**Table S1.**

List of analysed samples, their identification, geographical origin, voucher number and GenBank accession numbers for their sequences. Voucher numbers starting with ‘A’ refer to the collection of IAPG, Liběchov, Czech Republic; ‘CMK’ numbers refer to the collection of Maurice Kottelat; ‘GenBank’ refers to sequences from GenBank; ‘ZRC’ to samples housed in the Lee Kong Chian Natural History Museum, National University of Singapore, Singapore.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Species name | Country | Province | River drainage | voucher | Cyt b  | RAG 1  | IRBP2  | MYH6  | RH 1 | EGR 3  |
|  |  |  |  |  |  |  |  |  |  |  |
| EASTERN CLADE |  |  |  |  |  |  |  |  |  |
| *Karstsinnectes acridorsalis* | China | Guangxi | Pearl | GenBank | ON116515 | OP473644 | - | OP473686 | OP473776 | OP473850 |
| *Karstsinnectes anophthalmus* | China | Guangxi | Pearl | GenBank | ON116506 | OP473637 | OP473907 | OP473664 | OP473763 | OP473828 |
| *Karstsinnectes parvus* | China | Guangxi | Pearl | GenBank | ON116520 | OP473651 | OP473900 | OP473693 | - | OP473859 |
| *Lefua costata* | Korea | Gangwon | Cheon Jin Cheon | A1895A6942 | PP279919KP738591 | PP315753KP738551 | PP280130KP738511 | PP280341OL191348 | -- | -PP259693 |
| *Lefua torrentis* | Japan | Hyogo | Kako | A1050A1051A1052 | PP279878PP279879PP279880 | PP315711PP315712PP315714 | PP280091PP280092PP280093 | PP280288PP280289PP280291 | PP259745PP259747PP259748 | --- |
| *Micronemacheilus bailianensis* | China | Guangxi | Pearl | GenBank | ON116504 | OP473620 | OP473876 | OP473662 | OP473759 | OP473825 |
| *Micronemacheilus cruciatus* | Vietnam | Thua Tien-Hue  | Song Bu Lu | A3293A3294 | PP279965PP279966 | PP315801PP315802 | -- | PP280394PP280395 | PP259847PP259848 | PP259670PP259671 |
| *Micronemacheilus longibarbatus* | China | Guangxi | Pearl | GenBank | ON116508 | OP473625 | OP473879 | OP473666 | OP473761 | OP473833 |
| *Micronemacheilus pulcherimus* | China | Guangxi | Pearl | A8690A8691 | PP280043PP280044 | PP315878PP315879 | PP280229PP280230 | PP280508PP280509 | PP259968PP259969 | PP259700- |
| *Oreonectes guananensis* | China | Guangxi | Pearl | GenBank | ON116507 | OP473623 | OP473878 | OP473665 | OP473750 | OP473830 |
| *Oreonectes luochengensis* | China | Guangxi | Pearl | GenBank | ON116495 | - | OP473882 | OP473670 | OP473749 | OP473836 |
| *Oreonectes platycephalus* | China | Hong Kong | Tai Tam | A1674A1675A1676GenBank | PP279902PP279903PP279904ON116528 | PP315737PP315738PP315739OP473652 | PP280115PP280116PP280117OP473904 | PP280323PP280324PP280325OP473696 | PP259777PP259778PP259779OP473745 | ---OP473862 |
| *Oreonectes* cf. *platycephalus 1* | China | Guangxi | Pearl | A9065 | PP280053 | PP315888 | PP280239 | PP280518 | PP259977 | PP259707 |
| *Oreonectes* cf. *platycephalus 2* | China | Guangxi | Pearl | A8697 | PP280045 | PP315880 | PP280231 | PP280510 | PP259970 | PP259701 |
| *Oreonectes* cf. *platycephalus 3* | Vietnam | Lang Son | Pearl | A10603 | PP279881 | - | - | PP280292 | - | - |
| *Oreonectes polystigmus* | China | Guangxi | Pearl | GenBank | ON116514 | OP473614 | OP473871 | OP473657 | OP473746 | OP473856 |
| *Oreonectes* sp. | China | Guangxi | Pearl | A8963A8964 | PP280047PP280048 | PP315882PP315883 | PP280233PP280234 | PP280512PP280513 | PP259972- | PP259702PP259703 |
| *Paranemachilus genilepis* | China | Guangxi | Pearl | GenBank | ON116497 | OP473630 | OP473885 | OP473673 | OP473752 | OP473839 |
| *Paranemachilus pingguoensis* | China | Guangxi | Pearl | GenBank | ON116500 | OP473634 | OP473888 | OP473676 | OP473755 | OP473843 |
| *Paranemachilus zhengbaoshani* | China | Guangxi | Pearl | A9153 | PP280054 | PP315889 | PP280240 | PP280519 | PP259978 | PP259708 |
| *Sundoreonectes sabanus* | Malaysia | Sabah | Baram | A1844A1845 | PP279914PP279915 | PP315748PP315749 | PP280126PP280127 | PP280334PP280335 | PP259789PP259790 | PP259651PP259652 |
| *Traccatichthys pulcher* | China | Guangxi | Pearl | A1804A1805A8681 | PP279910PP279911PP280042 | PP315744PP315745PP315877 | PP280122PP280123PP280228 | PP280330PP280331PP280507 | PP259785PP259786PP259967 | --PP259699 |
| *Traccatichthys taeniatus* | VietnamLaos | Nghe AnHouaphan | LamLam | A3175A3176CMK 25931 | PP279960PP279961PP279871 | PP315796PP315797PP315710 | PP280167PP280168PP280088 | PP280387PP280388PP280249 | PP259840PP259841PP259738 | PP259666-- |
| *Traccatichthys* cf. *taeniatus* | Vietnam | Quang Nam | Cau Do | A9575 | PP280060 | - | - | - | - | - |
| *Traccatichthys zispi* | China | Hainan | - | GenBank | ON116518 | OP473648 | OP473898 | OP473691 | OP473780 | OP473861 |
| *Troglonectes barbatus* | China | Guizhou | Pearl | GenBank | ON116501 | OP473635 | OP473889 | OP473678 | OP473756 | - |
| *Troglonectes daqikongensis* | China | Guizhou | Pearl | GenBank | ON116526 | OP473641 | - | OP473683 | OP473773 | OP473849 |
| *Troglonectes dongganensis* | China | Guangxi | Pearl | GenBank | ON116503 | OP473617 | OP473875 | OP473661 | OP473757 | OP473847 |
| *Troglonectes donglanensis* | China | Guangxi | Pearl | GenBank | ON116505 | OP473621 | OP473877 | OP473663 | OP473762 | OP473826 |
| *Troglonectes duanensis* | China | Guangxi | Pearl | GenBank | ON116509 | OP473622 | OP473880 | OP473667 | OP473764 | OP473831 |
