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ABSTRACTS

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The sixth stage: from 1990 till present. Ad.A.Aliyev, A.H.Hasanov, I.S.Guliyev, A.A.Feyzullayev, B.M.Panahi, F.A.Kadirov, Ch.S.Aliyev et al. The studies of mud volcanoes in cooperation with foreign oil companies. Morphogenetic classification of mud volcanoes by specific features. The study of volcanoes with GPS and monitoring stations. The compilation of catalogue of eruption of mud volcanoes (2002), new map of "Map of mud volcanoes of Azerbaijan" in scale 1 : 500 000 (2003) et al.

### **New data on the Tithonian ammonites from the Tekegajachai Basin, Mt. Susuzlug , Lesser Caucasus, Azerbaijan**

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Tithonian deposits of the Lesser Caucasus are characterized by rare ammonites and hitherto were not studied in details. From the different areas of Lesser Caucasus our predecessors determined some ammonites, such as *Subplanites contiguus*, "*Perisphinctes*" *zitteli*, *Haploceras carachteis*. In our opinion these ammonoids are typical for the Middle Tithonian Fallauxi Zoze (Cecca, Enay, 1991) except *H. carachteis*, ranged on the whole Tithonian Stage, while the Upper Tithonian rocks were not supported by ammonite records.

During the joint investigations of the molluscan faunas from the Jurassic/Cretaceous boundary beds of Azerbaijan we have find few interesting ammonoids in the collections. These specimens were gathered in the beginning of 1960<sup>th</sup> from the span of the 260-440 m from the base of suggested Tithonian-Berriasian beds of Tekegajachai River Basin and determined by O.B.Aliev and A.G.Khalilov as typical Berriasian fossils *Berriasella payuannei*, *B. ex gr. callisto*, *Protetragonites* c.f. *quadrisulcatus*, whereas the age of the lowermost part of the section was recognized on the base of aptychi *Lamellaptychus lamellosus* and *Punctaptychus punctatus*. (Aliiev, Alijulla, 1963). These determinations allowed to conclude about the Tithonian – Berriasian age of the section under investigation (Aliiev, Alijulla, 1963). Afterwards from the studied area was reported another Berriasian species, *Berriasella pontica* (Khalilov, Aliiev, 1988), perhaps (from the labels) characterized by the upper part of the section (span of the 500-800 m from the base).

Reinvestigation of the original specimens of ammonoids show that they strictly differs from the Berriasian ones and belongs to Tithonian taxa. So, ammonites labeled as *B. pontica*, have clear distinction from the typical *Berriasella pontica* (Retowski, 1893, pl.X, fig.9) by the more dense, bifurcate, slightly prorsiradiate ribbing without curvature on the flanks and by the more evolute whorls. These features are typical for the genus *Oloriziceras* of the Late Tithonian (Simplisphinctes/Magnum Chron) age. *Oloriziceras* was recorded from the Spain (Tavera, 1985), Marocco (Benzaggagh, 2000), Austria (Zeiss, 2001) and recently was found in the Eastern Crimea (Arkadiiev, 2004). Specimens from the studied collection may belong to the species *O. magnum* Tavera and *O. salarense triplex* Zeiss.

Ammonites from the lowermost part of the section also do not belong to the Cretaceous species. Specimens labeled as *Berriasella pauyannei* differ from the true *Berriasella* by the straighter polygyrate ribs. These ammonites show some characters of the genus *Subplanites* and are very close to the species *S. postrueppelianum* (Ohmert, Zeiss, 1980, p.29, pl.13, fig.1-3). We determined these ones as *S. cf. postrueppelianum*. It is important that records of the *Subplanites* sp.indet. were noted from the beds with *Lamellaptychus* and *Punctaptychus* of the section located not far away from the section under discussion, also within Susuzlug Ridge (Gasanov, 1985).

First appearance datum of the *Subplanites* is fixed in the latest Kimmeridgian, but acme-level of this genus is lowermost Tithonian. Species *S. postrueppelianum* is a characteristic fossil of the *eigeltingense* horizon, the lowermost faunal horizon of the Tithonian (Schweigert, 2000). Aptychi belonging to the *Punctaptychus* were unknown from the deposits older than Tithonian (Khalilov, 1978). Therefore we suggesting Hybonotum Chron as probable age of the lower part of the section (up to level 440 m from the base).

Thus the re-studying of the ammonites from the supposed Tithonian-Berriasian beds of the Tekegajachai Basin shows their Tithonian age. True Upper Tithonian ammonites were determined from the Lesser Caucasus for the first time.

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