Faunas and age significance of the pre-Jurassic turbidite-olistostrome unit in the western parts of Turkey

by J. Wiedmann, H. Kozur and O. Kaya*

with 3 plates and 2 figures

Abstract. The pre-Jurassic turbidite-olistostrome unit of the western parts of Anatolia is characterized by large blocks of late Paleozoic platform-type limestones. In recent works it is almost uniformly considered to be a late Paleozoic to Triassic ophiolitic or tectonic melange.

The turbidite-olistostrome unit (the Dîskaya Formation) consists of successions of thick sequences of shale, lithic sandstone-shale and quartz-feldspathic sandstone, and a great variety of olistostromes containing the above rock types, reworked submarine mafic volcanics and pebbly mudstones as the supporting matrix. The olistostromes contain extra- and intrabasinal blocks, sometimes of gigantic proportions, such as late Paleozoic and Triassic limestones, submarine mafic volcanic rocks of unknown age, and Halobia shales. The Triassic blocks include cephalopod, ostracod and conodont faunas indicating late Scythian, middle Anisian and late Ladinian ages. The recognition of the early Norian Halobia shales as blocks in the lowermost as well as in the uppermost parts of the unit permits a closer age assignment to the late Triassic.

* Authors’ addresses: J. Wiedmann, Geologisch-Paläontologisches Institut, Sigwartstr. 10, D-7400 Tübingen, Germany.