

THE ODIVELAS GABBRO COMPLEX (ALENTEJO, PORTUGAL): A HERCYNIAN SYNOROGENIC LAYERED INTRUSION

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ABSTRACT

The ultramafic-mafic zone of the Hercynian Beja Massif includes 1) the Quintos amphibolite-diorite-serpentinite Complex, 2) the Odivelas layered gabbro Complex, and 3) the Peroguarda (meta) basalt-andesite Complex.

The rhythmic and cryptic zoning of the Odivelas Complex is described, as well as its sedimentary structures and cumulate textures. The gabbros are of the high-alumina type; they have tholeiitic affinities at lower levels and alkalic affinities (due to a Na-metasomatism) at upper levels. The Odivelas Complex has probably crystallized under conditions of the granulite facies.