

Genus	species	male ornaments	sex chrom	ornament citation	sex chromosome citation
<i>Diademichthys</i>	<i>lineatus</i>	brighter	XX-XO	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Galaxias</i>	<i>platei</i>	no	XX-XO	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Gobiodon</i>	<i>citrinus</i>	no	XX-XO	Breder and Rosen 1966, Reeve and Pfennig 2003	Chourrout 1986
<i>Lampanyctus</i>	<i>ritteri</i>	no	XX-XO	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Parvilux</i>	<i>ingens</i>	no	XX-XO	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Sternoptyx</i>	<i>diaphana</i>	no	XX-XO	Paxton and Eschenmeyer 1998	Devlin and Nagahama 2002
<i>Symphurus</i>	<i>plagiusa</i>	no	XX-XO	Breder and Rosen 1966	Sola et al. 1982
<i>Xiphophorus</i>	<i>maculatus</i>	dark dorsal	XX'-XY	Breder and Rosen 1966, Meyer 1997	Bellamy 1928
<i>Acerina</i>	<i>cernua</i>	no	XX-XY	Muus et al. 1999	Devlin and Nagahama 2002
<i>Argentina</i>	<i>silus</i>	no	XX-XY	Breder and Rosen 1966	Chourrout 1986
<i>Arothron</i>	<i>nigropunctatus</i>	no	XX-XY	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Barbonymus</i>	<i>gonionotus</i>	no	XX-XY	Froese and Pauly 2004	Pognthana et al. 1995
<i>Barilius</i>	<i>shacra</i>	no	XX-XY	Jayaram 1981	Devlin and Nagahama 2002
<i>Beryx</i>	<i>splendens</i>	no	XX-XY	McEachran 1998	Devlin and Nagahama 2002
<i>Bothus</i>	<i>podas</i>	longer fins	XX-XY	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Brevoortia</i>	<i>aurea</i>	no	XX-XY	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Brienomyrus</i>	<i>brachistius</i>	electric song	XX-XY	Breder and Rosen 1966, Froese and Pauly 2004	Devlin and Nagahama 2002
<i>Carassius</i>	<i>auratus</i>	tubercles	XX-XY	Froese and Pauly 2004	Yamamoto and Kajimisha 1969
<i>Carassius</i>	<i>carassius</i>	no	XX-XY	Jayaram 1981	Devlin and Nagahama 2002
<i>Cichlasoma</i>	<i>nigofasciata</i>	long rays, dark bars	XX-XY	Reeve and Pfennig 2003	Reeve and Pfennig 2003
<i>Clarias</i>	<i>fuscus</i>	no	XX-XY	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Clarias</i>	<i>gariopinus</i>	no	XX-XY	Breder and Rosen 1966	Galbusera et al. 2000
<i>Coregonus</i>	<i>sardinella</i>	no	XX-XY	Breder and Rosen 1966, Reeve and Pfennig 2003	Devlin and Nagahama 2002
<i>Ctenopharyngodon</i>	<i>idella</i>	no	XX-XY	Sanford 1995	Stanley 1976
<i>Cyprinus</i>	<i>carpio</i>	no	XX-XY	Gilbert and Williams 2002	Golovinskaya 1972
<i>Dormitator</i>	<i>maculatus</i>	brighter	XX-XY	Froese and Pauly 2004	Moreira-Filho et al. 1993
<i>Eigenmannia</i>	<i>virescens</i>	electric song	XX-XY	Froese and Pauly 2004	Devlin and Nagahama 2002
<i>Fundulus</i>	<i>diaphanus</i>	no	XX-XY	Goldstein et al.2000	Chourrout 1986
<i>Fundulus</i>	<i>heteroclitus</i>	brighter stripes	XX-XY	Robins and Ray 1986	Kornfield 1981
<i>Fundulus</i>	<i>parvipinnis</i>	male darker	XX-XY	Goldstein et al.2000	Chourrout 1986
<i>Gasterosteus</i>	<i>wheatlandi</i>	brighter	XX-XY	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Geophagus</i>	<i>brasiliensis</i>	no	XX-XY	Sanford 1995	Chourrout 1986
