SUPPLEMENTARY MATERIALS FOR THE ARTICLE:

Molecular and biological studies of nonindigenous and extremely rare fish species from the western Baltic reported from the Pomeranian Bay (southwest Baltic Proper)

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Supplementary Materials SM.01. **Molecular marker sequences of collected samples**

Sample ID	Species name	Molecular marker	Sequence 5'–3'
Mer.mer.01	*M.merlangus*	*COI*	CCTTTATCTCGTATTTGGTGCCTGAGCCGGCATAGTCGGAACAGCCCTAAGCCTGCTCATTCGAGCAGAGCTAAGTCAACCTGGTGCACTCCTTGGTGATGATC AAATTTATAATGTAATCGTTACAGCACACGCTTTCGTAATAATTTTCTTTATAGTAATACCACTAATAATTGGAGGCTTCGGCAACTGACTAATTCCCCTAATG ATCGGTGCTCCAGATATAGCTTTCCCTCGAATAAATAACATAAGCTTCTGACTTCTTCCCCCATCTTTCCTACTCCTTTTAGCATCATCTGGTGTAGAAGCCGGA GCCGGGACAGGTTGAACTGTCTATCCCCCTTTAGCTGGAAACCTCGCTCATGCTGGGGCATCTGTTGACCTCACTATTTTTTCCCTTCATCTGGCAGGAATTTCA TCAATTCTTGGGGCAATTAATTTTATTACCACAATTATTAACATAAAACCTCCAGCAATTTCACAATATCAAACTCCCCTCTTTGTTGAGCAGTCCTAATTACA GCTGTGCTTCTATTATTATCTCTTCCAGTCTTAGCAGCCGGTATCACAATACTTTTAACTGATCGTAATCTTAATACTTCTTTCTTTGATCCTGCTGGAGGAGGTG ACCCCATTTTATATCAGCATCTA
Pol.vir.01	*P. virens*	*COI*	CCTCTATCTCGTATTTGGTGCCTGAGCCGGCATAGTCGGAACAGCCCTAAGCCTGCTCATTCGAGCAGAGCTAAGTCAACCCGGCGCACTCCTTGGTGACGAT CAAATTTACAATGTGATCGTTACAGCACACGCTTTCGTAATAATTTTCTTTATAGTAATACCACTGATAATTGGAGGCTTTGGAAACTGACTCATTCCTTTAATG ATCGGTGCCCCAGATATGGCCTTCCCTCGAATAAACAACATAAGTTTCTGACTTCTCCCTCCCTCTTTCCTCCTCCTTTTAGCATCATCCGGTGTAGAAGCCGGA GCTGGGACAGGCTGAACTGTTTATCCCCCTCTAGCTGGAAACCTGGCTCACGCTGGGGCTTCTGTTGATCTTACCATTTTCTCTCTTCATTTAGCAGGGATTTCA TCAATTCTTGGGGCAATTAATTTTATTACCACAATTATTAATATGAAACCTCCAGCAATTTCACAATATCAAACACCCCTCTTTGTGTGAGCAGTACTAATTAC AGCTGTGCTTCTATTATTATCCCTTCCCGTCTTAGCAGCCGGTATTACAATACTCCTAACCGATCGTAATCTTAATACTTCCTTCTTTGATCCTGCAGGAGGGGG TGATCCCATTTTATATCAACATTTA
