PŮVODNÍ PRÁCE/ORIGINAL PAPER

# trukturní a metamorfní vývoj severozápadní části krkonošsko-jizerského krystalinika (v okolí Lázní Libverda)

## Structural and metamorphic evolution of the northwestern Krkonoše-Jizera Unit (in the surrounding Lázně Libverda)

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Buriánek D., Verner K., Mrázová Š. (2013) Strukturní a metamorfní vývoj severozápadní části krkonošsko-jizerského krystalinika (v okolí Lázní Libverda). *Bull. mineral.-petrolog. Odd. Nár. Muz. (Praha) 21, 2, 179-190. ISSN 1211-0329.*

### Abstract

Northeastern part of the Krkonoše-Jizera Unit is built of orthogneisses with presence of elongated bodies of low- to marginally medium-grade metasedimentary rocks (phyllites to mica-schists), amphibolites and metamorphic felsic rocks of uncertain origin. Regional metamorphism and polyphase deformation in the northwestern Krkonoše-Jizera Unit took place during the Variscan orogeny. This metamorphic complex was intruded by high-K calc-alkaline granitoids of the Krkonoše-Jizera Pluton. Temperature and pressure conditions of regional metamorphism, which have been broadly associated with the formation of moderately NW dipping foliation and SW stretching lineation, were estimated at 530 - 617 °C and 6 - 7 kbar. Regionally metamorphosed rocks subsequently underwent younger contact metamorphism in thermal aureole of posttectonically emplaced body the Krkonoše-Jizera Pluton. This subsequent metamorphic event was associated with the formation of contact mineral assemblage indicating temperature in range between 541 and 685 °C and pressure around 3 kbar.

***Key words:*** *European Variscides, Western Sudetes, metapelites, metamorphic fabric, contact aureole, P-T conditions*

*Obdrženo: 25. 4. 2013; přijato: 30. 10. 2013*