apatite, rutile, ilmenite and zircon are accessories. The main deformation produced porphyroblasts of garnet with quartz, muscovite and biotite in pressure shadows. The supposed crystallization sequence of other minerals is depicted in Fig. 2.
The mylonitized schists are fine-grained. Andalusite and plagioclase 2 are lacking The syndeformational staurolite is common. Muscovite, biotite and quartz occur in its pressure shadows.

The non-mylonitized schists were subjected to kyanite metamorphism, followed by a high-temperature (K-feldspar) event. The main deformation was later and took place under staurolite-grade conditions. The post-deformational andalusite marks the end of metamorphism.

The northward directed shear sense in the non-mylonitized schists corresponds to that typical of the Moravian/Moldanubian boundary in the Czech Republic and Lower Austria. The schists are the northernmost element with this shear sense, in which the mineral crystallization sequence and conditions of metamorphism can be reasonable evaluated.

Rb-Sr-DATING OF ACID SUBVOLCANIC DYKE ROCKS - FINAL MAGMATIC PRODUCTS OF THE MOLDANUBIAN BATHOLITH

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Acid dyke rocks of subvolcanic character are common in the southwestern part of the Moldanubian (South-Bohemian) Batholith and along its western margin (KLEČKA, 1984). These rocks correspond to alkali-feldspar bearing peraluminous and highly-differentiated granites with associated Sn-W mineralization (KLEČKA, 1986). They represent the youngest products of magmatism associated with an extensional regime of the final stages of Variscan orogeny in the Moldanubian core of the Bohemian Massif.

The acid dykes build a N-trending ca 85 km long volcanotectonic zone across the Czech-Austrian boundary. The zone is spatially associated with several ring volcanotectonic structures (VRÁNA, 1990) and small intrusive stocks (KLEČKA & MATĚJKA, 1992; KLEČKA & ŠREIN, 1992; KLEČKA et al., 1994) that are typically represented by topas-bearing muscovite granite (Homolka type) and Kozí hora-Hirschenschlag granite.

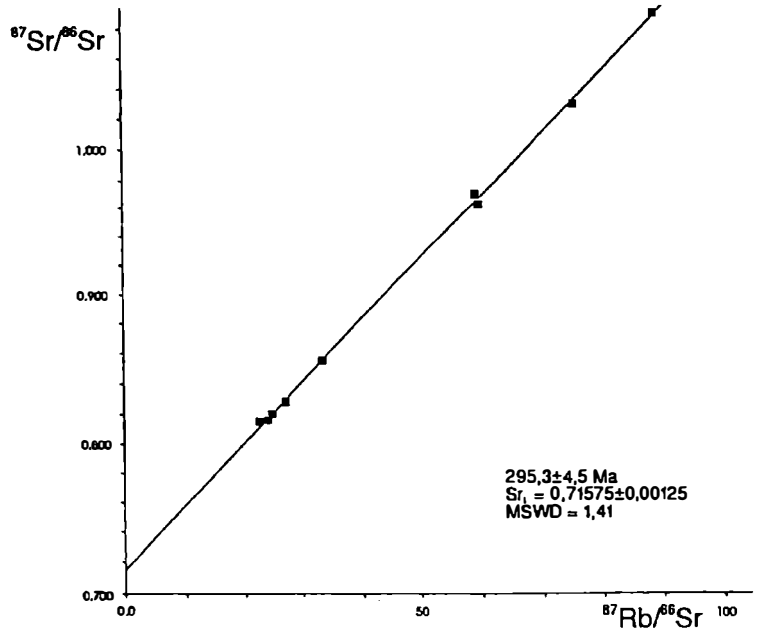

Fig. 1: Rb-Sr-isochrone plot for the subvolcanic dyke rocks from the Modanubian Batholith.

The dykes have a subvertical dip, their thickness and length vary from 2 to 20 m and 100 to 2000 m, respectively. The dykes intrude Moldanubian metasediments as well as granites (Lásenice type and the Číměř variety of Eisgarn type). The contacts with the country rocks are always sharp, with no contact metamorphism present. In most cases the structure of dykes shows a marked zonation with a zone of felsitic microgranite at the contact, up to 50 cm thick, showing pronounced fluidal textures. Vitreous parts are sometimes present at the contact. The central part of dykes is formed by felsitic granite prophyry. The field affiliations of the dykes suggest their early Permian age (KLEČKA, 1992; KLEČKA & MATĚJKA, 1992), however, reliable geochronological data were lacking. Unspecified K-Ar data yield an age 228 Ma (VRÁNA, 1990).

Rb-Sr whole rock isochron of 9 samples (30 - 50 kg) yield an age of 295 ± 5 Ma and a corresponding $^{87}Sr/^{86}Sr$ initial ratio of 0.71575 ± 125. The obtained age (295 Ma) value straddles the Carboniferous - Permian boundary and is interpreted as a cooling age of acid subvolcanic dyke rocks in this part of the Moldanubian zone. It fits within the previously reported geochronological framework for the Austrian part of the Moldanubian Batholith (Rb-Sr whole-rock data of the Eisgarn type: 316 ± 7 Ma (SCHARBERT, 1987)).

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ZIRCON Pb-Pb AND U-Pb GEOCHRONOLOGY OF THE RASTENBERG GRANODIORITE (LOWER AUSTRIA): EVIDENCE FOR THE INCORPORATION OF CADOMIAN AND POSSIBLY ARCHEAN CRUST INTO VARISCAN GRANITOIDS OF THE SOUTH BOHEMIAN PLUTON

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Introduction: The existence of metamorphic and plutonic rocks of Cadomian (pan-African) age either consolidated with or reworked into the European basement during the Variscan orogeny is well documented for the central and eastern part of the Bohemian Massif (i.e. "Moldanubicum" of Bohemia, "Bruno-Vistulicum"; ZOUBEK, 1988; ZWART, 1986). For the South Bohemian Pluton in Austria and the Czech Republic such evidence was lacking until now. A combined zircon Pb-Pb evaporation and conventional U-Pb study from the Rastenberg type granodiorite demonstrates for the first time the existence in the South Bohemian Pluton of inherited zircons derived from pre-Variscan basement.

The Rastenberg type granodiorite forms a separate intrusion of ~ 170 km^2 east of the large composite South Bohemian Pluton in Austria (EXNER, 1968; KLÖTZLI, 1993). It crosscuts the Monotonous Series and the Dobra gneiss of the Variscan