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“Environmental Micropaleontology, Microbiology and Meiobenthology”

Proceedings

of the Sixth International Conference
“Environmental Micropaleontology, Microbiology
and Meiobenthology”

September 19–22, 2011
Moscow

Moscow
PIN RAS
2011

LATE FAMENNIAN SHALLOW CONODONTS OF THE KUZNETSKY BASIN

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During inspection of terminal deposits of the Later Devonian in Kuzbass in typical section of Topkian Substage we found out original assemblage of shallow conodonts of the Late Famennian. Described site was localized along the left board of the river Bolshaya Kamyshnaya 500 m above the railway bridge at Topki Village (not town of Topky located nearby). Geographical coordinates of the site 55°21'13.0" N, 85°46'23.0" E. Conodont samples were collected from the layer of dark gray organogenic limestone containing fragments of brachiopod shutters, small colonies of bryozoans and crinoids detritus.

The assemblage of conodonts received from these samples is variable in structure (the most important taxa are shown on the Plate 1). It includes the following: *Polygnathus* aff. *parapetus* Druce (Pl. 1, figs. 1, 6), *Polygnathus inornatus* Branson et Mehl (Pl. 1, figs. 3, 4), *Neopolygnathus lectus* Kononova (Pl. 1, figs. 2, 5), *Pseudopolygnathus primus* Branson et Mehl (Pl. 1, fig. 7), "*Icriodus*" *costatus darbyensis* Klapper, Morphotype 2 (Pl. 1, fig. 9), "*Icriodus*" *costatus* (Thomas) (Pl. 1, fig. 8). Besides there are fragments of conodonts of the worst safety, which are not possible to indentify, and backbone elements of the apparatus: *Drepanodina* sp., *Ligonodina* sp., *Hindeodella* sp., *Acodina* sp., etc.

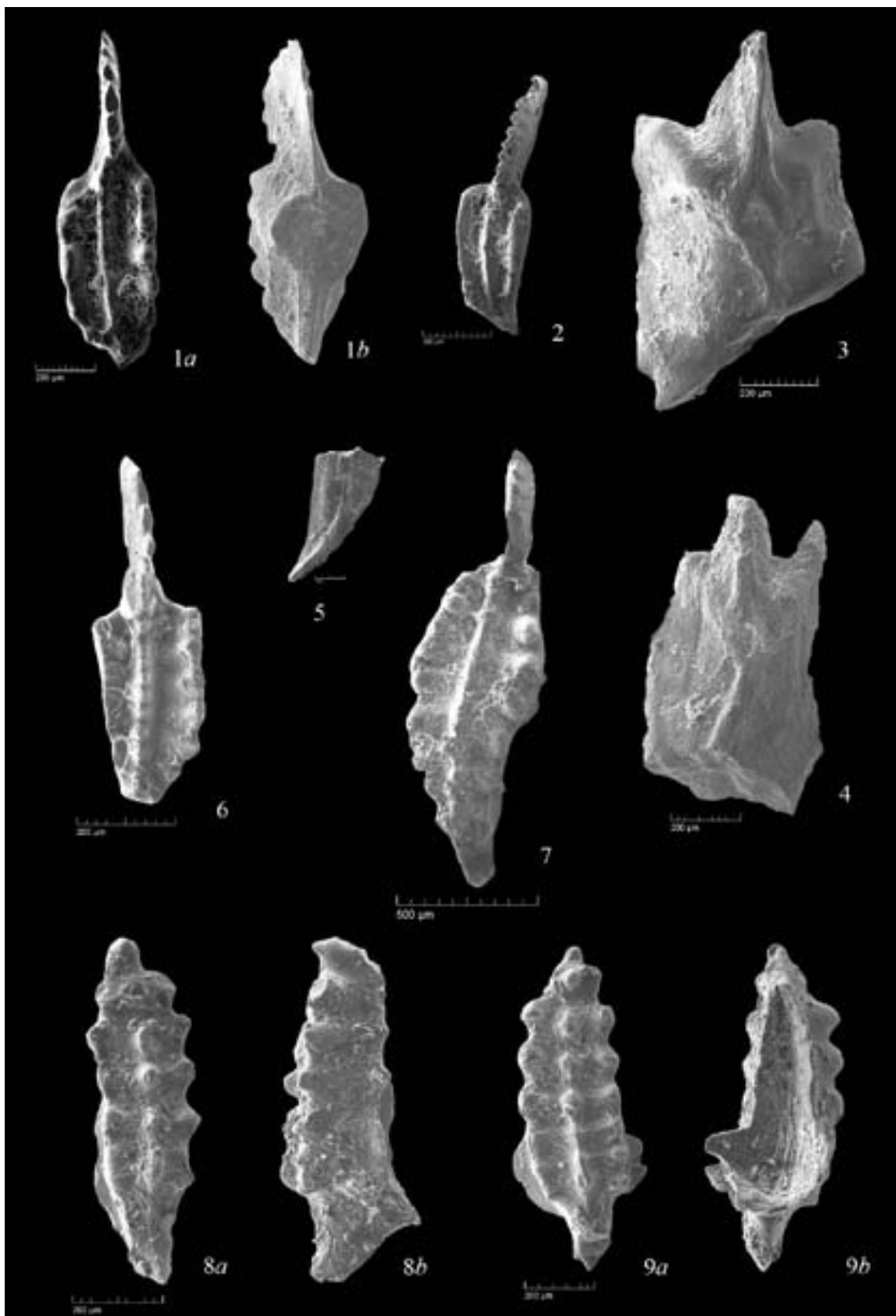
The resulted association of conodonts, especially prevalence of numerous species of *Polygnathus* (dominant) and representatives of *Icriodus* among them is typical for shallow facies of the open sea. This conclusion is proved to be true by lithologic characteristics of rocks were generated in wave-cut zone, the limestone pack of small thickness (to 50 m) lies over red-colored deposits of continental genesis and is overlapped by pyroclastic (ash) deposits.

