

Ophiolitic complex of Puka

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The mantle section of the Albanian ophiolites represented by: (1) Western Belt: Zemblak, Rehove, Voskopoja, Morava, Devolli, Vallamara, Shpati-Kuterman, Skanderbeu, Pilinarda, Puka, Gomsiqe, Krrabi, and (2) Eastern Belt: Bitincke, Shebenik-Pogradec, Bulqiza, Lura, Kuksi, Tropoja, according to ⁴⁰Ar/³⁹Ar hornblende age metamorphic sole: 160–164 Ma in the north, 165–172 Ma in the middle part, 169–174 Ma in the south, 163–173 Ma in gabbros, 162.3–165.5 Ma of zircons from N Albanian gabbros (Dilek *et al.*, 2008 and references therein).

The Puka ultramafic massif belongs to the western ophiolite belt of Albania and occurs in the northern part of this belt. It covers an area about 210 km². The western contact of the Massif with the volcanic-sedimentary formation of the Middle–Upper Triassic in the area Gomsiqe-Kçire and with “block in matrix” mélange of Jurassic to Cretaceous age in the Kçire-Kashnjet is represented by a strong fault zone. These formations mark the boundary between Puka massif and the Gomsiqe and Pilinarda ones. In the northern, eastern and southern parts the contact of Puka massif is with volcanic basic rocks or with gabbro-microgabbro of Gojani and Kaçinari massifs or with plagiogranite. The Puka (Terbuni) ophiolitic complex is represented by:

(1) The lherzolitic ultrabasic mantle, which is predominant and represented by mantle lherzolite and clinopyroxene-bearing harzburgite with rare and small lenses of dunite are predominant and constitute the deepest part of the mantle section, and dunite with intercalations of clinopyroxene-bearing harzburgite and lherzolite, which have various distributions.

(2) Cumulate sequences and volcanic rocks as well as the sheeted dykes have a relatively limited distribution and are represented by small massifs of gabbro-troctolite, olivine gabbro, gabbro, ferrogabbro, gabbro-norite, olivine-gabbro-norite and volcanic rocks.

The Puka ultramafic unit, so far as we sampled, consists of harzburgites and depleted lherzolites, with evidence for a MORB origin.

REFERENCES

Dilek, Y., Furnes, H., Shallo, M. 2008. Geochemistry of the Jurassic Mirdita Ophiolite (Albania) and the MORB to SSZ evolution of a marginal basin oceanic crust. *Lithos* 100, 174–209.