

Veľká Detva stratovolcano - the Abčina Formation and its Hučava Member, situated closer to the centre - are composed of agglomerates, pyroclastic flows, lahars and scarce amphibole-bearing pyroxenic andesite lava flows. Tufts and intrusions are rare.

The Sebedin Member is represented by epiclastic sandstones and conglomerates. They sedimented from fragmentflows, grainflows, highly saturated flood streams, diluted streams and normal fluvial streams, which represent distal and medial facies of the volcano.

*Veľká Detva Formation* (Kopa Member, Šafranička Member), (12.35-12.63 Ma) makes up the upper part of the upper structure of polygenetic stratovolcano and represents a transition to the final, effusive-intrusive activity, which replaced a turbulent explosive activity represented by cyclic eruptions of rhyodacitic tufts and followed by freato-magmatic and magmatic eruptions inside the caldera.

The formation is composed of two members, the Kopa Member - an effusive suite of pyroxenic, less amphibole-pyroxene andesites that make up a large lava envelope of the volcano. The Šafranička Member is composed of an intrusive suite of andesitic and dioritic intravolcanic intrusions in the central volcanic zone, which also became a site of hydrothermal activity in the caldera Kyslinky. The volcano was armoured by a lava envelope that protected it from the erosion. And this is why it now forms the uppermost, and the best preserved Sarmatian volcanic structure, situated in the geographic centre of Slovakia.

**Upper Sarmatian** is represented by cyclic sediments that deposited in a marshy environment under moderate to cool climatic conditions that still grew cooler. The formation is composed of kaolinic tufts, claystones, sandstones, marly polymict breccias and diatomite beds, or lignite seams. The material is mainly of andesitic-rhyodacitic composition. Only relics of original basin are preserved in the surroundings of Dúbravica and Oravica.

#### Postvolcanic sediments

##### Upper Miocene (Pontian)?-Lower Pliocene (Dacian)?

This is a lithologically variable formation of fresh-water clays, sandy clays with gravel and sand intercalations that deposited in the Zvolenské Pohronie area. This formation grades upwards into younger, Hronic, gravel formation of Pliocene age.

##### Lower Pliocene (Dacian)? - Upper Pliocene (Rumanian)?

The Hronic gravel formation of Pliocene age sedimented in a fluvial-limnic and fluvial environment of the Zvolenská kotlina depression; The clayey- sandy gravels with clay and sand intercalations are predominant lithologies. The lithofacies character of sediments indicates that the original sedimentation took place in a channelled lake and corresponded to a fluvial- lacustrine type of sedimentation of the pre-Hron river. The gravels are composed mainly of quartzite, quartzose sandstone and quartz pebbles and scarce crystalline schist pebbles. The andesites only rarely occur in the tributaries to the basin. During Pliocene to Pleistocene times the local basaltic eruptions took place in the Pliešovská kotlina depression, southwards of the area mapped.

#### QUATERNARY

The Zvolenská kotlina depression is an area of varied Quaternary development. Its typical feature is a great lithofacial and temporal variability of fluvial and proluvial terrace accumulations and of alluvial cones that sedimented from the Hron, Hučava, Zolná and Slatina rivers during Pleistocene. Most widespread are the terrace crest sediments south and west of the Zvolenská pahorkatina upland margin and rather continuous are also the terrace proluvial-fluvial sediments in the Očová part of the Slatinská kotlina depression. Of interest are also the travertines and calcareous tufas in the surroundings of Sliac and Borová Hora.



# REGIONÁLNE GEOLOGICKÉ MAPY SLOVENSKA

1 : 50 000

LADISLAV DUBLAN ET AL. - 1997

## GEOLOGICKÁ MAPA POĽANY

## GEOLOGICAL MAP OF THE POĽANA MTS.

Vydalo Ministerstvo životného prostredia Slovenskej republiky, Bratislava 1997. Tematický obsah spracovala Geologická služba SR. Autor RNDr. Ladislav Dublan, CSc., a kol. Aprobácia mapy 28. 1. 1997. Zodpovedný Redaktor RNDr. Milan Polák, CSc. Technický redaktor Roman Fritzman. Kartograficky a počítačovo spracovali Ing. Miroslav Antalík, Roman Fritzman, RNDr. Štefan Káčer, Jozef Vlachovič. Technická príprava čistokresby: RNDr. Ladislav Dublan, CSc. Schválené Ministerstvom životného prostredia Slovenskej republiky č. 3.1/83/97-1.

Súhlas na použitie štátneho mapového diela vydal Geodetický a kartografický ústav, č. 254/146-1287/97. Počítačové spracovanie, sadzba a pre-press: Esprit, spol. s r.o., Banská Štiavnica. Tlač Vojenský kartografický ústav, Harmanec. 1. vydanie. Náklad 1000 kusov.

Topografický podklad: © Úrad geodézie, kartografie a katastra SR, 1997.  
© Ministerstvo životného prostredia SR.

ISBN 80 - 85314 - 73 - 8

GEOLOGICKÁ SLUŽBA SLOVENSKEJ REPUBLIKY - BRATISLAVA

