ABSTRACT

Subvulcanics rocks of the Roztoky volcanic centre consists of trachytic and phonolitic intrusions, accompanied by hypabyssal intrusions of trachybasaltic (essexite, monzodiorite) and syenitic (sodalite syenite) charakter and dyke swarm of lamprophyres > semilamprophyres. Intrusions of the hypabyssal faintly alcalic series (essexite, monzodiorite, sodalite syenite) are 33-28 Ma old, the lamprophyres of greatly alcalic series (monchiquite, camptonite) are 31-26 Ma old and the semilamprophyres of faintly alcalic series (gauteite, bostonite) are 28-24 Ma old (sensu Ulrych, 1998). The datas corresponds to the trachybasalt – basaltit – trachyandesite suite of the Děčín Formation and the interval of České středohoří Mts. volcanic activity to (42-16 Ma, Eocene -Miocene). 14 samples plutonic rocks of the essexite-monzodiorite-sodaliticsyenite suite and 10 samples of theirs venous equivalents from (semi)lamprophyres and tinguaites groups were withdrawaled in the Roztoky nad Labern area. I analyzed in detail 5 essexite samples and 6 (semi)lamprophyres samples in those study. I studied the sampels using polarization microscope and subsequently elektron micro-analyzer in the analitic metods laboratory of the Geologic institute of Academy of Science, Czech Republic. All analyzed samples belong to II., hypabysal, faintly alcalic rock serie by partition intrusive rocks in Roztoky Volcanic Centre (RVC) area (sensu Ulrych, 1998 and Ulrych and Balogh, 2000). The venous rocks of RVC area are associating with intrusions of plutonic rocks for theirs geochemical similarity. The relatively low differentiation level, Sr - Nd isotopic signatures and other geochemic characteristics (e.g. REE volume correlated by primitive mantle) of the subvulcanics rocks confirm its mantle origin.