<i>Gobionellus</i>	<i>shufeldti</i>	no	XX-XY	Robins and Ray 1986	Devlin and Nagahama 2002
<i>Gobius</i>	<i>bucchichi</i>	no	XX-XY	Miller and Loates 1997	Devlin and Nagahama 2002
<i>Gobius</i>	<i>cobitis</i>	darker	XX-XY	Miller and Loates 1997	Devlin and Nagahama 2002
<i>Gobius</i>	<i>niger</i>	no	XX-XY	Muus et al. 1999	Chourrout 1986
<i>Gobius</i>	<i>pagenellis</i>	no	XX-XY	Muus et al. 1999	Chourrout 1986
<i>Gymnothorax</i>	<i>eurostus</i>	no	XX-XY	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Hucho</i>	<i>hucho</i>	red color	XX-XY	Miller and Loates 1997	Devlin and Nagahama 2002
<i>Hypostomus</i>	<i>ancistroides</i>	no	XX-XY	Breder and Rosen 1966	Moreira-Filho et al. 1993
<i>Hypostomus</i>	<i>macrops</i>	no	XX-XY	Breder and Rosen 1966	Moreira-Filho et al. 1993

<i>Lepidogaster</i>	<i>candollei</i>	brighter	XX-XY	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Leporinus</i>	<i>lacustris</i>	brighter, longer fins	XX-XY	Breder and Rosen 1966	Moreira-Filho et al. 1993
<i>Mastacembelus</i>	<i>aculeatus</i>	no	XX-XY	Breder and Rosen 1966	Liu et al. 2002
<i>Melamphaes</i>	<i>parvus</i>	no	XX-XY	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Microchirus</i>	<i>ocellatus</i>	longer fins	XX-XY	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Netuma</i>	<i>barba</i>	no	XX-XY	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Nothobranchius</i>	<i>guentheri</i>	no	XX-XY	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Noturus</i>	<i>taylori</i>	no	XX-XY	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Odonus</i>	<i>niger</i>	no	XX-XY	Sanford 1995	Devlin and Nagahama 2002
<i>Ompok</i>	<i>bimaculatus</i>	no	XX-XY	Breder and Rosen 1966	Sola et al. 1981
<i>Oncorhynchus</i>	<i>gorbuscha</i>	hooked jaw, brighter	XX-XY	Breder and Rosen 1966	Chourrout 1986
<i>Oncorhynchus</i>	<i>kisutch</i>	hooked jaw, brighter	XX-XY	Breder and Rosen 1966	Chourrout 1986
<i>Oncorhynchus</i>	<i>lagocephalus</i>	hooked jaw, brighter	XX-XY	Breder and Rosen 1966	Chourrout 1986
<i>Oncorhynchus</i>	<i>mykiss</i>	hooked jaw, brighter	XX-XY	Breder and Rosen 1966	Chourrout 1986
<i>Oncorhynchus</i>	<i>tshawytscha</i>	hooked jaw, brighter	XX-XY	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Oreochromis</i>	<i>mossambicus</i>	brighter	XX-XY	Froese and Pauly 2004	Chourrout 1986
<i>Oryzias</i>	<i>curvinotus</i>	no	XX-XY	Breder and Rosen 1966	Matsuda et al. 2003
<i>Osteoglossum</i>	<i>bicirrhosum</i>	no	XX-XY	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Parapercis</i>	<i>sexfasciata</i>	no	XX-XY	Andryashev 1971	Devlin and Nagahama 2002
<i>Pimelodella</i>	<i>sp.</i>	no	XX-XY	Breder and Rosen 1966	Moreira-Filho et al. 1993
<i>Plecostomus</i>	<i>ancistroides</i>	no	XX-XY	Breder and Rosen 1966	Chourrout 1986
<i>Plecostomus</i>	<i>macrops</i>	no	XX-XY	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Proterorhinus</i>	<i>marmoratus</i>	no	XX-XY	Miller and Loates 1997	Devlin and Nagahama 2002