| *Troglonectes elongatus* | China | Guangxi | Pearl | GenBank | ON116502 | OP473616 | OP473874 | OP473660 | OP473758 | OP473848 |
| *Troglonectes furcocaudalis* | China | Guangxi | Pearl | GenBank | ON116512 | OP473628 | OP473883 | OP473671 | OP473767 | OP473837 |
| *Troglonectes jiarongensis* | China | Guizhou | Pearl | GenBank | ON116527 | OP473643 | OP473894 | OP473685 | OP473769 | OP473846 |
| *Troglonectes lihuensis* | China | Guangxi | Pearl | GenBank | ON148332 | OP473618 | OP473892 | OP473688 | - | OP473852 |
| *Troglonectes macrolepis* | China | Guangxi | Pearl | GenBank | ON116498 | OP473632 | OP473886 | OP473674 | OP473753 | OP473841 |
| *Troglonectes microphthalmus* | China | Guangxi | Pearl | A8988A8989GenBank | PP280049PP280050ON116494 | PP315884PP315885OP473631 | PP280235PP280236OP473872 | PP280514PP280515OP473659 | PP259973PP259974OP473748 | PP259704PP259705OP473840 |
| *Troglonectes retrodorsalis* | China | Guangxi | Pearl | GenBank | ON116511 | OP473627 | OP473873 | OP473669 | OP473766 | OP473835 |
| *Troglonectes shuilongensis* | China | Guizhou | Pearl | GenBank | ON116522 | OP473636 | OP473891 | OP473679 | OP473768 | OP473834 |
| *Troglonectes translucens* | China | Guangxi | Pearl | GenBank | ON116510 | OP473626 | OP473881 | OP473668 | OP473765 | OP473832 |
| *Yunnanilus pleurotaenia* | China | Yunnan | Yangtze | A2967A2968A2969 | PP279954PP279955PP279956 | PP315791PP315792PP315793 | PP280163PP280164PP280165 | PP280381PP280382PP280383 | PP259836PP259837PP259838 | PP259664PP259665- |
|  |  |  |  |  |  |  |  |  |  |  |
| NORTHERN CLADE |  |  |  |  |  |  |  |  |  |
| *Barbatula barbatula* | FranceRussiaGermanyCzechiaCzechiaPoland | Haute-GaronneUnknownNordrhein-WestfalenLibereckyStredoceskyDolnośląskie | Garonneunknown RhineElbeElbeOder | CMK18464\_1CMK18464\_2A4013A4015A2046A2047A2587A2588A8393A8394A2957A2958 | PP279842PP279843PP279979PP279980PP279922PP279923PP279923PP279941KP738604KP738605PP279952PP279953 | PP315677PP315678PP315816PP315817PP315756PP315757PP315777PP315778KP738564KP738565PP315789PP315790 | --PP280179PP280180PP280133PP280134PP280150PP280151KP738524KP738525PP280161PP280162 | PP280251PP280252PP280409PP280410PP280344PP280345PP280367PP280368PP280499OL191359PP280379PP280380 | -PP259711PP259858-PP259798PP259799PP259822PP259823PP259955PP259956PP259834PP259835 | -PP259624-PP259674PP259655---PP259697--- |
| *Barbatula* cf. *compressirostris* | MongoliaMongolia | KhovdKhovd | Khovd Tsendkhar Khovd | CMK19564\_1 CMK19564\_2CMK19590\_1CMK19590\_2 | PP279848PP279849PP279852PP279853 | PP315683PP315684PP315687PP315688 | PP280067PP280068PP280071PP280072 | PP280257PP280258PP280261PP280262 | PP259716PP259717PP259720PP259721 | PP259626-PP259628- |
| *Barbatula dgebuadzei* | Mongolia | Bayankhongor | Baydrag | CMK19594\_1CMK19594\_2 | PP279854PP279855 | PP315689PP315690 | PP280073PP280074 | PP280263PP280264 | PP259722PP259723 | PP259629- |
| *Barbatula karabanowi* | Mongolia | Khovd | Bulgan Gol | CMK19584\_1 CMK19584\_2 | PP279850PP279851 | PP315685PP315686 | PP280069PP280070 | PP280259PP280260 | PP259718PP259719 | PP259627- |
| *Barbatula oreas* | Japan | Hokkaido | Shinkawa | A11223A11224 | PP279887PP279888 | PP315722PP315723 | PP280097PP280098 | PP280300PP280301 | PP259754PP259755 | PP259638- |
| *Barbatula* sp. Korea | Korea | Gangwon | Cheon Jin Cheon | A1888 | PP279918 | PP315752 | - | PP280340 | - | - |
| *Barbatula* sp. Tuul | Mongolia | Ulaanbaatar | Selenga | A4246A4247A4248A4250 | PP279981PP279982PP279983PP279985 | -PP315818PP315819PP315821 | -PP280181PP280182PP280184 | PP280412PP280413PP280414PP280416 | PP259861-PP259862PP259863 | PP259676--- |
| *Barbatula toni* | Russia | Primorsky | Amur | A3171 | PP279959 | - | - | PP280386 | - | - |
| *Barbatula* cf. *toni* | MongoliaMongolia | KhövgölUlaanbaatar | SelengaSelenga | CMK19540\_1CMK19540\_2A4249 | PP279844PP279845PP279984 | PP315679PP315680PP315820 | PP280063PP280064PP280183 | PP280253PP280254PP280415 | PP259712PP259713- | --PP259677 |
| *Claea dabryi* | China | Sichuan | Yangtze | GenBank | MG238214 | MG237922 | MG238312 | - | MG238015 | - |
| *Triplophysa baotianensis* | China | Guizhou | Pearl | GenBank | MT992550 | OP473612 | OP473868 | OP473655 | - | OP473864 |
| *Triplophysa bleekeri* | China | no detail | Yangtze  | GenBank  | MG238298KX373847 | MG238003MG725561 | MG238415MG698830 | -MG698529 | -MG697779 | -- |
| *Triplophysa brevicauda* | China | no detail | Yangtze  | GenBank | MG238300 | MG238005 | MG238417 | - | MG238107 | - |
| *Triplophysa dalaica* | China | Gansu | no details | GenBank | MG697586 | - | MG698831 | MG698530 | MG697806 | - |
| *Triplophysa dorsalis* | Kazachstan | Almaty | Lake Balkash | A5377A5378A5380A5383 | PP280001PP280002PP280004PP280007 | PP315838PP315839PP315841PP315844 | PP280191PP280192PP280194PP280196 | PP280444PP280445PP280447PP280450 | PP259893PP259894PP259895PP259898 | PP259684PP259685-- |
| *Triplophysa grahami* | China | Yunnan | Yangtze | A1663A2933 | MK608125PP279948 | OL191414PP315785 | MT536722- | OL191277PP280375 | PP259776PP259830 | PP259648- |
| *Triplophysa gundriseri* | Mongolia | Khövgöl | Tes Gol | CMK19543\_1CMK19543\_2 | PP279846PP279847 | PP315681PP315682 | PP280065PP280066 | PP280255PP280256 | PP259714PP259715 | PP259625- |
