

PLANKTONIC GASTROPODS (PTEROPODS) FROM THE MIOCENE OF THE SUBCARPATHIAN FOREDEEP AND THE ZDANICE UNIT IN MORAVIA (CZECH REPUBLIC)

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The paper by Ctyroky et al. (1968) is the most recent summarising the distribution of Czech pteropods. Now new finds of Miocene (Eggenburgian-Badenian) pteropods from the Subcarpathian Foredeep and the Zdanice unit in Moravia (Czech Republic) are evaluated systematically, biostratigraphically and paleobiogeographically. The material studied originates mainly from recent outcrops and boreholes (donated by P. Ctyroky, Prague) but includes also parts of the old pteropod collection of Kittl (1886), which is housed in the Museum of Natural History in Vienna. Some samples from the Czech localities of this collection were already discussed in Janssen & Zorn (1993). A study on Oligocene pteropods from Moravia is in progress.

The Eggenburgian pteropods originate from the Sakvice Marls of Zajeci and Valtice belonging to the Zdanice unit in Southern Moravia. The presence of *Clio triplicata* Audenino, 1897, which is the most typical pteropod in the Eggenburgian of the Central Paratethys, and *Vaginella* cf. *depressa* Daudin, 1800 could be established. It is one of the northernmost occurrences of *Clio triplicata*, which is common in the Molassezone of Upper Austria (Zorn, 1991). A study on the time setting of the "Clio-horizon" is in progress (cooperation Prague/Hodonin/Vienna). The next younger occurrence of pteropods is that of *Vaginella austriaca* (Kittl, 1886) and *Limacina* sp. in the Karpatian of the Subcarpathian Foredeep, documented in the boreholes Novy Prerov-1 and Nosislav-3.

In the Early Badenian of the Subcarpathian Foredeep *Vaginella austriaca* (Kittl, 1886), *Limacina* cf. *mirostralis* (Kautsky, 1925), *Clio fallauxi* (Kittl, 1886) and *Diacrolinia aurita* (Bellardi, 1873) have been found. The boreholes HJ-303 Tucapy, HJ-309 Nové Dvory and Drazovice, as well as the material from Kittl's localities of the surroundings of Ostrava have been studied. For the first time a protoconch of *C. fallauxi* could be isolated. *Clio fallauxi* and *Diacrolinia aurita* are stratigraphically restricted to the Early Badenian within the Central Paratethys and therefore are index fossils.

The pteropod assemblage from the Late Badenian deposits of the Subcarpathian Foredeep originates from boreholes in Northern Moravia (surroundings of Opava). They yielded *Limacina valvatina* (Reuss, 1867), *L. gramensis* (Rasmussen, 1968) and *Creseis spina* (Reuss, 1867). Within the Paratethys realm *Limacina gramensis* is restricted to the Late Badenian of the Subcarpathian Foredeep, known also from Southern Poland, Rumania and the Ukraine (Janssen & Zorn, 1993). Otherwise it is known only from the Langenfeldian of the North Sea Basin. The occurrence of *Creseis spina* during the Late Badenian agrees with that of the Austrian deposits, whereas in other parts of the Central Paratethys it occurs in the Middle and/or Early Badenian. Besides *Vaginella austriaca*, *Limacina valvatina* is the most characteristic pteropod species of the Badenian.

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