

THE HERCYNIAN GRANITOID COMPLEX OF NORTHEASTERN SERBIA

VASKOVIĆ, N., BLAGOJEVIĆ, S., ERIC, S. & BABIĆ, D. (Faculty of Mining and Geology, Belgrade, Yugoslavia)
E-mail: danislav@net.yu

The Hercynian granitoids in northeastern Serbia are one of the main geological features of the Carpatho–Balkan composite terrane e.g. its terranes: Kucaj, Stara planina–Porec and Vrska cuka–Miroc (KARAMATA & KRSTIC, 1996).

The Hercynian granitoid complex (Fig. 1) consists of four large (Neresnica, Brnjica, Gornjane, Plavna) and eight small (Veliki Greben, Turija, Popovica, Veliki grabor, Mali goli vrh, Donja Bela reka, Pecka bara, Barjaktar) plutons intruded into Proterozoic high grade metamorphics, Rifeo-Cambrian „green complexes” and Lower Paleozoic slightly metamorphosed sediments. Structural features indicated their early to late sin- (Brnjica) and post-kinematic (Neresnica, Gornjane, Plavna) emplacement.

The granitoid complex comprises principally granitic rocks (tonalite-granodiorite-monzogranite) with subordinate quartz monzodiorite, quartz diorite and diorite, rarely gabbro bodies. Most intrusions show zonal distribution of rock types and the character of polyphase intrusions. These rocks consist of plagioclase (7–30 An to 35–65 An), K-feldspar (commonly with micropertite), amphibole, biotite, \pm quartz, and relics of clinopyroxene; accessory are zircon, allanite, apatite, titanite, magnetite, \pm monazite.

The whole rock chemistry indicates a broad variation and a nearly smooth trend of major elements, calcic to calc-alkali and peraluminous character of all granitoids.

Mineral composition as well as whole rock chemistry suggest I-type (with subordinate S-type) origin of the North-eastern Serbia Hercynian granitoids.



Fig. 1. Distribution of Hercynian granitoids in the northeastern part of Serbia.

References:

- KARAMATA, S. & KRSTIC, B. (1996).
In: KNEZEVIC, V. & KRSTIC, B. (eds.):
Terranes of Serbia. pp. 25–40.
VASKOVIC, N. & MATOVIC, V. (1997).
In: GRUBIC, A (ed.): *Geology in the Danube
Gorges*. pp. 129–141.