| *Triplophysa huapingensis* | China | Guangxi | Pearl | GenBank | MG697589 | - | MG698834 | MG698537 | MG697870 | - |
| *Trplophysa labiata* | Kazachstan | Almaty | Lake Balkash | A5381A5384A5385 | PP280005PP280008PP280009 | PP315842PP315845PP315846 | -PP280197PP280198 | PP280448PP280451PP280452 | PP259896PP259899PP259900 | --- |
| *Triplophysa leptosoma* | China | no detail | Yangtze  | GenBank | KX373839 | - | MG698825 | MG698524 | MG697601 | - |
| *Triplophysa luochengensis* | China | Guangxi | Pearl | A8990A8991 | PP280051PP280052 | PP315886PP315887 | PP280237PP280238 | PP280516PP280517 | PP259975PP259976 | PP259706- |
| *Triplophysa nandanensis* | China | Guangxi | Pearl | GenBank | MG697588 | - | MG698833 | MG698536 | MG697869 | - |
| *Triplophysa nanpanjiangensis* | China | Yunnan | Pearl | GenBank | MG238302 | MG238007 | MG238419 | - | MG238109 | - |
| *Triplophysa nasobarbatula* | China | Guizhou | Pearl | GenBank | ON116529 | OP473653 | OP473869 | OP473697 | OP473781 | OP473865 |
| *Triplophysa obscura* | China | no detail | Yangtze  | GenBank | MG238304 | MG238009 | MG238421 | - | MG238111 | - |
| *Triplophysa orientalis* | China | Qinghai | Yangtze  | GenBank | KX373846 | - | MG698829 | MG698528 | MG697755 | - |
| *Triplophysa pseudoscleroptera* | China | Qinghai | Yangtze  | GenBank | MG697585 | - | MG698828 | MG698527 | MG697684 | - |
| *Triplophysa rosa* | China | Wulong | Yangtze  | GenBank | MG697587 | MG725565 | MG698832 | MG698535 | MG697868 | - |
| *Triplophysa scleroptera* | China | No details | Yangtze | GenBank | MG238307KX373833 | MG238012MG725554 | MG238424MG698838 | MG698534 | MG238113MG697908 | -- |
| *Triplophysa siluroides* | China | no details | no details | 1797 | MT536720 | EF063156 | MT536723 | OL191278 | PP259784 | PP259650 |
| *Triplophysa stenura* | China | Yunnan | Yangtze | 293529382939GenBank | PP279949PP279950PP279951MG697583 | PP315786PP315787PP315788MG725550 | PP280158PP280159PP280160MG698824 | PP280376PP280377PP280378MG698523 | PP259831PP259832PP259833MG697592 | -PP259662PP259663- |
| *Triplophysa stolickai* | China | no detail | no details | GenBank | MG697582 | MG725535 | MG698822 | MG698521 | MG697590 | - |
| *Triplophysa strauchi* | KazachstanKyrgyzstan | AlmatyNaryn | Lake BalkashSyr Darya | 5367537953821149611497 | PP280000PP280003PP280006MT536721PP279889 | -PP315840PP315843OL191500PP315725 | -PP280193PP280195MT536724PP280100 | -PP280446PP280449OL191382PP280303 | --PP259897PP259757PP259758 | -PP259686-PP259639- |
| *Triplophysa tenuis* | China | no detail | no details | GenBank | MG697584 | MG725556 | MG698827 | MG698526 | MG697626 | - |
| *Triplophysa wuweiensis* | China | Gansu | no details | GenBank | KX373838 | - | MG698823 | MG698522 | MG697591 | - |
|  |  |  |  |  |  |  |  |  |  |  |
| INDOCHINESE CLADE |  |  |  |  |  |  |  |  |  |
| *Homatula anguillioides* | China | Yunnan | Mekong | GenBank | HM010583 | HM010669 | MG238315 | - | MG238018 | - |
| *Homatula change* | China | Yunnan | Mekong | GenBank | - | - | MG238318 | - | MG238021 | - |
| *Homatula cryptoclathrata* | China | Yunnan | Salween | GenBank | HM010569 | HM010663 | MG238332 | - | - | - |
| *Homatula disparizona* | China | Yunnan | Red | GenBank | MG238218 | MG237926 | MG238321 | - | MG238023 | - |
| *Homatula laxiclathra* | China | Shanxi | Yellow | GenBank | MG238219 | MG237927 | MG238322 | - | MG238024 | - |
| *Homatula longidorsalis* | China | Yunnan | Pearl | GenBank | HM010522 | HM010618 | MG238324 | - | MG238026 | - |
| *Homatula potanini* | China | Sichuan | Yangtze | A1788A1789 | PP279908PP279909 | PP315742PP315743 | PP280120PP280121 | PP280328PP280329 | PP259782PP259783 | PP259649- |
| *Homatula pycnolepis* | China | Yunnan | Mekong | A2973 | PP279957 | PP315794 | PP280166 | PP280384 | PP259839 | - |
| *Homatula variegata* | China | Sichuan | Yangtze | A1459A1460 | PP279900PP279901 | PP315735PP315736 | PP280112PP280113 | PP280319PP280320 | PP259773PP259774 | PP259646- |
| *Homatula wuliangensis* | China | Yunnan | Mekong | GenBank | HM010517 | HM010609 | MG238336 | - | MG238036 | - |
| *‘Nemacheilus' arenicolus* | Laos | Bolikhamsay | Mekong | CMK21208\_2CMK21208\_3 | MW512964MW512965 | MW513090MW513091 | MW513213MW513214 | PP280265PP280266 | PP259724PP259725 | -PP259630 |
| *‘Nemacheilus' argyrogaster* | Laos | Sekong | Mekong | CMK21521\_1CMK21521\_2 | MW512988MW512989 | MW513111MW513112 | MW513237MW513238 | PP280267PP280268 | PP259726PP259727 | PP259631- |
| *‘Nemacheilus' banar* | Vietnam | Kontum | Mekong | A3307A3308 | PP279967MW512968 | PP315803MW513094 | PP280172MW513217 | PP280396PP280397 | PP259849PP259850 | PP259672- |
| *‘Nemacheilus' cleopatra* | Vietnam | Gia Lai | Song Ba | A3256A3257 | MW512982MW512983 | MW513106MW513107 | MW513231MW513232 | PP280392PP280393 | PP259845PP259846 | PP259669- |
| *Rhyacoschistura suber* | LaosLaos | XiengkhuangXaysomboon | MekongMekong | CMK22643CMK22484 | PP279857PP279856 | PP315692PP315691 | -PP280079 | PP280270PP280269 | PP259729PP259728 | PP259632- |
| *Schistura amplizona* | China | Yunnan | Mekong | GenBank | MG238243 | MG237949 | MG238357 | - | MG238056 | - |
| *Schistura bolavensis* | Laos | Champasak | Mekong | A4618A4620 | KP738575KP738576 | KP738535KP738536 | KP738495KP738496 | OL191315PP280421 | PP259869PP259870 | PP259681- |
