

OPHIOLITE BEARING TERTIARY NAPPE IN NW THESSALY, GREECE

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Our research, based on geological mapping at scale 1/25.000, in north-western Thessaly and especially in the between Trikala and Kalambaka showed the existence of nappe structure. The Alpine formations are distinguished in the following three tectonic units (Fig. 1):

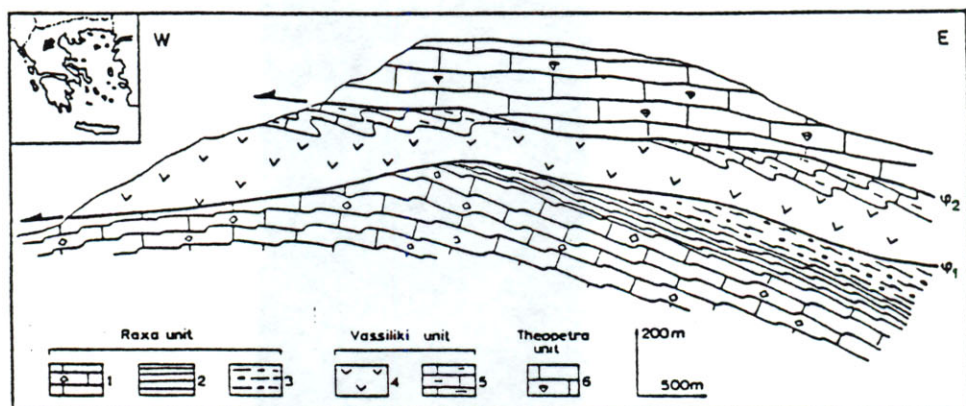


Fig. 1. Synthetic profile of the Trikala-Kalambaka area, showing the three tectonic units: 1. Calcareous turbidites of Cretaceous, 2. Paleocene red pelites, 3. Tertiary flysch, 4. Ophiolitic rocks, 5. Pelagic limestones of Lower Cretaceous, 6. Neritic limestones with Rudists.

— The lower tectonic unit of Raxa, comprising a sequence dipping with 20° – 30° to the East, of Upper Cretaceous calcareous turbidites, overlain by Paleocene red pelites, which form the basal beds of the Tertiary flysch.

— The intermediate tectonic unit of Vassiliki, comprising ophiolitic rocks with predominance of peridotites and pillow-lavas, and pelagic sediments comprising radiolarites, pink platy limestones with *Calpionellides* and limestones of *ammonitico rosso* facies of uppermost Jurassic-Lower Cretaceous age. Mesoscopic folds trending NE-SW characterize the internal structure of this unit.

— The upper tectonic unit of Theopetra, comprising massif light-colored neritic limestones with Rudists of Upper Cretaceous age.

The lower tectonic contact φ_1 is an important overthrust which is folded along the NW-SE direction. On the contrary, the

upper tectonic contact φ_2 is flat and could be interpreted also as a tectonic surface due to decollement. In this case Theopetra might represent the transgressive platform sediments over the Vassiliki Unit.

Theopetra Unit does not occur in Koziakas Mt to the west, whereas Vassiliki Unit resembles to the Eastern Kozoikas outcrops. Finally the Raxa Unit might be interpreted as lateral equivalent of the Thymiama sequence occurring in Western Koziakas.