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ZBORNIK ABSTRAKATA

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OPTIMISATION AND STANDARDIZATION OF PRIMERS FOR STERLET (*Acipenser ruthenus*) AND BELUGA (*Huso huso*) MICROSATELLITE LOCI

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Overharvest, habitat loss, fragmentation and other anthropogenic factors have resulted in population and distribution decline of both sterlet (*Acipenser ruthenus*) and beluga (*Huso huso*) in Danube basen. As all living sturgeon species are endangered and there are numerous conservation programs, there is a need for estimation of genetic diversity and the evolutonary relationships among populations. Microsatellite loci are useful tool for detection of intraspecies and intrapopulatoin polymorphism and numerous microsatellite loci were detected for sturgeon species. Primers for loci from Afu, Aox and Spl groupe were preveously developed for lake sturgeon (*Acipenser fulvescens*), Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) and shovelnose sturgeon (*Scaphirhynchus platorynchus*) respectfuly and provided a much needed group of genetic markers, detectable with non-invasive sampling (anal fin tissue). We tested and optimised primers for ten microsatellite loci on 10 sterlet and 5 beluga speciments from Serbian part of Danube River. All of tested loci show high level of polymorphism among sample speciments.

OPTIMIZACIJA I STANDARDIZACIJA PRAJMERA ZA DETEKCIJU MIKROSATELITSKIH LOKUSA KOD KEČIGE (*Acipenser ruthenus*) I MORUNE (*Huso huso*)

Prekomerni izlov, gubitak i fragmentacija staništa, kao i drugi antropogeni faktoru doveli su do opadanja brojnosti i distribucije kečige (*Acipenser ruthenus*) i morune (*Huso huso*) u slivu Dunava. Budući da su sve jesetarske vrste ugrožene i da postoje brojni konzervacioni programi, postoji potreba za procenom genetičkog diverziteta i evolutivnih odnosa između populacija. Mikrosatelitski lokusi su korisni pri detekciji polimorfizma unutar vrste i unutar populacija, te su zbog toga utvrđeni mnogobrojni mikrosatelitski lokusi za jesetarske vrste. Prajmeri za lokuse Afu, Aox i Spl grupe su razvijeni kod jezerske jesetre (*Acipenser fulvescens*), atlantske jesetre (*Acipenser oxyrinchus oxyrinchus*) i lopatonosa (*Scaphirhynchus platorynchus*) i predstavljaju veoma korisnu grupu genetičkih markera, koji se mogu detektovati primenom neinvazivnih metoda uzorkovanja (analno peraje). Testirali smo i optimizovali prajmere za deset mikrosatelitskih lokusa na uzorku od deset kečiga i pet moruna iz srpskog dela Dunava. Svi testirani lokusi su pokazali visok nivo polimorfnosti kod ispitivanih uzoraka.