

Short Communication

Cross-species amplification of selected zebrafish, central stoneroller, and finescale dace microsatellites in lake minnow populations

D. Kaczmarczyk

Department of Environmental Biotechnology, University of Warmia and Mazury, Olsztyn, Poland

Corresponding author: D. Kaczmarczyk E-mail: kaczmarczyk@uwm.edu.pl

Genet. Mol. Res. 12 (1): 154-159 (2013) Received March 14, 2012 Accepted July 20, 2012 Published January 24, 2013 DOI http://dx.doi.org/10.4238/2013.January.24.7

ABSTRACT. Fifteen sets of PCR primers designed for the amplification of microsatellite loci from *Danio rerio* and *Phoxinus neogaeus Campostoma* DNA that have been proven applicable for molecular studies of several species of cyprinids were tested for amplification of microsatellites from lake minnow DNA. The samples were taken from 298 fish inhabiting 6 distinct populations located in Poland, and DNA was extracted from dried fin clips. There were 6 sets of primer loci that were identified as useful for amplification of microsatellites from lake minnow DNA, which were polymorphic and could be applied in population genetics of this species. Three other sets of primers provided PCR products with a considerable number of stutter bands obscuring the identity of true microsatellite alleles. The amplification of lake minnow microsatellites using the 6 remaining primer sets was unsuccessful.

Key words: Cross-species amplification; Lake minnows; Microsatellites