One of the most complete Permian–Triassic boundary sections located in the Bükk Mountains (Hungary) was sampled for ostracod study. Seventy-six species are recognized, belonging to twenty genera. Fifteen new species are described and figured: *Acratia? jeanvannieri* Forel sp. nov., *Acratia nagyvisnyoensis* Forel sp. nov., *Bairdia anisongae* Forel sp. nov., *Bairdia davehornei* Forel sp. nov., *Callicythere? balvanyseptentrioensis* Forel sp. nov., *Cytherellina? magyarorszagensis* Forel sp. nov., *Eumiraculum desmaresae* Forel sp. nov., *Hollinella fengqinglaii* Crasquin sp. nov., *Hungarella gerennavarensis* Crasquin sp. nov., *Langdaia bullabalvanyensis* Crasquin sp. nov., *Liuzhinia venninae* Forel sp. nov., *Liuzhinia bankutensis* Forel sp. nov., *Microcheilinella egerensis* Forel sp. nov., *Reviya praecurrakensis* Forel sp. nov., *Shemonaella? olempskaella* Forel sp. nov. One species is renamed: *Bairdia baudini* Crasquin nom. nov. Comparison of the Bálvány North section with the Meishan section (Zhejiang Province, South China), Global Boundary Stratotype and Point (GSSP) of the Permian–Triassic Boundary (PTB), reveals discrepancies linked to the environmental setting and particularly to bathymetry. The stratigraphical distribution of all the species is given and diversity variations are discussed. The Bálvány North section exhibits the lowest extinction rate of all PTB sections studied for ostracods analysis associated with a high level of endemism.

**Key words:** Ostracoda, biodiversity, Permian-Triassic boundary, Bükk Mountains, Hungary.