Mer.merluccius.01	*M. merluccius*	*rho*	CCACGCCATCATGGGCGTGGCCTTCACCTGGGTCATGGCCAACGCGTGCGCCTTGCCCCCGCTGGTGGGCTGGTCTCGCTACATCCCCGAGGGAATGCAGTGC TCATGCGGCGTCGACTATTACACACGTGCCCCCGGCTTCAACAACGAGTCATTTGTCATCTACATGTTCGCGTGTCACTTTTTCACCCCGCTGACAGTGATCTTC TTCTGCTACGGACGCCTGCTCTGCGCCGTGAAGGAGGCCGCCGCTGCCCAGCAGGAGTCCGAGACCACCCAGAGGGCCGAGAGGGAGGTGAGCCGCATGGTG GTGCTCATGGTGGTTCCCTTGGTGTGTTGGTTGCCCTACGCTAGCGTGGCCTGGTACATCTTCACCCACCAGGGCAGCATATTCGGACCGTCTTCATGAC CCTGCCGGCCTTCTTCGCCAAGGCGGCCGCCATCTACAACCCCATG
Che.luc.01	*C. lucerna*	*cytb*	CTTTCCTTTCATTGTCGCAGGGGCCACCCTTATTCACCTTATCTTCCTACACGAAACCGGGTCAAACAACCCCCTCGGATTAAACTCAGATGCAGACAAAATCT CATTTCACCCCTACTTCTCCTACAAAGACCTCCTAGGATTTGCAGCCCTACTCATCGCACTCACATCCCTAGCCCTATTTGCCCCAAACCTCCTAGGGGATCCA GACAACTTCACCCCCGCCAACCCGTTAGTTACACCCCCTCATATTAAACCAGAATGATACTTCCTATTTGCCTATGCCATCCTACGTTCAATCCCCAACAAGCT AGGCGGGGTTTTAGCTCTCTTTGCCTCAATCATTGTCCTTATGGTCGTCCCTGTTCTTCACACCTCAAAACAACGAGGCCTCACCTTTCGCCCCCTCACCCAACT CCTCTTCTGAACCCTGATCGCCAACGTCGCTATTCTCACCTGAATTGGGGGCATGCCCGTCGAACATCCCTATATTATTATTGGCCAAGTCGCATCACTCCTAT ACTTCCTTCTCTTCCTAGTCCTCACTCCCCTAGCAGGTTGGGTTGAAAACAAGGCCCTGGAATGATCCTGCATTAGTAGCTCAGCGCCAGAGCGC
Che.luc.02	*C. lucerna*	*cytb*	CTTTCCTTTCATTGTCGCAGGGGCCACCCTTATTCACCTTATCTTCCTACACGAAACCGGGTCAAACAACCCCCTCGGATTAAACTCAGATGCAGACAAAATCT CATTTCACCCCTACTTCTCCTACAAAGACCTCCTAGGATTTGCAGCCCTACTCATCGCACTCACATCCCTAGCCCTATTTGCCCCAAACCTCCTAGGGGATCCA GACAACTTCACCCCCGCCAACCCGTTAGTTACACCCCCTCATATTAAACCAGAATGATACTTCCTATTTGCCTATGCCATCCTACGTTCAATCCCCAACAAGCT AGGCGGGGTTTTAGCTCTCTTTGCCTCAATCATTGTCCTTATGGTCGTCCCTGTTCTTCACACCTCAAAACAACGAGGCCTCACCTTTCGCCCCCTCACCCAACT CCTCTTCTGAACCCTGATCGCCAACGTCGCTATTCTCACCTGAATTGGGGGCATGCCCGTCGAACATCCCTATATTATTATTGGCCAAGTCGCATCACTCCTAT ACTTCCTTCTCTTCCTAGTCCTCACTCCCCTAGCAGGTTGGGTTGAAAACAAGGCCCTGGAATGATCCTGCATTAGTAGCTCAGCGCCAGAGCGC
Che.luc.03	*C. lucerna*	*cytb*	CTTTCCTTTCATTGTCGCAGGGGCCACCCTTATTCACCTTATCTTCCTACACGAAACCGGGTCAAACAACCCCCTCGGATTAAACTCAGATGCAGACAAAATCT CATTTCACCCCTACTTCTCCTACAAAGACCTCCTAGGATTTGCAGCCCTACTCATCGCACTCACATCCCTAGCCCTATTTGCCCCAAACCTCCTAGGGGATCCA GACAACTTCACCCCCGCCAACCCGTTAGTTACACCCCCTCATATTAAACCAGAATGATACTTCCTATTTGCCTATGCCATCCTACGTTCAATCCCCAACAAGCT AGGCGGGGTTTTAGCTCTCTTTGCCTCAATCATTGTCCTTATGGTCGTCCCTGTTCTTCACACCTCAAAACAACGAGGCCTCACCTTTCGCCCCCTCACCCAACT CCTCTTCTGAACCCTGATCGCCAACGTCGCTATTCTCACCTGAATTGGGGGCATGCCCGTCGAACATCCCTATATTATTATTGGCCAAGTCGCATCACTCCTAT ACTTCCTTCTCTTCCTAGTCCTCACTCCCCTAGCAGGTTGGGTTGAAAACAAGGCCCTGGAATGATCCTGCATTAGTAGCTCAGCGCCAGAGCGC