<i>Pseudocrenilabrus</i>	<i>multicolor</i>	brighter	XX-XY	Froese and Pauly 2004	Chourrout 1986
<i>Pseudotocinclus</i>	<i>tietensis</i>	no	XX-XY	Breder and Rosen 1966	Moreira-Filho et al. 1993
<i>Pterolebias</i>	<i>hoignei</i>	no	XX-XY	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Rhinecanthus</i>	<i>aculeatus</i>	no	XX-XY	Smith and Heemstra 1986	Devlin and Nagahama 2002
<i>Rhinecanthus</i>	<i>reticulangus</i>	no	XX-XY	Smith and Heemstra 1986	Devlin and Nagahama 2002
<i>Salmo</i>	<i>salar</i>	hooked jaw, brighter	XX-XY	Froese and Pauly 2004	Woram et al. 2003
<i>Salmo</i>	<i>trutta</i>	hooked jaw, brighter	XX-XY	Froese and Pauly 2004	Chourrout 1986
<i>Salvelinus</i>	<i>alpinus</i>	brighter	XX-XY	Froese and Pauly 2004	Woram et al. 2003
<i>Salvelinus</i>	<i>namaycush</i>	brighter	XX-XY	Froese and Pauly 2004	Devlin and Nagahama 2002
<i>Scopelengys</i>	<i>tristis</i>	no	XX-XY	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Scopeloberyx</i>	<i>robustus</i>	no	XX-XY	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Scopelogadus</i>	<i>mizolepis</i>	no	XX-XY	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Stenobranchius</i>	<i>leucopsarus</i>	no	XX-XY	Breder and Rosen 1966	Chourrout 1986
<i>Stephenolepis</i>	<i>cirrifer</i>	no	XX-XY	Smith 1997	Devlin and Nagahama 2002
<i>Symbolophorus</i>	<i>californiensis</i>	no	XX-XY	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Vimba</i>	<i>vimba</i>	brighter	XX-XY	Miller and Loates 1997	Devlin and Nagahama 2002
<i>Xiphophorus</i>	<i>cortezi</i>	sword, dark caudal	XX-XY	Breder and Rosen 1966, Meyer 1997	Voff and Scharlt 2001
<i>Xiphophorus</i>	<i>pygmaeus</i>	sword, dark caudal	XX-XY	Breder and Rosen 1966, Meyer 1997	Kallman and Atz 1966
<i>Xiphophorus</i>	<i>variatus</i>	no	XX-XY	Breder and Rosen 1966, Meyer 1997	Kallman and Atz 1966

<i>Xiphophorus</i>	<i>xiphidium</i>	sword	XX-XY	Breder and Rosen 1966, Meyer 1997	Volff and Schartl 2001
<i>Zeus</i>	<i>faber</i>	no	XX-XY	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Chaenodraco</i>	<i>wilsoni</i>	no	XX-XY	Froese and Pauly 2004	Devlin and Nagahama 2002
<i>Garmanella</i>	<i>pulchra</i>	no	XX-XY	Goldstein et al.2000	Devlin and Nagahama 2002
<i>Megupsilon</i>	<i>aporus</i>	brighter	XX-XY	Goldstein et al.2000	Devlin and Nagahama 2002
<i>Oryzias</i>	<i>latipes</i>	no	XX-XY	Breder and Rosen 1966	Francis 1992
<i>Parablennius</i>	<i>tentacularis</i>	brighter	XX-XY	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Poecilia</i>	<i>reticulata</i>	brighter, longer fins	XX-XY	Breder and Rosen 1966, Reeve and Pfennig 2003	Francis 1992
<i>Scolecenchelys</i>	<i>gymnotus</i>	no	XX-XY	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Stephenolepis</i>	<i>hispidus</i>	no	XX-XY	Gilbert and Williams 2002	Devlin and Nagahama 2002
<i>Xiphophorus</i>	<i>milleri</i>	no	XX-XY	Breder and Rosen 1966, Meyer 1997	Kallman and Atz 1966
