

Project Update: September 2017

We prolonged the first fieldtrip, planned for August 2017, due to a delay obtaining the licence for electro-fishing. During this period of the current project, we bought chemicals and expendables (for the DNA extraction and PCR analyses) and laptop. We also did the sequencing for two mitochondrial genes (cytochrome b, cytochrome c oxidase subunits 1) and one nuclear gene (s7 ribosomal protein gene introns) of the smales that we sampled in Opačica and Pribitul during the Rufford project (Population structure and vulnerability of the threatened fish species *Telestes metohiensis* from karstic streams in Bosnia and Herzegovina) (Fig. 1).

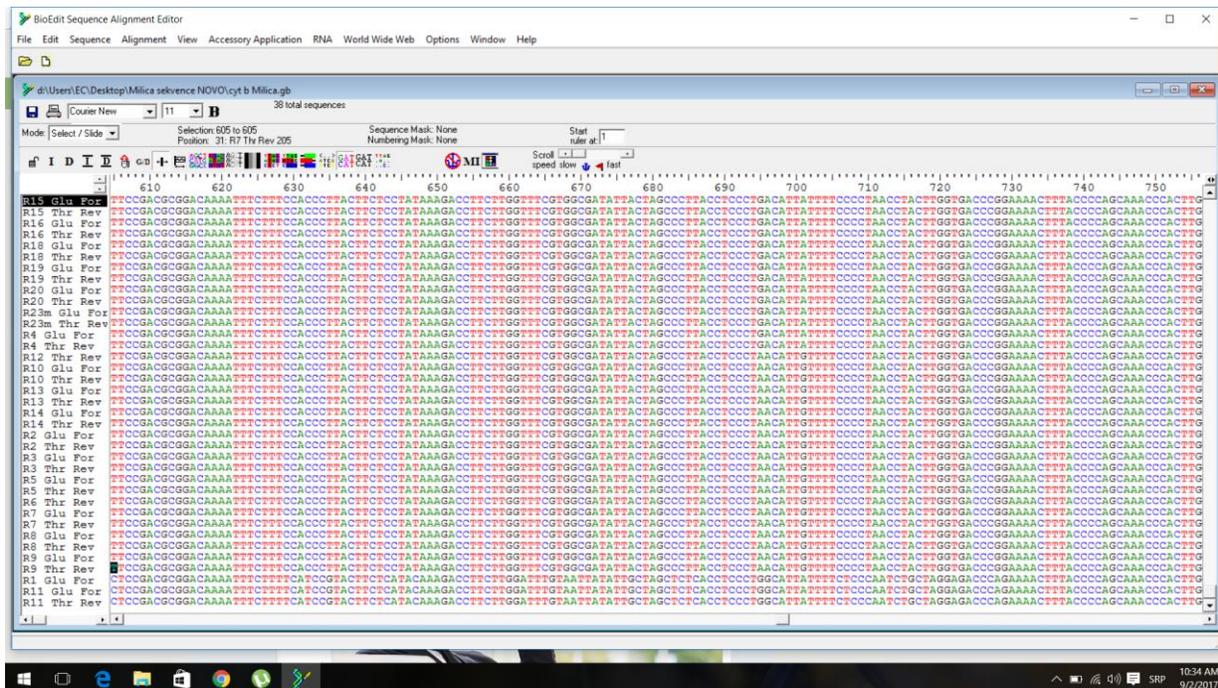


Figure 1. Edited sequences of cyt b mtDNA (specimens from the Opačica and Pribitul)

In August 2017, we completed the first field work in the Nevesinjsko field. Because of high temperatures and lack of rainfall during the summer season, Zalomka and Ljeskovik are mostly dried up (Fig. 2). So, we were unable to sample the fish. We also visited Dabarsko polje, in which most of the watercourses were dried (Opačica and Pribitul) as well. However, watercourses Vrijeka and Suški potok (in which we had not previously managed to make the samples) did not completely dry out (Fig. 3).

Figure 2. Dry riverbed of Zalomka





Figure 3. Analyzes physico-chemical parameters of water

In those watercourses we measured the physico-chemical parameters of the water and performed the electro-fishing (Fig. 3.). The part of the tail fin of 20 individuals from the Vrijeka and 30 from the Suški potok were lightly cut (Fig. 4). We photographed each individual by standard procedure and returned it to its habitat. Photos will be used to determine the morphological variability based on the geometric morphometry method (Fig. 5). A part of the tail fin was used for molecular analysis (Fig.6). We started molecular analyzes in the Laboratory for Evolutionary Biology at Department of Biology and Ecology, Faculty of Sciences in Novi Sad. The sequence analyses are in progress and we expect results soon. It will be published in the scientific journal.

