

## **EOCENE HOLOPLANKTONIC GASTROPODS AND THEIR CORRELATION WITH THE TIME SCALE**

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Recent studies of marine fossil planktonic gastropods suggest that this group of molluscs is an effective biostratigraphic tool for global correlation of Cenozoic marine sediments. We present here the results of investigation of Eocene holoplanktonic gastropods in Hungary, other Tertiary pteropods were reported previously. The heteropods and pteropods are the two groups of planktonic gastropods that have been preserved in fossil records. Heteropods are unknown in Hungary, and the pteropods are represented mainly by eight genera of Euthecosomata (Limacina, Creseis, Praehyalocylis, Clio, Styliola, Vaginella, Cavolinia, Irenia) distributed from the Middle Eocene to Middle Miocene. Eocene pteropods occur in 33 localities in Hungary, mostly in continuously cored boreholes. Nannofossil and planktonic foraminiferal zones are available in a large part of these boreholes, supported by several magnetostratigraphic correlations. The deposits contain a rich fauna of pteropods; 10 species have been identified and assigned to 4 genera. The first planktonic gastropods - Limacina, Creseis, Praehyalocylis - appeared at 43 Ma, in the nannozone NP16, Morozovella lehneri planktonic foraminiferal zone and magnetic chron C20n. The pteropods disappeared at 37-36 Ma, in the nannozone NP18, Globigerinoides semiinvoluta planktonic foraminiferal zone and magnetic chron C16r. The first appearance of Clio genus at the top of nannozone NP16, around 40 Ma is its oldest occurrence worldwide.