

NEW FOSSIL SCALPELLIDS FROM THE USSR

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The new fossil material was collected by V. T. AKOPJAN from Armenia, maesstrichtian beds and by V. G. NIKITIN from Kuznataj, upper cretaceous beds 1958 and me hands over passed from Prof. Dr. VIALOV at Szeged in Hungary 1965.

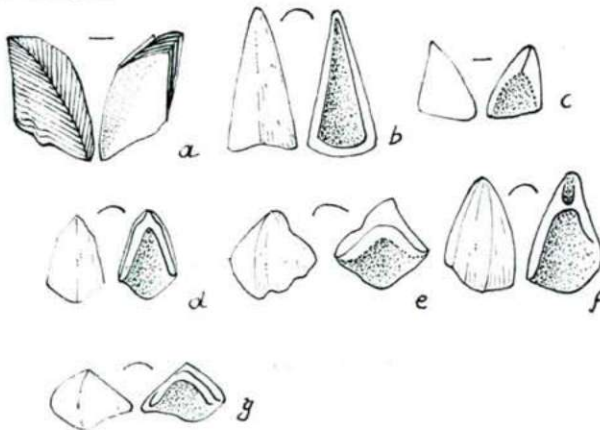
From the middle or upper cretaceous beds are known the genera as follows: *Zeugmatolepas*, *Scillaelepas*, *Cretiscalpellum* (only from the senonian beds to the maesstrichtian beds), *Acroscalpellum*, *Virgiscalpellum* (only from senonian beds to the lower maesstrichtian beds), *Neoscalpellum*, *Pycnolepas*, *Calantica* and *Brachilepas*.

First in the rhätian beds are to be found Scalpellids (*Eolepas*) and from the jurassic age is known *Archaeolepas* and in the cretaceous beds the Scalpellids they are cited here.

Capitulum has more than 5 compartments; the form is characteristically developed; near the styl with little compartments or shields; some genera are hermaphrodits with accessory ♂♂ and another genera having lilipout ♂♂. Caudal appendices present with many particularities. 5 primary compartments having also in the juv. and adult. stages apical umbos.

In the material from Kuznataj are 7 arts of isolated more or less inruined compartments of many specimens to be collected. In the material from Armenia are only carinas, tergas, and some incomplete lati-fragments to be observe in limestone embedded.

The compartments from Kuznataj are very like to the compartments of the species *Cretiscalpellum unguis* (l. de C. Sow.) (fig. 1.) — from the gault-albian beds from England and to the species *Pycnolepas rigida* (l. de C. Sow) upper cretaceous beds (fig. 3.) (8). — The armenian compartments are more or less differents from these and are with *Zeugmatolepas mackleri* WITHERS (11) — character (fig. 5.). — The compartments of our pycnolepadoid species see in fig. 2.

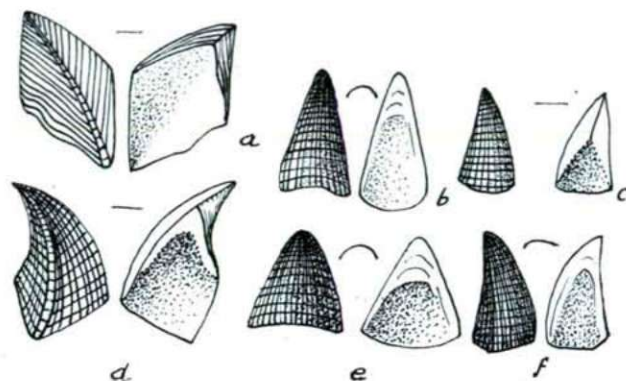


1: *Cretiscalpellum unguis* — compartments original. a: scutum; b: carina; c: carinolaterale; d: subcarina; e: infralaterale; f: tergum; g: subcarinolaterale.

Descriptions

PYCNOLEPAS ORIENTALIS N. SP. (fig. 2.)

Compartements like to the lamelles of *Pycnolepas rigida* and *Cretiscalpellum unguis* (figs. 1–3). — The carina is short. External surface longitudinally and horizontally striated as by *Brachilepas guasconi* (BOSQUET) (3) and *Pseudopollicipes domerinensis* MEUBEAUGE (9). — The scutum also very like to the scutum of *Cretis-*



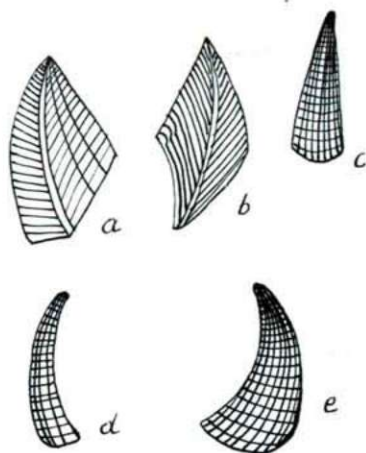
2: *Pycnolepas orientalis* — compartements original. — a: scutum; b: carina; c: carinolaterale; d: tergum; e: rostrum; f: supralaterale.