<i>Xiphophorus</i>	<i>nezahualcoyotl</i>	sword, dark caudal	XX-XY	Breder and Rosen 1966, Meyer 1997	Volff and Schartl 2001
<i>Xiphophorus</i>	<i>nigrens</i>	sword	XX-XY	Breder and Rosen 1966, Meyer 1997	Volff and Schartl 2001
<i>Cynoglossus</i>	<i>puncticeps</i>	no	ZZ-ZO	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Acipenser</i>	<i>transmontanus</i>	brighter	ZZ-ZW	Breder and Rosen 1966	VanEenennaam et al. 1999
<i>Alepes</i>	<i>djedaba</i>	no	ZZ-ZW	Kyushin et al. 1982	Devlin and Nagahama 2002
<i>Anguilla</i>	<i>anguilla</i>	no	ZZ-ZW	Breder and Rosen 1966	Chourrout 1986
<i>Anguilla</i>	<i>japonica</i>	no	ZZ-ZW	Breder and Rosen 1966	Chourrout 1986
<i>Anguilla</i>	<i>rostrata</i>	no	ZZ-ZW	Breder and Rosen 1966	Chourrout 1986
<i>Apeltes</i>	<i>quadracus</i>	brighter	ZZ-ZW	Breder and Rosen 1966	Chourrout 1986
<i>Aplocheilichthys</i>	<i>panchax</i>	no	ZZ-ZW	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Aulopus</i>	<i>japonicus</i>	brighter	ZZ-ZW	Froese and Pauly 2004	Devlin and Nagahama 2002
<i>Boleophthalmus</i>	<i>boddaerti</i>	no	ZZ-ZW	Jayaram 1981	Devlin and Nagahama 2002
<i>Characidium</i>	<i>fasciatum</i>	spotted dorsal	ZZ-ZW	Sanford 1995	Devlin and Nagahama 2002
<i>Clarias</i>	<i>batrachus</i>	no	ZZ-ZW	Breder and Rosen 1966	Pandey and Lakra 1997
<i>Conger</i>	<i>myriaster</i>	no	ZZ-ZW	Breder and Rosen 1966	Chourrout 1986
<i>Eleotris</i>	<i>pisonis</i>	no	ZZ-ZW	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Gambusia</i>	<i>affinis</i>	no	ZZ-ZW	Breder and Rosen 1966, Reeve and Pfennig 2003,	Sola et al. 1981
<i>Gambusia</i>	<i>hurtadoi</i>	no	ZZ-ZW	Breder and Rosen 1966, Froese and Pauly 2004	Chourrout 1986
<i>Gambusia</i>	<i>puncticulata</i>	no	ZZ-ZW	Breder and Rosen 1966, Froese and Pauly 2004	Moreira-Filho et al. 1993
<i>Hemisynodontis</i>	<i>membranaceous</i>	no	ZZ-ZW	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Hypostomus</i>	<i>sp.</i>	no	ZZ-ZW	Breder and Rosen 1966	Artoni et al. 1998
<i>Ictalurus</i>	<i>punctatus</i>	no	ZZ-ZW	Breder and Rosen 1966	Wolters, et al 1882
<i>Imparfinis</i>	<i>mirini</i>	no	ZZ-ZW	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Lepidocephalichthys</i>	<i>guntea</i>	brighter	ZZ-ZW	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Leporinus</i>	<i>conirostris</i>	brighter, longer fins	ZZ-ZW	Breder and Rosen 1966	Moreira-Filho et al. 1993
<i>Leporinus</i>	<i>elongatus</i>	brighter, longer fins	ZZ-ZW	Breder and Rosen 1966	Moreira-Filho et al. 1993
<i>Leporinus</i>	<i>macrocephalus</i>	brighter, longer fins	ZZ-ZW	Breder and Rosen 1966	Moreira-Filho et al. 1993
<i>Leporinus</i>	<i>obtusidens</i>	brighter, longer fins	ZZ-ZW	Breder and Rosen 1966	Moreira-Filho et al. 1993
<i>Leporinus</i>	<i>reinhardti</i>	brighter, longer fins	ZZ-ZW	Breder and Rosen 1966	Moreira-Filho et al. 1993
<i>Leporinus</i>	<i>silvestrii</i>	brighter, longer fins	ZZ-ZW	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Leporinus</i>	<i>trifasciatus</i>	brighter, longer fins	ZZ-ZW	Breder and Rosen 1966	Moreira-Filho et al. 1993