| *Schistura bucculenta* | China | Yunnan | Mekong | GenBank | JN837654 | JN837666 | - | - | - | - |
| *Schistura callichroma* | China | Yunnan | Red | GenBank | MG238244 | MG237950 | MG238359 | - | MG238057 | - |
| *Schistura caudofurca* | China | Yunnan | Red | GenBank | MG238245 | MG237951 | MG238360 | - | MG238059 | - |
| *Schistura* cf. *amplizona* | Thailand | Loei | Mekong | A2375 | PP279932 | PP315766 | PP280144 | PP280355 | PP259808 | PP259658 |
| *Schistura* cf. *palma* | Thailand | Loei | Mekong | 2376 | PP279933 | PP315767 | - | PP280356 | PP259809 | PP259659 |
| *Schistura* cf. *schultzei* | Thailand | Loei | Mekong | 25222523 | PP279934PP279935 | PP315768PP315769 | PP280145PP280146 | PP280359PP280360 | PP259813PP259814 | PP259660- |
| *Schistura cryptofasciata* | China | Yunnan | Salween | GenBank | MG238250 | MG237956 | MG238366 | - | MG238063 | - |
| *Schistura desmotes* | Thailand | Chiang Mai | Chao Phraya | A1180A1181A1182 | PP279892PP279893PP279894 | PP315728PP315729PP315730 | --- | PP280306PP280307PP280308 | PP259761PP259762PP259763 | PP259640-- |
| *Schistura dubia* | Thailand | Phrae | Chao Phraya | GenBank | MK301364 | - | - | - | - | - |
| *Schistura fasciolata* | China | Guangxi | Pearl | A5300A5301A5302 | KP738579KP738580KP738581 | KP738539KP738540KP738541 | KP738499KP738500KP738501 | PP280441PP280442OL191323 | PP259888PP259889PP259890 | PP259683-- |
| *Schistura fusinotata* | Laos | Xekong | Mekong | A5065 | PP279991 | PP315830 | PP280188 | PP280430 | PP259880 | - |
| *Schistura implicata* | Vietnam | Lam Dong | No details | GenBank | MG238289 | MG237995 | MG238406 | - | - | - |
| *Schistura incerta* | China | No details | No details | GenBank | MK361215 | KP695623 | KP695078 | - | KP695739 | KP694654 |
| *Schistura* sp. *Lam* | Vietnam | Nghe An | Lam | A3198A3199 | PP279962PP279963 | PP315798PP315799 | PP280169PP280170 | PP280389PP280390 | PP259842PP259843 | PP259667- |
| *Schistura irregularis* | Laos | Houaphan | Mekong | CMK25919\_1CMK25919\_2 | PP279866PP279867 | PP315701PP315702 | PP280084PP280085 | PP280279PP280280 | -- | PP259635- |
| *Schistura kaysonei*  | Laos | Bolikhamsay | Mekong | GenBank | NC\_031580 | - | - | - | - | - |
| *Schistura klydonion* | Laos | Champasak | Mekong | CMK23320\_1CMK23320\_2 | PP279858PP279859 | PP315693PP315694 | PP280080PP280081 | PP280271PP280272 | PP259980PP259981 | PP259709- |
| *Schistura kongphengi* | Vietnam | Thua Thien Hue | Mekong | A2722A3321 | PP279945PP279969 | PP315782PP315805 | PP280155PP280173 | PP280372PP280399 | PP259827PP259851 | -- |
| *Schistura laterimaculata* | Thailand | Petchabun | Mekong | A6848A6849  | PP280023PP280024 | PP315856PP315857 | PP280208PP280209 | PP280465PP280466 | PP259922PP259923 | PP259689- |
| *Schistura latidens* | China | Yunnan | Mekong | GenBank | MG238266 | MG237973 | MG238383 | - | MG238081 | - |
| *Schistura latifasciata* | China | Yunnan | Mekong | GenBank | MG238268 | MG237975 | MG238385 | - | MG238083 | - |
| *Schistura macrocephala* | China | Yunnan | Mekong | GenBank | MG238274 | MG237981 | MG238391 | - | MG238088 | - |
| *Schistura macrotaenia* | China | Yunnan | Mekong | GenBank | JN837655 | JN837667 | - | - | - | - |
| *Schistura magnifluvis* | China | Yunnan | Mekong | GenBank | JN837654 | MG237967 | MG238355 | - | MG238075 | - |
| *Schistura moeiensis* | Thailand | Tak | Salween | A4965A4966A11033 | PP279988PP279989PP279883 | PP315826PP315827PP315718 | PP280185PP280186PP280094 | PP280426PP280427PP280296 | PP259876PP259877PP259752 | --- |
| *Schistura nicholsi* | China | Yunnan | Mekong | GenBank | DQ105202 | - | - | - | - | - |
| *Schistura notasileum* | China | Yunnan | Mekong | GenBank | OQ945050 | OQ973300 | OQ973298 | - | OQ973302 | - |
| *Schistura porthos* | China | Yunnan | Mekong | GenBank | MG238282 | MG237988 | MG238399 | - | - | - |
| *Schistura reidi* | Thailand | Mae Hong Son | Salween | A781A817 | PP280032PP280036 | PP315865PP315871 | PP280217PP280220 | PP280488PP280494 | PP259950- | -- |
| *Schistura rikiki* | Laos | Xekong | Mekong | A5066A5067 | PP279992PP279993 | PP315831PP315832 | PP280189PP280190 | PP280431PP280432 | PP259881- | PP259682- |
| *Schistura sertata* | Laos | Luang Prabang | Mekong | A2531A2531 | PP279936PP279937 | PP315770PP315771 | PP280147PP280148 | PP280361PP280362 | PP259815PP259816 | -- |
| *Schistura sexcauda* | Thailand | Chiang Mai | Chao Phraya | A755 | PP280029 | PP315862 | PP280214 | PP280485 | PP259947 | - |
| *Schistura similis* | Thailand | Tak | Salween | A5004 | PP279990 | PP315828 | PP280187 | PP280428 | PP259878 | - |
| *Schistura sokolovi* | Vietnam | Gia Lei | Song Ba | A3384 | PP279970 | PP315806 | PP280174 | PP280400 | PP259852 | PP259673 |
| *Schistura susannae* | Vietnam | Da Nang | Mong Mo | GenBank | MG238288 | MG237994 | MG238405 | - | - | - |
| *Schistura thanho* | Vietnam | Bien Dinh  | Vinh Thanh | A3310 | PP279968 | PP315804 | - | PP280398 | - | - |
| *Schistura waltoni* | Thailand | Chiang Mai | Chao Phraya | A731A732 | PP280027PP280028 | PP315860PP315861 | PP280212PP280213 | PP280477PP280478 | PP259934PP259935 | -- |
| *Schistura xhatensis* | Laos | Houaphan | Mekong | CMK25920\_1CMK25920\_2 | PP279868PP279869 | PP315703PP315704 | PP280086PP280087 | PP280281PP280282 | PP259736PP259737 | PP259636- |
