

Identification Genetic characterization and population of *Barbus brachycephalus caspius*, *Rutilus rutilus caspius*, and *Salmo trutta caspius* in southern part of the Caspian Sea by molecular method

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Abstract:

In this study genetic characterization of *Rutilus rutilus caspius*, *Barbus brachycephalus caspius*, and *Salmo trutta caspius* were examined by 446 samples from regions in East (Guilan province), middle (Mazandaran province) and west (Golestan province) of southern part of the Caspian Sea. DNA was extracted from fin tissue by phenol - chlorophorm method and then PCR was performed using special primers. Statistical analysis of data was performed by Gene Alex, MEGA and Arlequin software's. The result indicated that there are different populations in the southern part of the Caspian Sea.

Keywords: Genetic variation, *Barbus brachycephalus caspius*, *Rutilus rutilus caspius* and *Salmo trutta caspius*, Caspian Sea