Che.luc.04	*C. lucerna*	*cytb*	CTTTCCTTTCATTGTCGCAGGGGCCACCCTTATTCACCTTATCTTCCTACACGAAACCGGGTCAAACAACCCCCTCGGATTAAACTCAGATGCAGACAAAATCT CATTTCACCCCTACTTCTCCTACAAAGACCTCCTAGGATTTGCAGCCCTACTCATCGCACTCACATCCCTAGCCCTATTTGCCCCAAACCTCCTAGGGGATCCA GACAACTTCACCCCCGCCAACCCGTTAGTTACACCCCCTCATATTAAACCAGAATGATACTTCCTATTTGCCTATGCCATCCTACGTTCAATCCCCAACAAGCT AGGCGGGGTTTTAGCTCTCTTTGCCTCAATCATTGTCCTTATGGTCGTCCCTGTTCTTCACACCTCAAAACAACGAGGCCTCACCTTTCGCCCCCTCACCCAACT CCTCTTCTGAACCCTGATCGCCAACGTCGCTATTCTCACCTGAATTGGGGGCATGCCCGTCGAACATCCCTATATTATTATTGGCCAAGTCGCATCACTCCTAT ACTTCCTTCTCTTCCTAGTCCTCACTCCCCTAGCAGGTTGGGTTGAAAACAAGGCCCTGGAATGATCCTGCATTAGTAGCTCAGCGCCAGAGCGC
Che.luc.05	*C. lucerna*	*cytb*	CTTTCCTTTCATTGTCGCAGGGGCCACCCTTATTCACCTTATCTTCCTACACGAAACCGGGTCAAACAACCCCCTCGGATTAAACTCAGATGCAGACAAAATCT CATTTCACCCCTACTTCTCCTACAAAGACCTTCTAGGATTTGCAGCCCTACTCATCGCACTCACATCCCTAGCCCTATTTGCCCCAAACCTCCTAGGGGATCCAG ACAACTTCACCCCCGCCAACCCGTTAGTTACACCCCCTCATATTAAACCAGAATGATACTTCCTATTTGCCTATGCCATCCTACGTTCAATCCCCAACAAGCTA GGCGGGGTTTTAGCTCTCTTTGCCTCAATCATTGTCCTTATGGTCGTCCCTGTTCTTCACACCTCAAAACAACGAGGCCTCACCTTTCGCCCCCTCACCCAACTC CTCTTCTGAACCCTGATCGCCAACGTCGCTATTCTCACCTGAATTGGGGGCATGCCCGTCGAACATCCCTATATTATTATTGGCCAAGTCGCATCACTCCTATA CTTCCTTCTCTTCCTAGTCCTCACTCCCCTAGCAGGTTGGGTTGAAAACAAGGCCCTGGAATGATCCTGCATTAGTAGCTCAGCGCCAGAGCGC
Mul.sur.01	*M. surmuletus*	*rho*	CCACGCTATCATGGGCTTGGGCATGACCTGGCTCATGGCCTCAGCTTGCGCCGTCCCCCCCCTGGTTGGCTGGTCCCGTTACATCCCCGAGGGCATGCAGTGCT CATGCGGAGTCGACTACTACACGAGAGCCGAAGGCTTCAACAACGAGTCCTTTGTCGTCTACATGTTCTGCTGCCACTTCATGATCCCCCTGATCATCGTGTTC TTCTGCTACGGCCGTCTGCTCTGCGCCGTCAAGGAGGCCGCTGCCGCCCAGCAGGAGTCTGAGACCACCCAGAGGGCTGAGAGGGAAGTCACCCGCATGGTC GTTATCATGGTCATCGCCTTCCTGGTATGTTGGTTGCCCTACGCCAGCGTGGCCTGGTGGATCTTCACCCACCAGGGCTCCGAGTTCGGCCCTGTCTTCATGAC CATCCCAGCTTTCTTTGCCAAGAGCTCCTCCATCTACAACCCCATG
