

## *Studia breviora*

### Triassic fossil remains in the siderite ore of the Kremikovci iron-ore deposit

The geological age of the ore-hosted rocks in the Kremikovci iron (+Pb—Mn—Ba) ore deposit was determined so far only by means of lithological similarity with non ore-bearing formations from adjacent areas whose age was certainly known. The rocks in the ore deposit were more or less affected by tectonic processes being part of the Kremikovci Nappe. Besides, the rocks were strongly- to completely altered due to the primary and secondary mineralization. This makes the drawn lithological analogies non reliable and explains the fact that the ore-hosted rocks of primary mineralization have been considered to be of Triassic age by some authors, e. g. Станев, Панайотов (1964), and of Jurassic age by others, e. g. Попов et al. (1985); Попов (unpublished data from 1989). It is widely known that the siderite represents the main primary ore, whereas the limonite and partly the hematite which dominate in the high topographical levels of the deposit are secondary ores.

During the geochemical sampling in the Kremikovci day-light mine in 1991 bivalvian and gastropod mollusc faunas of moderate diversity have been collected. The fossil locality is situated in the northeastern side of the mine at topographical level 480-484. The fossils have been found in grey, fine grained, compact dense siderite which is non uniformly porous due to the presence of leached mollusc shells. The sideritic rock is flecked with small veins and nuclei of white barite and fine veins and minor impregnations of sulphide ore minerals. During the sampling and one year later the grey sideritic rock was exposed over an area of several dozen square metres. The sideritic rock resembles partly the secondary dolomites and dolomitic limestones of Iskar Carbonate Group in Western Stara Planina Mountain.

The following taxa have been identified: *Costatoria costata* (Zenkner), *Entolium liscaviensis* (Giebel), *Curionia* aff. *gastrochaena* (Dunker), *Unionites* (?) sp. indet., *Gastropoda* gen. et sp. indet.

The species *C. costata* is represented by more than 20 specimens only. The rest of the taxa are represented by one to five specimens which are fragments as a rule. They are relatively well preserved inner nuclei and/or outer prints. The shells themselves are leached and the walls of caverns are covered by fine colourless carbonate crystals. Marks of the hinge teeth are visible on some specimens of *C. costata*. Some of the taxa recorded are longer ranging forms but their co-existence has proved a stratigraphical interval from the highest Lower Triassic (Spatian Stage) to the lowest parts of the Lower Anisian (Aegean + Bithynian) Substage of the Middle Triassic.

## References

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