Polygnathus inornatus Branson et Mehl is traced in the range from the Famennian Lower expansa to the Tournaisian anchoralis zone: (1) *Neopolygnathus lectus* Kononova (former *Polygnathus communis lectus*) is distributed in the Famennian of the Upper Devonian and the Tournaisian of the Lower Carboniferous, in praesulcata – sulcata – duplicata zone interval; (2) *Pseudopolygnathus primus* Branson et Mehl is distributed within praesulcata zone in the upper part of Famennian; (3) the subspecies "*Icriodus*" *costatus darbyensis* Klapper, Morphotype 2 is traced "from level within the Lower expansa zone, presumably above the first occurrence of a morphotype 1, is definitely traced through all the Upper expansa zone and probably also through the zones of the Lower and Middle praesulcata, on basis of rare finds" (Sandberg, Dreesen, 1984); (4) "*Icriodus*" *costatus* (Thomas) is extended in shallow facies of Famennian for which some researchers allocate the zone with the corresponding name, which correlates with standard conodont zones of Uppermost marginifera, trachytera, postera, expansa and praesulcata (Sandberg, Dreesen, 1984; Matyja, 1993).

Conodonts, attributed by us to *Polygnathus* aff. *parapetus* Druce, in our opinion represent transit forms from *Polygnathus paprothae* Bouckaert et Groessens to *P. parapetus* Druce also are typical for the top part of praesulcata Zone – sulcata Zone. The most probable time of formation of the described assemblage was the Late Famennian (the upper part of praesulcata Zone). The data obtained by us correlate with data received before by Kononova (Bushmina et al., 1984), and our data on other areas of distribution of these deposits (Gutak et al., 2007). Most likely, in the end the Famennian the lowland area of northern part of the Kuznetsk bending was a part of epicontinental sea basin.

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Conodonts from the Upper Devonian (Topkian Substage), the sample G-08-46. Conodonts are stored in the Paleontological Museum of Tomsk State University at number 68: figs. 1, 6. *Polygnathus* aff. *parapetus* Druce, P-element: 1a – top view, 1b – bottom view, 6 – top view; figs. 2, 5. *Neopolygnathus lectus* Kononova, P-element: 2 – top view, 5 – ventral view; figs. 3, 4. *Polygnathus inornatus* Branson et Mehl, P-element: 3 – bottom view, 4 – bottom view; fig. 7. *Pseudopolygnathus primus* Branson et Mehl, P-element, top view; fig. 8. “*Ieriodus*” *costatus* (Thomas), I-element: a – top view, b – side view; fig. 9. “*Ieriodus*” *costatus darbyensis* Klapper, Morphotype 2, I-element: a – top view, b – bottom view.