Mul.sur.02	*M. surmuletus*	*rho*	CCACGCTATCATGGGCTTGGGCATGACCTGGCTCATGGCCTCAGCTTGCGCCGTCCCCCCCCTGGTTGGCTGGTCCCGTTACATCCCCGAGGGCATGCAGTGCT CATGCGGAGTCGACTACTACACGAGAGCCGAAGGCTTCAACAACGAGTCCTTTGTCGTCTACATGTTCTGCTGCCACTTCATGATCCCCCTGATCATCGTGTTC TTCTGCTACGGCCGTCTGCTCTGCGCCGTCAAGGAGGCCGCTGCCGCCCAGCAGGAGTCTGAGACCACCCAGAGGGCTGAGAGGGAAGTCACCCGCATGGTC GTTATCATGGTCATCGCCTTCCTGGTATGTTGGTTGCCCTACGCCAGCGTGGCCTGGTGGATCTTCACCCACCAGGGCTCCGAGTTCGGCCCTGTCTTCATGAC CATCCCAGCTTTCTTTGCCAAGAGCTCCTCCATCTACAACCCCATG
Sco.sco.01	*S. scombrus*	*COI*	CCTCTACCTAGTATTTGGTGCATGATCTGGAATAGTTGGCACGGCCTTAAGCTTGCTTATCCGAGCCGAACTAAGCCAACCAGGGTCCCTTCTCGGCGACGACC AAGTTTATAACGTAATTGTTACGGCCCATGCCTTCATTATAATCTTCTTTTTAGTAATACCAGTCATGATTGGAGGGTTCGGAAACTGACTTATCCCCCTAATGA TCGGAGCCCCCGATATAGCGTTCCCCCGAATGAATAACATAAGCTTCTGACTTCTTCCCCCTTCTCTCCTACTACTCCTGTCTTCTTCGGCAGTTGAAGCTGGAG CCGGAACTGGCTGAACAGTCTACCCCCCACTAGCTGGTAACCTAGCGCATCGCCGGGGCATCAGTTGACCTAACCATCTTCTCCCTTCACCTAGCAGGTGTTTCC TCAATTCTTGGGGCCATTAACTTCATCACAACAATTATTAATATGAAACCTGCAGGTATTTCTCAATACCAAACCCCTCTGTTCGTCTGAGCAGTCCTAATTAC AGCTGTTCTTCTACTCCTATCTCTGCCAGTCCTTGCTGCCGGCATTACAATGCTTCTAACTGATCGAAATCTTAATACCACTTTCTTTGACCCCGGAGGAGGAGG AGATCCTATTCTTTACCAACATCTA
Sco.sco.02	*S. scombrus*	*COI*	CCTCTACCTAGTATTTGGTGCATGATCTGGAATAGTTGGCACGGCCTTAAGCTTGCTTATCCGAGCCGAACTAAGCCAACCAGGGTCCCTTCTCGGCGACGACC AAGTTTATAACGTAATTGTTACGGCCCATGCCTTCATTATAATCTTCTTTTTAGTAATACCAGTCATGATTGGAGGGTTCGGAAACTGACTTATCCCCCTAATGA TCGGAGCCCCCGATATAGCGTTCCCCCGAATGAATAACATAAGCTTCTGACTTCTTCCCCCTTCTCTCCTACTACTCCTGTCTTCTTCGGCAGTTGAAGCTGGAG CCGGAACTGGCTGAACAGTCTACCCCCCACTAGCTGGTAACCTAGCGCATCGCCGGGGCATCAGTTGACCTAACCATCTTCTCCCTTCACCTAGCAGGTGTTTCC TCAATTCTTGGGGCCATTAACTTCATCACAACAATTATTAATATGAAACCTGCAGGTATTTCTCAATACCAAACCCCTCTGTTCGTCTGAGCAGTCCTAATTAC AGCTGTTCTTCTACTCCTATCTCTGCCAGTCCTTGCTGCCGGCATTACAATGCTTCTAACTGATCGAAATCTTAATACCACTTTCTTTGACCCCGGAGGAGGAGG AGATCCTATTCTTTACCAACATCTA
