## A Preliminary List of Geoheritage Sites in the Temštica River Valley

Renata Kujundžić<sup>1</sup>, Rastislav Stojisavljević<sup>1</sup>, Mladjen Jovanović<sup>2</sup>, Dragan Milošević<sup>1</sup>

- Society of Young Researches of Institute of Geography, Faculty of Science, University of Novi Sad, Tra Dositeja Obradovića 3, 21000 Novi Sad
- Department of Geography, Tourism and Hotel Management, Faculty of Science, University of Novi Sad, Tra Dositeja Obradovića 3, 21000 Novi Sad;

Temštica valley is located in the Southeast of Serbia, on the southwest slope of Stara planina. This is the longest and water richest right tributary of Nišava.

Temštica is formed at Mrtvački most, at 483 m altitude, where it meets the Visočica and Toplodolska reka. The river's mouth is located beside the Staničenje village, at 330 m altitude. Peaks which are build up divorce towards other rivers can reach over 1000 meters.

Toplodolska river is charasteristic because of huge vertical difference in longitudinal profiles (1487 m) and high average inclination (3,870). Other component, Visočica, is important for it's landslide-damned lake Zavoj. A large part of Visočica water is taken with underground tunnel to hydroelectric plant built on periphery of Pirot directly threating flow of Temštica and natural eco-system in surrounding.

The most attractive place in the Temštica valley, significant for it's geomorphologic and touristic values, is deep george, 6,5 km long, with entrenched meanders, formed were river has cut through a triassic sediments and especially markant permian red sandstones. On it's steep, up to 350 m high sides many waterfalls are formed after abundant amount of precipitation and snow melting in the highest part of the mountain.

Also very attractive are longitudinal profiles of the left Temštica tributaries in this sector with many rapids and waterfalls. We want to highlight waterfall Prskalo, 12 meters high. Another place that catch our attentions is downstream east tributary valley, significant for its marked line erosion represented by system of parallel rills and gullies.

One most important palaeontological site is located in the eastern catchment area, near Oreovica village, in an abandoned limestone quarry. A wide diversity of fossil ammonite fauna from jurassic period can be found there. In the middle of one of the incised meander there is a archaeological site with remains of medieval city known as Temac.

Keywords: Temštica river, Stara planina, geoheritage, geology