| *Schistura yersini* | Vietnam | Lam Dong | Da Dung | A3206 | PP279964 | PP315800 | PP280171 | PP280391 | PP259844 | PP259668 |
| *Sectoria atriceps* | Thailand | Nan | Chao Phraya | A845A846A847A848A849 | PP280037PP280038PP280039PP280040PP280041 | PP315872PP315873PP315874PP315875PP315876 | PP280221PP280222PP280223PP280224PP280225 | PP280500PP280501PP280502PP280503PP280504 | PP259957PP259960PP259961PP259962PP259963 | ----PP259698 |
| *Sectoria heterognathos* | Laos | Louang Namtha | Mekong | CMK25980 | PP279872 | PP315705 | PP280089 | PP280283 | PP259740 | - |
| *Speonectes tiomanensis* | Malaysia | Pahang | Tioman Island | A1848A1849 | PP279916PP279917 | PP315750PP315751 | PP280128PP280129 | PP280336PP280337 | PP259791PP259792 | -- |
| *Tuberoschistura baenzingeri* | Thailand | Surat Thani | Tapi | A2340A4485 | -- | PP315765PP315822 | PP280143- | PP280354PP280418 | PP259807PP259866 | PP259657- |
| *Tuberoschistura cambodgiensis* | Cambodia | Phnom Penh | Mekong | A7949A7950 | -- | PP315866PP315867 | PP280218PP280219 | PP280489PP280490 | PP259951PP259952 | PP259696- |
|  |  |  |  |  |  |  |  |  |  |  |
| SUNDAIC CLADE |  |  |  |  |  |  |  |  |  |  |
| *Nemacheilus binotatus* | Thailand | Chiang Mai | Chao Phraya | A6926A6927 | KP738586KP738587 | KP738546KP738547 | KP738506PP280210 | OL191346PP280469 | PP259926PP259927 | PP259690- |
| *Nemacheilus cacao* | Laos | Bolikhamsay | Mekong | ZRC 62554ZRC 62553 | ON720269ON720270 | ON720271ON720272 | PP280244PP280245 | PP280527PP280528 | PP259983- | -- |
| *Nemacheilus* cf. *tuberigum*  | Indonesia | Aceh | Alas | A4536A4537 | PP279986PP279987 | PP315823PP315824 | -- | PP280419PP280420 | PP259867PP259868 | PP259680- |
| *Nemacheilus masyae* | ThailandCambodia | Surat ThaniSiem Reap | TapiMekong | A1421A1422A5450 | MW512997MW512998PP280010 | MW513120MW513121PP315847 | PP280109PP280110PP280199 | PP280316PP280317PP280453 | PP259771PP259772PP259901 | PP259644-- |
| *Nemacheilus ornatus* | Thailand | Surat Thani | Tapi | A1402A1403 | MW513023MW513024 | MW513146MW513146 | PP280107PP280108 | PP280314PP280315 | PP259769PP259770 | PP259643- |
| *Nemacheilus pallidus* | Thailand | Nan | Chao Phraya | A1394 | MW513029 | MW513151 | PP280106 | PP280313 | PP259768 | - |
| *Nemacheilus platyceps* | Thailand | Chanthaburi | Mekong | A856A857 | MW513045MW513046 | MW513170MW513171 | PP280226PP280227 | PP280505PP280506 | PP259965PP259966 | -- |
| *Nemacheilus saravacensis* | Malaysia | Sarawak | Sabang | A1632 | MW513056 | MW513181 | PP280114 | PP280321 | PP259775 | - |
| *Nemacheilus selangoricus* | Thailand | Nakhon Si Thammarat | Pak Paying | A1437 | MW513062 | MW513186 | PP280111 | PP280318 | - | PP259645 |
| *Nemacheilus spiniferus* | Malaysia | Sarawak | Engkaban | A1640 | MW513079 | MW513203 | - | PP280322 | - | PP259647 |
|  |  |  |  |  |  |  |  |  |  |  |
| BURMESE CLADE |  |  |  |  |  |  |  |  |  |  |
| *Aborichthys kempi* | Myanmar | Kachin | Irrawaddy | CMK25538\_1 CMK25538\_2 | PP280061PP280062 | PP315697PP315698 | -- | PP280275PP280276 | PP259732PP259733 | PP259633- |
| *Aborichthys* sp. | India | West Bengal | Brahma-putra | A3972A3973 | PP279977PP279978 | PP315814PP315815 | PP280177PP280178 | PP280407PP280408 | PP259857- | -- |
| *Acanthocobitis* cf. *pavonacea* | Ornamental fish trade | A1863A1864 | MK608119MK608120 | EF056379MK608146 | MK608242MK608243 | PP280338PP280339 | PP259794PP259795 | -- |
| *Paracanthocobitis epimekes* | ThailandMyanmar | Phang NgaTanintharyi | Takua PaTenasserim | A2460CMK 24940 | MK608038MK608104 | MK608151MK608213 | MK608248MK608307 | PP280357PP280247 | PP259811PP259730 | -- |
| *Paracanthocobitis linypha* | Myanmar | no details |  | A2562A2563 | MK608044MK608045 | MK608157MK608158 | MK608254MK608255 | PP280365PP280366 | PP259821- | -- |
| *Paracanthocobitis mackenziei* | OrnamentalNepal | fish tradeKoshi | Ganges | A82A83A3437 | EF508598MK608121MK608113 | EF056383MK608127MK608162 | MK608221MK608222MK608259 | PP280495PP280496PP280401 | --PP259853 | --- |
| *Paracanthocobitis mandalayensis* | Thailand | Tak | Salween | A11558 | PP279890 | PP315726 | - | PP280304 | PP259759 | - |
| *Paracanthocobitis phuketensis* | MyanmarThailandThailandThailandThailand | TanintharyiPhatthalungTrangPhang NgaPhang Nga | TenasserimPhaniatPalianTam NangTakua Pa | CMK 28791A5190A5175A9713A2466 | MK608107MK608075MK608071MK608099MK608042 | MK608216MK608186MK608182MK608208MK608155 | MK608310MK608281MK608277MK608302MK608252 | PP280246PP280434PP280433PP280526PP280358 | -PP259882--PP259812 | ----- |
| *Paracanthocobitis pictilis* | Ornamental | fish trade |  | A6940A6941A10938 | KP738589KP738590PP279882 | KP738549KP738550PP315715 | KP738509KP738510- | OL191347PP280471PP280293 | PP259929-PP259749 | PP259692-- |
| *Paracanthocobitis* sp. Irrawaddy | MyanmarMyanmar | MagwayAyeyerwady | IrrawaddyIrrawaddy | A5774A6621A6573 | MK608078MK608089MK608086 | MK608189MK608198MK608196 | MK608284MK608293MK608291 | PP280456PP280459PP280458 | PP259905-PP259912 | --- |
| *Paracanthocobitis* sp. Rakhine | Myanmar | Rakhine | no details | A5331A5332 | KP738582KP738583 | KP738542KP738543 | KP738502KP738503 | OL191324PP280443 | PP259891PP259892 | -- |
| *Paracanthocobitis* sp. Sittaung | Myanmar | Mon | Sittaung | A4102 | MK608051 | MK608164 | MK608261 | PP280411 | - | - |