Sco.sco.03	*S. scombrus*	*COI*	CCTCTACCTAGTATTTGGTGCATGATCTGGAATAGTTGGCACGGCCTTAAGCTTGCTTATCCGAGCCGAACTAAGCCAACCAGGGTCCCTTCTCGGCGACGACC AAGTTTATAACGTAATTGTTACGGCCCATGCCTTCATTATAATCTTCTTTTTAGTAATACCAGTCATGATTGGAGGGTTCGGAAACTGACTTATCCCCCTAATGA TCGGAGCCCCCGATATAGCGTTCCCCCGAATGAATAACATAAGCTTCTGACTTCTTCCCCCTTCTCTCCTACTACTCCTGTCTTCTTCGGCAGTTGAAGCTGGAG CCGGAACTGGCTGAACAGTCTACCCCCCACTAGCTGGTAACCTAGCGCATCGCCGGGGCATCAGTTGACCTAACCATCTTCTCCCTTCACCTAGCAGGTGTTTCC TCAATTCTTGGGGCCATTAACTTCATCACAACAATTATTAATATGAAACCTGCAGGTATTTCTCAATACCAAACCCCTCTGTTCGTCTGAGCAGTCCTAATTAC AGCTGTTCTTCTACTCCTATCTCTGCCAGTCCTTGCTGCCGGCATTACAATGCTTCTAACTGATCGAAATCTTAATACCACTTTCTTTGACCCCGGAGGAGGAGG AGATCCTATTCTTTACCAACATCTA
Sco.rho.01	*S. rhombus*	*rho*	TCACGCAATCATGGGTTTGGCTTTCACCTGGTTTGCAGCATCCGCTTGTGCTGTACCCCCTCTTGTTGGCTGGTCTCGTTACATCCCTGAGGGCATGCAGTGCTC ATGTGGAGTCGACTACTATACACGTGCAGAAGGTTTCAACAATGAATCCTTCGTTATCTACATGTTCATCTGCCACTTCCTTATTCCACTGGTTGTTGTGTTCTT CTGCTATGGCCGTCTGCTCTGTGCTGTCAAGGAGGCTGCTGCTGCCCAGCAAGAGTCTGAGACCACCCAAAGGGCTGAGAGGGAAGTCACCCGCATGGTTGTA ATCATGGTTATCGCTTTCCTGGTATGTTGGTGTCCCTATGCAAGTGTGGCCTGGTATATCTTCACACATCAGGGCTCTGAGTTCGGACCCCTGTTCATGACCTTC CCCGCCTTCTTTGCCAAGAGTTCCTCCATCTACAACCCATTG
Sco.rho.02	*S. rhombus*	*rho*	TCACGCAATCATGGGTTTGGCTTTCACCTGGTTTGCAGCATCCGCTTGTGCTGTACCCCCTCTTGTTGGCTGGTCTCGTTACATCCCTGAGGGCATGCAGTGCTC ATGTGGAGTCGACTACTATACACGTGCAGAAGGTTTCAACAATGAATCCTTCGTTATCTACATGTTCATCTGCCACTTCCTTATTCCACTGGTTGTTGTGTTCTT CTGCTATGGCCGTCTGCTCTGTGCTGTCAAGGAGGCTGCTGCTGCCCAGCAAGAGTCTGAGACCACCCAAAGGGCTGAGAGGGAAGTCACCCGCATGGTTGTA ATCATGGTTATCGCTTTCCTGGTATGTTGGTGTCCCTATGCAAGTGTGGCCTGGTATATCTTCACACATCAGGGCTCTGAGTTCGGACCCCTGTTCATGACCTTC CCCGCCTTCTTTGCCAAGAGTTCCTCCATCTACAACCCATTG
Lim.lim.01	*L. limanda*	*COI*	CCTCTATCTCGTATTTGGTGCCTGAGCCGGAATAGTGGGGACAGGTCTAAGTCTGCTCATTCGGGCAGAACTTAGCCAACCTGGGGCTCTCCTGGGAGACGAT CAAATTTATAATGTGATCGTTACCGCACACGCCTTTGTAATAATCTTCTTTATAGTAATACCAATTATGATCGGAGGGTTCGGAAACTGACTTATCCCACTAAT GATCGGGGCCCCTGATATGGCATTCCCTCGGATGAACAACATGAGTTTCTGACTTCTACCTCCATCCTTTCTTCTTCTCCTAGCCTCTTCAGGCGTAGAAGCCGG