Figure 4. Specimen from the Suški potok





Figure 5. Landmarks for geometric morphometry

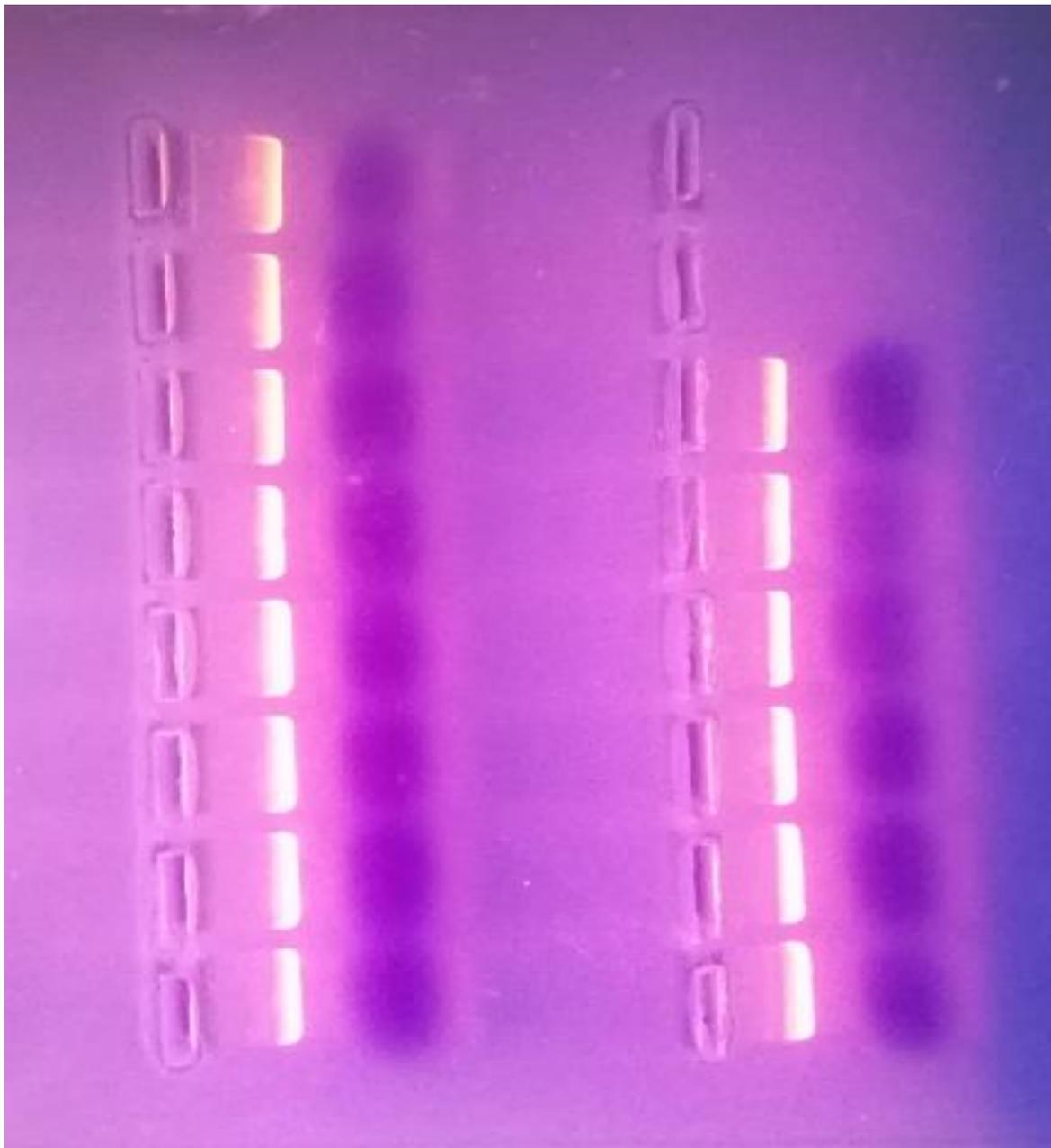


Figure 6. Checking the PCR products of individuals from new sites (Vrijeka i Suški potok)