| *Paracanthocobitis zonalternans* | Thailand | Tak | Salween | A4942 | MK608065 | MK608176 | MK608271 | PP280425 | - | - |
| *Schistura* cf. *kohchangensis* | Thailand | Tak | Salween | A11046 | PP279884 | PP315719 | PP280095 | PP280297 | PP259753 | - |
| *Schistura kohchangensis* | Thailand | Chanthaburi | Mekong | A1822A1823 | PP279912PP279913 | PP315746PP315747 | PP280124PP280125 | PP280332PP280333 | PP259787PP259788 | -- |
| *Schistura savona* | Ornamental fish trade | A7530A7532 | KP738598KP738599 | KP738558KP738559 | KP738518KP738519 | PP280482OL191354 | PP259939PP259940 | PP259695- |
|  |  |  |  |  |  |  |  |  |  |  |
| SOUTHERN CLADE |  |  |  |  |  |  |  |  |  |
| *Afronemacheilus abyssinicus* | Ethiopia | Amhara | Nile | A11680 | PP279891 | PP315727 | PP280101 | PP280305 | PP259760 | - |
| *Mesonoemacheilus guentheri* | India | Ornamental fish trade | A2630A2631A6935 | PP279943PP279944 | PP315780PP315781 | PP280153PP280154 | PP280370PP280371PP280470 | PP259825PP259826PP259928 | --PP259691 |
| *Mesonoemacheilus herrei* | India | Tamil Nadu | Periyar | A5526A5527 | PP280011PP280012 | PP315848PP315849 | PP280200PP280201 | PP280454PP280455 | PP259902PP259903 | -- |
| *Mesonoemacheilus pambarensis* | India  | Tamil Nadu | Pambar | GenBank | MF680101 | - | - | - | - | - |
| *Mesonoemacheilus petrubanarescui* | India | Karnataka | Saklshpur | A9197 | PP280055 | PP315890 | PP280241 | PP280520 | PP259979 | - |
| *Mesonoemacheilus tambaraparniensis* | India  | Tamil Nadu | Tamiraparani | GenBank | MF680096 | - | - | - | - | - |
| *Mesonoemacheilus triangularis* | India | Ornamental fish trade | A944A945 | PP280058PP280059 | PP315891PP315892 | PP280242PP280243 | PP280521PP280522 | PP259984PP259985 | -- |
| *Mustura bella* | Laos | Louang Namtha | Mekong | CMK 26052 | OL191242 | OL191491 | OL345558 | OL191373 | PP259743 | - |
| *Mustura celata* | Myanmar | Kachin | Irrawaddy | CMK25620\_1CMK25620\_2 | PP279863PP279864 | PP315699PP315700 | PP280082PP280083 | PP280277PP280278 | PP259734PP259735 | PP259634- |
| *Mustura geisleri* | Thailand | Chiang Mai | Chao Phraya | A1238A1239 | OL191158OL191159 | OL191407OL191408 | OL345477OL345478 | OL191270OL191271 | PP259764PP259765 | -- |
| *Mustura isostigma* | Laos | Khammouane | Mekong | A1307 | PP279899 | - | - | - | - | - |
| *Mustura maepaiensis* | Thailand | Mae Hong Son | Salween | A799A804A805 | PP280033PP280034PP280035 | PP315868PP315869PP315870 | --- | PP280491PP280492PP280493 | --- | --- |
| *Mustura shanensis* | Myanmar | Shan | Salween | A6649A6773A6774 | OL191213OL191220OL191221 | OL191462OL191469OL191470 | OL345529OL345536OL345537 | OL191333OL191340OL191341 | PP259913-PP259920 | -PP259688- |
| *Mustura* sp. | Myanmar | Magway | Irrawaddy | A6712A6713 | PP280019PP280020 | PP315852PP315853 | PP280204PP280205 | PP280461PP280462 | PP259917- | -- |
| *Mustura* sp. Salween | Thailand | Tak | Salween | A1776 | PP279907 | - | - | - | - | - |
| *‘Nemacheilus'**corica* | India | Ornamental fish trade | A6945A6948A6953 | KP738592KP738593KP738594 | KP738552KP738553KP738554 | KP738512KP738513KP738514 | PP280472PP280473PP280475 | PP259930PP259931PP259932 | PP259694-- |
| *Nemachilichthys ruppelli*  | India | Ornamental fish trade | A4341A4345 | KP738573KP738574 | KP738533KP738534 | KP738493KP738494 | OL191311PP280417 | PP259864PP259865 | PP259678PP259679 |
| *Neonoemacheilus labeosus* | Thailand | Tak | Salween | A1774A1775 | PP279905PP279906 | PP315740PP315741 | PP280118PP280119 | PP280326PP280327 | PP259780PP259781 | -- |
| *Neonoemacheilus peguensis* | Myanmar | Bago | Sittaung | A877 | PP280046 | PP315881 | PP280232 | PP280511 | PP259971 | - |
| *Neonoemacheilus* sp. Irrawaddy | Myanmar | Magway | Irrawaddy | A6287 | PP280017 | PP315850 | PP280202 | PP280457 | PP259909 | - |
| *Neonoemacheilus* sp. | Myanmar | Magway | Irrawaddy | A6664A6734A6735 | PP280018PP280021PP280022 | PP315851PP315854PP315855 | PP280203PP280206PP280207 | PP280460PP280463PP280464 | PP259914-- | --- |
| *Oxynoemacheilus angorae* | No details | GenBank | NC\_031548 | - | - | - | - | - |
| *Oxynoemacheilus brandtii* | Armenia | Lori | Kura | A3901A3902 | PP279975PP279976 | PP315812PP315813 | -- | PP280405PP280406 | -- | -- |
| *Oxynoemacheilus bureschi* | Bulgaria | Blagoevgrad | Struma | A12147A12148 | PP279895PP279896 | PP315731PP315732 | PP280102PP280103 | PP280309PP280310 | PP259991PP259992 | PP259641- |
| *Oxynoemacheilus cilicic* | Turkey | Adana | Seyhan | A2758 | PP279947 | PP315784 | PP280157 | PP280374 | PP259828 | - |
| *Oxynoemacheilus chomanicus* | Iran | Kurdistan | Tigris | GenBank | KT715806 | - | - | - | - | - |
| *Oxynoemacheilus euphraticus* | Turkey | Mus | Euphrat | A1003 | PP279876 | PP315708 | PP280090 | PP280286 | - | - |
| *Oxynoemacheilus frenatus* | Turkey | Diyarbakir | Tigris | A2102A2103 | PP279926PP279927 | PP315759PP315760 | PP280137PP280138 | PP280348PP280349 | -- | -- |
| *Oxynoemacheilus galilaeus* | Syria | Dara | Jordan | A3890A3891 | PP279973PP279974 | PP315810PP315811 | -PP280176 | -- | -- | -- |
| *Oxynoemacheilus gyndes* | Iraq | Sulaimaniyah | Tigris | GenBank | MH842968 | MH843091 | - | - | - | - |
| *Oxynoemacheilus hanae* | Iraq | Sulaimaniyah | Tigris | GenBank | MH842969 | MH843092 | - | - | - | - |