calpellum unguis and of the recent species of *Scalpellum striolatum* (2) and *Scalpellum woodmansonii* (10). — The tergum especially with curved apex like to the tergum of recent species of *Scalpellum columbicum* (4). — The rostrum is very large and external longitudinally and horizontally striated. — The lati are also externally and internally like to the lamelles of the *Pycnolepas rigida* but a little latus in the typus wanting (fig. 3.) (8). —

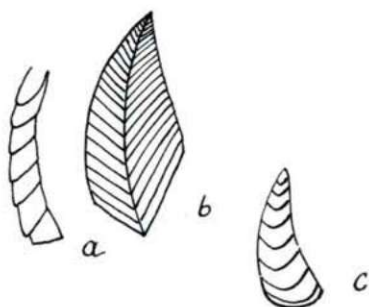
Reconstruction: see fig. 7. diameter of the basis of the capitulum cca 25 mm (oval). — The height of the capitulum 40 mm. Carina, rostrum and the three little lati-compartements are all longitudinally and horizontally striated. The longitudinal striae are denses, the horizontal striae are thins or scantis but the striae are virgorous. The tergum and the scutum are only with oblique equale striae. The colour of the lamelles is slate-gray, sometimes with brown tone. The compartements are thin and fragils with lamellous structure. Many isolated compartements are to be found from little, semiadult and great specimens. The maximum of scuta 25 mm, the maximum of the terga 20 mm. Carina max.: 15 mm; rostrum max.: 8 mm. Shields and another little stylscales wanting in the collected matter. —

ZEUGMATOLEPAS MACKLERI ARMENICUS N. SSP. (fig. 4).

Differ from the types of *Zeugmatolepas mackleri* WITHERS (11). Differ in the form of the little lamelle of carinolaterale. This compartement has in type a simple habitus with lines A-formes (8) but in the our subspecies has this compartement an ornamentation with striae in V-formes developed and two particularities having striae lungitudinales by the concav side of this lamelle.

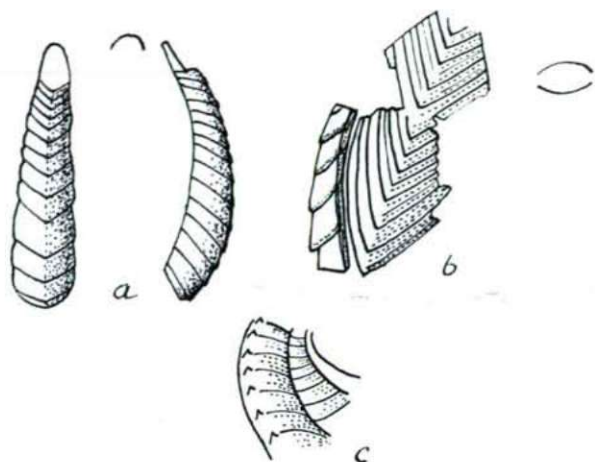


3: *Pycnolepas rigida* — compartements (8). — a: tergum; b: rostrum; c: supralaterale; d: carina; e: rostrum. —

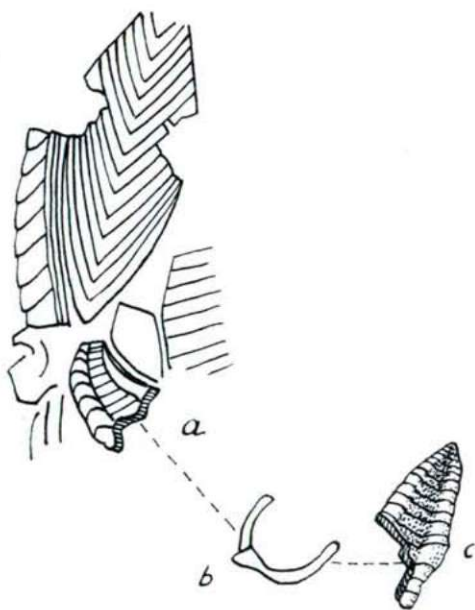


4: *Zeugmatolepas m. armenicus* — compartements original. — a: carina; b: tergum; c: carino-laterale.

Reconstruction: See fig. 6. Height of the capitulum 15 mm. Carina with virgorous oblique striae in V-form. The tergum is oval or „os sepiae”-form with virgorous oblique striae also in V-form ordered. Between the virgorous striae are also scantis-striae present. The lamelle infracarinale dorsalside with A-form-lines and 1-1 granulae dorsales ornamented. Lateralside with short horizontal striae equally developed. Rostrum (?) with virgorous horizontal striae. Another compartements wanting. Colour of the lamelles are brown-rosa in a faint tone and white.



5: *Zeugmatolepas mackleri* compartements (8). — a: carina; b: tergum; c: infracarinale. —



6: *Zeugmatolepas m. armenicus* reconstruction. Height 15 mm. a: capitulum; b: infracarinale; c: a latus?



7: *Pycnolepas orientalis* reconstruction. Basis 25 mm. height 40 mm. a: capitulum; pointed the styl contours; b: schema; c: carina; r: rostrum. — Delineavit autor.

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