For determination of presence of fossil species during biostatigraphic research whole shells and stone hearts were used together with traces of external ornamentation, patterns and shell fragments. After research work of fossil bivalvia it was established that they are the species characteristic for baden layers sedimented in marine conditions, in the shallow coastal region.

Sediments shaped as hard lime marl and marl clay or as thick layers of litotamin lime-stone and sandstone, developed next to the coast of the former sea with numerous remains of thick shell crustaceans, sea-urchins and corals. (TAKSIĆ, 1970)