| *Oxynoemacheilus* veyselorum | Turkey | Erzurum | Arax | A1045 | PP279877 | PP315709 | - | PP280287 | - | - |
| *Oxynoemacheilus insignis* | Israel | West bank | Jordan | A1961A1962 | PP279920PP279921 | PP315754PP315755 | PP280131PP280132 | PP280342PP280343 | PP259796PP259797 | PP259654- |
| *Oxynoemacheilus kaynaki* 1 | Turkey | Elazig | Euphrat | A1000 | PP279874 | PP315706 | - | PP280284 | - | - |
| *Oxynoemacheilus kaynaki* 2 | Turkey | Elazig | Euphrat | A1002 | PP279875 | PP315707 | - | PP280285 | - | - |
| *Oxynoemacheilus kurdistanicus* | Iran | Kurdistan | Tigris | GenBank | KU180210 | - | - | - | - | - |
| *Oxynoemacheilus merga* | Russia | Dagestan | Rubas | A1109A1110 | PP279885PP279886 | PP315720PP315721 | PP280096- | PP280298PP280299 | -- | PP259637- |
| *Oxynoemacheilus persa* | Iran | Fars | Kor | A695A697 | PP280025PP280026 | PP315858PP315859 | PP280211- | PP280474PP280476 | PP259933- | -- |
| *Oxynoemacheilus phasicus* | Georgia | Imereti | Rioni | A2057 | PP279924 | - | PP280135 | PP280346 | PP259800 | - |
| *Oxynoemacheilus pindus* | Albania | Gjirokaster | Vjosa | A12149A12150 | PP279897PP279898 | PP315733PP315734 | PP280104PP280105 | PP280311PP280312 | PP259993PP259994 | PP259642- |
| *Oxynoemacheilus* sp. Turkey | Turkey | No details | No details | GenBank | EU015983 | - | - | - | - | - |
| *Oxynoemacheilus tongiorgii* | Iran | Fars | Kor | A2757 | PP279946 | PP315783 | PP280156 | PP280373 | - | - |
| *Oxynoemacheilus zagrosensis* | Iran | Kurdistan | Tigris | GenBank | KU180203 | - | - | - | - | - |
| *Oxynoemacheilus zarzianus* | Iraq | Al-Sulaimaniyah | Tigris | GenBank | KY849795 | - | - | - | - | - |
| *Paracobitis atrakensis* | Iran | Khorasane - Shomali | Atrak | GenBank | MG229862 | - | - | - | - | - |
| *Paracobitis hircanica* | Iran | Golestan | Gorgan Roud | A2186A2187A2188 | PP279928PP279929PP279930 | PP315761PP315762PP315763 | PP280139PP280140PP280141 | PP280350PP280351PP280352 | PP259802PP259803PP259804 | PP259656-- |
| *Paracobitis malapterura* | Iran | Qom | Emamzadeh Abdollah  | GenBank | MG229879 | - | - | - | - | - |
| *Paracobitis molavii* | Iran | West Azerbaijan | Tigris | GenBank | MG229860 | - | - | - | - | - |
| *Paracobitis persa* | Iran | Fars | Kor | GenBank | MG229866 | - | - | - | - | - |
| *Paracobitis rhadinaea* | Iran | Sistan and Baluchistan | Sistan | GenBank | MG229870 | - | - | - | - | - |
| *Paraschistura cristata* | Iran | Khorazan Razavi | Hari | A5262A5263A5264A5265A5266 | PP279995PP279996PP279997PP279998PP279999 | PP315833PP315834PP315835PP315836PP315837 | ----- | PP280436PP280437PP280438PP280439PP280440 | PP259883PP259884PP259885PP259886PP259887 | ----- |
| *Paraschistura montana* | India | No details | Ganges | GenBank | FJ711438 | - | - | - | - | - |
| *Petruichthys brevis* | Myanmar | Shan | Salween | A4184A4185A6503A6739 | KP738571KP738572OL191210OL191219 | KP738531KP738532OL191459OL191468 | KP738491KP738492OL345526OL345535 | OL191307OL191308OL191330OL191339 | PP259859PP259860PP259910PP259919 | ---- |
| *Physoschistura brunneana* | Myanmar | Shan | Salween | A578 | OL191138 | OL191386 | OL345460 | OL191249 | PP259906 | PP259687 |
| *Physoschistura* cf. *rivulicola*  | Myanmar | Shan | Salween | A6806 | OL191223 | OL191472 | OL345539 | OL191343 | PP259921 | - |
| *Physoschistura* cf. *shuangjiangensis* | China | Yunnan | Mekong | A2999 | OL191173 | OL191423 | OL345492 | OL191288 | - | - |
| *Physoschistura mango* | Myanmar | Shan | Salween | A2253 | PP279931 | PP315764 | PP280142 | PP280353 | PP259805 | - |
| *Physoschistura pseudobrunneana* | ThailandThailand | PhayaoChiang Rai | Chao PhrayaMekong | A850A1356A1357 | OL191155OL191163OL191164 | OL191403OL191412OL191413 | OL345474OL345482OL345483 | OL191266OL191275OL191276 | PP259964PP259766PP259767 | --- |
| *Physoschistura rivulicola* | Myanmar | Shan | Salween | A6670 | OL191214 | OL191463 | OL345530 | OL191334 | PP259915 | - |
| *Physoschistura shuangjiangensis* | China | Yunnan | Mekong | GenBank | MG238284 | MG237990 | MG238401 | - | - | - |
| *Physoschistura* sp. | Myanmar | Shan | Salween | A2256A7545A7546 | OL191165KP738600KP738601 | OL191415KP738560KP738561 | OL345484KP738520KP738521 | OL191280OL191355OL191356 | PP259806PP259943PP259944 | --- |
| *Pteronemacheilus lucidorsum* | Myanmar | Shan | Irrawaddy | A6695A8465A8466 | OL191215KP738606KP738607 | OL191464KP738566KP738567 | OL345531KP738526KP738527 | OL191335OL191360OL191361 | PP259916PP259958PP259959 | --- |
| *Pteronemacheilus meridionalis* | ChinaLaos | YunnanLouang Namtha | SalweenMekong | A3122CMK 26015CMK 25928 | PP279958PP279873PP279870 | PP315795PP315676PP315675 | --- | PP280385PP280250PP280248 | --- | --- |
| *Pteronemacheilus* sp. | Myanmar | Shan | Irrawaddy | A5851A5852 | OL191208OL191209 | OL191457OL191458 | OL345524OL345525 | OL191328OL191329 | PP259907PP259908 | -- |
| *Sasanidus kermanshahensis* | Iran | Kermanshah | Tigris | A5261 | PP279994 | - | - | PP280435 | - | - |
| *Schistura albirostris* | China | Yunnan | Irrawaddy | GenBank | MG238242 | - | MG238356 | - | - | - |
| *Schistura ataranensis* | MyanmarThailand |  Ornamental Kanchanaburi | fish tradeAtaran | A2560A5062A11005 | MK886975MK886998MK887031 | PP315774PP315829PP315716 | MK886884MK886907MK886939 | PP280364PP280429PP280294 | PP259820PP259879PP259750 | --- |