GGCTGGAACTGGGTGAACTGTATACCCTCCGTTAGCTGGAAATCTAGCACACGCTGGAGCATCCGTAGACCTAACAATCTTCTCTCTTCACCTTGCCGGGATTT CATCAATCCTGGGAGCAATCAACTTTATTACCACAATCATCAACATGAAACCTACGGCAGTAACTATGTACCAAATTCCACTATTCGTGTGAGCCGTGCTAATT ACAGCCGTTCTTCTCCTCCTCTCCCTTCCGGTCTTAGCCGCTGGCATCACAATGCTACTGACAGACCGCAACCTAAACACAACTTTCTTTGACCCTGCCGGAGG GGGTGACCCCATCCTCTATCAACACCTA
Lim.lim.02	*L. limanda*	*COI*	CCTCTATCTCGTATTTGGTGCCTGAGCCGGAATAGTGGGGACAGGTCTAAGTCTGCTCATTCGGGCAGAACTTAGCCAACCTGGGGCTCTCCTGGGAGACGAT CAAATTTATAACGTGATCGTTACCGCACACGCCTTTGTAATAATCTTCTTTATAGTAATACCAATTATGATCGGAGGGTTCGGAAACTGACTTATCCCACTAAT GATCGGGGCCCCTGATATGGCATTCCCTCGGATGAACAACATGAGTTTCTGACTTCTACCTCCATCCTTTCTTCTTCTCCTAGCCTCTTCAGGCGTAGAAGCCGG GGCTGGAACTGGGTGAACTGTATACCCTCCGTTAGCTGGAAATCTAGCACACGCTGGAGCATCCGTAGACCTAACAATCTTCTCTCTTCACCTTGCCGGGATTT CATCAATCCTGGGAGCAATCAACTTTATTACCACAATCATCAACATGAAACCTACGGCAGTAACTATGTACCAAATTCCACTATTCGTGTGAGCCGTGCTAATT ACAGCCGTTCTTCTCCTCCTCTCCCTTCCGGTCTTAGCCGCTGGCATCACAATGCTACTGACAGACCGCAACCTAAACACAACTTTCTTTGACCCTGCCGGAGG GGGTGACCCCATCCTCTATCAACACCTA
Sol.sol.01	*S. solea*	*rho*	TCATGCCATCATGGGTTTGGGCTTCACCTGGTTTGCAGCTAGTGCTTGTGCCGTTCCCCCTCTTGTGGGCTGGTCCCGTTACATCCCTGAGGGCATGCAGTGCTC ATGCGGAGTTGACTACTACACCCGTGCAGAAGGTTTCAACAATGAATCCTTTGTTGTCTACATGTTCGTCTGCCACTTCCTCATCCCACTGATTGTCGTGTTCTT CTGCTATGGCCGACTGCTCTGCGCTGTCAAGGAGGCTGCTGCTGCCCAGCAGGAGTCTGAGACCACCCAAAGGGCTGAGAGGGAAGTCACCCGTATGGTTGTT ATCATGGTTATCGCTTTCCTGATATGTTGGTGCCCCTATGCAGGTGTGGCCTGGTACATCTTCTCAAATCAGGGTTCTGAATTCGGCCCACTTTTCATGACCATC CCCGCCTTCTTTGCCAAGAGTTCCTCCATCTACAACCCTCTG
Sol.sol.02	*S. solea*	*rho*	TCATGCCATCATGGGTTTGGGCTTCACCTGGTTTGCAGCTAGTGCTTGTGCCGTTCCCCCTCTTGTGGGCTGGTCCCGTTACATCCCTGAGGGCATGCAGTGCTC ATGCGGAGTTGACTACTACACCCGTGCAGAAGGTTTCAACAATGAATCCTTTGTTGTCTACATGTTCGTCTGCCACTTCCTCATCCCACTGATTGTCGTGTTCTT CTGCTATGGCCGACTGCTCTGCGCTGTCAAGGAGGCTGCTGCTGCCCAGCAGGAGTCTGAGACCACCCAAAGGGCTGAGAGGGAAGTCACCCGTATGGTTGTT ATCATGGTTATCGCTTTCCTGATATGTTGGTGCCCCTATGCAGGTGTGGCCTGGTACATCTTCTCAAATCAGGGTTCTGAATTCGGCCCACTTTTCATGACCATC CCCGCCTTCTTTGCCAAGAGTTCCTCCATCTACAACCCTCTG