<i>Leuciscus</i>	<i>carolitertii</i>	no	ZZ-ZW	Miller and Loates 1997	Devlin and Nagahama 2002
<i>Leuciscus</i>	<i>pyrenaicus</i>	no	ZZ-ZW	Miller and Loates 1997	Devlin and Nagahama 2002
<i>Loricariichthys</i>	<i>platymetopon</i>	no	ZZ-ZW	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Microlepidogaster</i>	<i>leucofrenatus</i>	no	ZZ-ZW	Breder and Rosen 1966	Moreira-Filho et al. 1993
<i>Mollienesia</i>	<i>sphenops</i>	no	ZZ-ZW	Breder and Rosen 1966, Froese and Pauly 2004	Chourrout 1986
<i>Oreochromis</i>	<i>aureus</i>	brighter	ZZ-ZW	Froese and Pauly 2004	Chourrout 1986
<i>Poecilia</i>	<i>latipinna</i>	brighter, large dorsal	ZZ-ZW	Breder and Rosen 1966, Reeve and Pfennig 2003	Devlin and Nagahama 2002
<i>Poecilia</i>	<i>sphenops</i>	larger dorsal	ZZ-ZW	Breder and Rosen 1966, Reeve and Pfennig 2003	Devlin and Nagahama 2002
<i>Poecilia</i>	<i>velifera</i>	larger dorsal	ZZ-ZW	Breder and Rosen 1966, Froese and Pauly 2004	Devlin and Nagahama 2002
<i>Saurida</i>	<i>elongata</i>	no	ZZ-ZW	Breder and Rosen 1966	Chourrout 1986
<i>Saurida</i>	<i>undosquamis</i>	no	ZZ-ZW	Breder and Rosen 1966	Sola et al. 1982
<i>Scardinius</i>	<i>erythrophthalmus</i>	no	ZZ-ZW	Reeve and Pfennig 2003	Koehler et al. 1995
<i>Semaprochilodus</i>	<i>taeniurus</i>	no	ZZ-ZW	Sanford 1995	Devlin and Nagahama 2002
<i>Synodontis</i>	<i>bastiani</i>	no	ZZ-ZW	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Synodontis</i>	<i>budgetti</i>	no	ZZ-ZW	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Synodontis</i>	<i>courteti</i>	no	ZZ-ZW	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Synodontis</i>	<i>filamentosus</i>	no	ZZ-ZW	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Synodontis</i>	<i>ocellifer</i>	no	ZZ-ZW	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Synodontis</i>	<i>schall</i>	no	ZZ-ZW	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Synodontis</i>	<i>sorex</i>	no	ZZ-ZW	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Synodontis</i>	<i>violaceus</i>	no	ZZ-ZW	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Synodus</i>	<i>hoshinonus</i>	no	ZZ-ZW	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Synodus</i>	<i>ulae</i>	no	ZZ-ZW	Breder and Rosen 1966	Devlin and Nagahama 2002
<i>Thoracocharax</i>	<i>stellatus</i>	no	ZZ-ZW	Breder and Rosen 1966	Carvalho et al. 2002
<i>Trachinotus</i>	<i>ovatus</i>	no	ZZ-ZW	Muus et al. 1999	Devlin and Nagahama 2002
<i>Triportheus</i>	<i>albus</i>	no	ZZ-ZW	Axelrod and Schulz 1983	Moreira-Filho et al. 1993
<i>Triportheus</i>	<i>angulatus</i>	no	ZZ-ZW	Paysan 1975	Moreira-Filho et al. 1993
<i>Xiphophorus</i>	<i>alvarezi</i>	sword, dark caudal	ZZ-ZW	Breder and Rosen 1966, Meyer 1997	Volff and Schartl 2001
<i>Trachinocephalus</i>	<i>myops</i>	no	ZZ-ZW	Breder and Rosen 1966	Devlin and Nagahama 2002

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