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OCCURRENCE OF STOMIOSPHAERA CARDIFORMIS AYALA-CASTAÑARES ET SEIGLIE SPECIES IN UPPER CRETACEOUS OF WEST CARPATHIANS

(Plate I)

Abstract. In sandy limestones of Middle and Upper Campanian of Gosau Cretaceous and in sandy limestones of Campanian of West Carpathian Klippen Belt occurrence of *Stomiosphaera cardiiformis* Ayala-Castañares et Seiglie species has been determined.

Several well preserved sections of *Stomiosphaera cardiiformis* Ayala-Castañares et Seiglie have been determined in thin sections from Middle and Upper Campanian sandy limestones of Gosau Cretaceous and Campanian sandy limestones of the Klippen Belt. First occurrence of this species was described by Ayala-Castañares et Seiglie (1962) in Cuba, Las Villas province.

Familie *Calcisphaerulidae* Bonet, 1956

Genus *Stomiosphaera* Wanner, 1940

Stomiosphaera cardiiformis Ayala-Castañares et Seiglie

(Pl. I, Fig. 1—3)

1962 *Stomiosphaera cardiiformis* sp. nov. Ayala-Castañares y Seiglie, p. 11—20, tab. I, fig. 1—9.

Description: Small one-chamber shell of hemisphaeric to subconical shape, heart-like in vertical section. Top of the shell is subangular, mostly well rounded. Lateral walls are slightly curved at the transition into apertural apparatus (basal part) forming a cone passing in the opening. Shell is calcic, hyaline, of radial arrangement. Horizontal section is circular. There are no characteristic specific for the identification of this species. Identification is difficult also in oblique sections which in some cases however is possible.

Individuals of this species found in the above rocks correspond to the description of Ayala-Castañares et Seiglie (1962). The shell dimensions are given below: Ayala-Castañares et Seiglie (1962): studied individuals:

shell diameter	0.073—0.098 mm	0.071—0.099 mm
height of shell	0.048—0.069 mm	0.056—0.078 mm

Stomiosphaera cardiiformis Ayala-Castañares et Seiglie is very similar to *Stomiosphaera conoidea* Bonet (Pl. I, Fig. 4) differing by the bell like form and curving of shell at the transition into oral opening. As stated by Bonet and Trejo (1958) some individuals of *Stomiosphaera conoidea* Bonet possess also cardiform shape, the bell-like form however is predominating. According to Bonet (1956)

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Stomiosphaera conoidea Bonet occurs in the stratigraphic range within Albian-Turonian.

Stratigraphic distribution: In the Las Villas province in Cuba the species has been found in two localities, one Campanian and other Maistrichian.

Occurrence: Sandy limestones of Middle to Upper Campanian, Gosau Cretaceous (Bradlo SW slope) in the association with *Stomiosphaera sphaerica* (Kaufmann), *Pithonella ovalis* (Kaufmann), *Globotruncana* sp., *Gümbelina* sp., *Miliolidae*, bivalves shells fragments and algal fragments.

Salaj (1960) from the same sequence listed the following foraminiferes association: *Marssonella oxycona* (Reuss), *Lenticulina* sp., *Pseudotextularia eggeri* (Cushman), *Bolivinoidea decorata* (Jones), *Stensioina exsculpta* (Reuss), *Globotruncana arca* (Cushman), *Globotruncana* cf. *contusa* (Cushman), *Anomalina welleri laevis* Vasilenko.

The fossils occur further in Campanian sandy limestones of Klippen Belt („U Škulcov“ NW of Nové Mesto n/Váhom) associated with *Pithonella ovalis* (Kaufmann), *Stomiosphaera sphaerica* (Kaufmann), algal, corals and Bryozoa. In the same sequence W of Bučkovce occurs *Orbitoides media* (Archiac) in sandstones.

Stomiosphaera cardiiformis Ayala-Castañares et Seiglie occurs in West Carpathians in stratigraphic horizon similar to that of Las Villas province in Cuba. The form is planktonic appearing both in pelagic and neritic sediments.

Translated by J. Kováčik.

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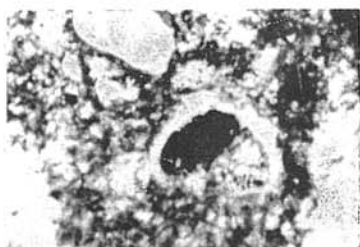
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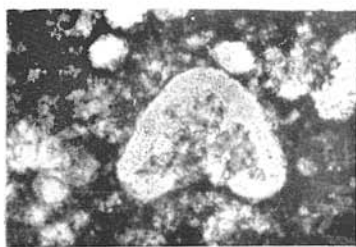
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Fig. 1. *Stomiosphaera cardiiformis* Ayala-Castañares et Seiglie from sandy limestones of Klippen Belt Campanian — locality „U Skulcov“ N of Eubina, Magn. 240 X. — Fig. 2—3. *Stomiosphaera cardiiformis* Ayala-Castañares et Seiglie of Middle and Upper Campanian of Gosau Cretaceous, SW slopes of Bradlo, Magn. 240 X. — Fig. 4. *Stomiosphaera conoidea* Bonet from Albian (?) limestones, St. Stephen island-Yugoslavia, Magn. 240 X. Foto K. Borza.