| *Schistura aurantiaca* | MyanmarThailandThailand | MonTakTak | AtaranMae KlongSalween | A954A9580A9584A11010 | MK886950MK887018MK887019MK887032 | PP315893OL191503PP315894PP315717 | MK886861MK886926MK886927MK886940 | PP280523OL191385PP280524PP280295 | PP259986PP259987PP259988PP259751 | -PP259710-- |
| *Schistura balteata* | Myanmar | Ornamental fish trade | A2554A2555 | MK886971MK886972 | OL191502PP315773 | MK886880MK886881 | OL191384PP280363 | PP259819- | -- |
| *Schistura beavani* | India | No detail | Ganges | GenBank | GQ478448 | - | - | - | - | - |
| *Schistura callidora* | Myanmar | Shan state | Irrawaddy | A3909A3910 | OL191189OL191190 | OL191438OL191439 | OL345507OL345508 | OL191303OL191304 | -- | -- |
| *Schistura* cf. *nilgiriensis* | India | Karnataka | Netravanthi | A9199 | PP280057 | - | - | - | - | - |
| *Schistura* cf. *poculi* 1 | Thailand | Tak | Mae Klong | A4202A4203 | OL191193OL191194 | OL191442OL191443 | OL345511OL345512 | OL191309OL191310 | -- | PP259675- |
| *Schistura* cf. *poculi* 2 | China | Yunnan | Salween | A2914 | OL191172 | OL191422 | OL345491 | OL191287 | PP259829 | - |
| *Schistura* cf. *scaturigina* | India | West Bengal | Rydak I River | A3925A3926 | OL191191OL191192 | OL191440OL191441 | OL345509OL345510 | OL191305OL191306 | PP259856- | -- |
| *Schistura* cf. *sijuensis* | India | Ornamental fish trade | A3698A3699A11327 | OL191184OL191185OL191248 | OL191434OL191435OL191499 | OL345503OL345504OL345566 | OL191299OL191300OL191381 | --- | --- |
| *Schistura* cf. *vinciguerrae* | MyanmarMyanmar | RakhineMagway | IrrawaddyIrrawaddy | A5557A6564A6736 | OL191205OL191211OL191216 | OL191454OL191460OL191465 | OL345521OL345527 OL345532 | OL191325OL191331OL191336 | PP259904PP259911PP259918 | --- |
| *Schistura cincticauda* | Thailand | Tak | Salween | A8312A8313 | MK887016MK887017 | -- | MK886924MK886925 | PP280497PP280498 | PP259953PP259954 | -- |
| *Schistura conirostris* | China | Yunnan | Mekong | GenBank | MG238247 | MG237953 | MG238362 | - | MG238061 | - |
| *Schistura crabro* | Laos | Bolikhamsai | Mekong | CMK 24559 | OL191231 | OL191480 | OL345547 | OL191362 | PP259982 | - |
| *Schistura crocotula* | Thailand | Prachuap Khiri Khan | Bang Saphan | A9591A10513 | MK887021MK887024 | PP315895PP315713 | MK886928MK886931 | PP280525PP280290 | PP259989PP259746 | -- |
| *Schistura denisoni* | India | Tamil Nadu | Vaigai | A5531A5532 | PP280015PP280016 | -- | -- | -- | -- | -- |
| *Schistura devdedi* | NepalIndia | No detailOrnamental  | Ganges fish trade | A3445A7541A7542 | PP279972KP738608KP738609 | PP315808KP738568KP738569 | PP280175KP738528KP738529 | PP280403PP280483PP280484 | -PP259941PP259942 | --- |
| *Schistura disparizona* | China | Yunnan | Salween | GenBank | MG238252 | MG238368 | MG237958 | - | MG238065 | - |
| *Schistura hartli* | Thailand | Surat Thani | Tapi | A3690 | MK886978 | PP315809 | MK886887 | PP280404 | PP259855 | - |
| *Schistura hoai* | Laos | Houaphan | Mekong | CMK25918\_1 CMK25918\_2 | OL191238OL191239 | OL191487OL191488 | OL345554OL345555 | OL191369OL191370 | -- | -- |
| *Schistura hypsiura* | Myanmar | Ornamental fish trade | A6922A6925 | KP738584KP738585 | KP738544KP738545 | KP738504KP738505 | PP280467PP280468 | PP259924PP259925 | -- |
| *Schistura indawgyiana* | Myanmar | Kachin | Irrawaddy | CMK 25633 | PP279865 | - | - | - | - | - |
| *Schistura jarutanini* | Thailand | Kanchanaburi | Mae Klong | GenBank | NC\_031584 | - | - | - | - | - |
| *Schistura kloetzliae* | Laos | Louang Namtha | Mekong | CMK25994\_1 CMK25994\_2GenBank | OL191240OL191241MG238237 | OL191489OL191490MG237945 | OL345556OL345557MG238351 | OL191371OL191372- | PP259741PP259742- | --- |
| *Schistura kuehnei* | Thailand | Surat Thani | Tapi | A4672A11261 | MK886991MK887040 | PP315825PP315724 | MK886900PP280099 | PP280422PP280302 | PP259871PP259756 |  |
| *Schistura longa* | China | Yunnan | Salween | GenBank | MG238272 | MG237979 | MG238389 | - | MG238086 | - |
| *Schistura mahnerti* | Thailand | Mae Hong Son | Salween | A778A779 | PP280030PP280031 | PP315863PP315864 | PP280215PP280216 | PP280486PP280487 | PP259948PP259949 | -- |
| *Schistura malaisei* | Myanmar | Kachin | Irrawaddy | CMK25506\_1 CMK25506\_2 | PP279860PP279861 | -PP315696 | -- | -- | -- | -- |
| *Schistura mukambbikaensis* | India | Karnataka | Netravathi | A9198 | PP280056 | - | - | - | - | - |
| *Schistura myaekanbawensis* | Myanmar | Tanintharyi | Tenasserim | CMK24993 | MK887022 | PP315695 | MK886929 | PP280273 | PP259731 | - |
| *Schistura nilgiriensis* | India | Ornamental fish trade | A2626 | PP279942 | PP315779 | PP280152 | PP280369 | PP259824 | - |
| *Schistura notostigma* | Sri Lanka | Ornamental fish trade | A7519A7520A7521 | KP738595KP738596KP738597 | KP738555KP738556KP738557 | KP738515KP738516KP738517 | PP280479PP280480PP280481 | PP259936PP259937PP259938 | --- |
| *Schistura nubigena* | Myanmar | Kachin | Irrawaddy | CMK 25509 | PP279862 | - | - | PP280274 | PP259990 | - |
| *Schistura obliquofascia* | India  | No details | No details | GenBank | HM636831 | - | - | - | - | - |
| *Schistura paucicincta* | Thailand | Tak | Salween | A4946A4947 | OL191203OL191204 | OL191452OL191453 | OL345519OL345520 | OL191321OL191322 | PP259874PP259875 | -- |
| *Schistura polytaenia* | China | Yunnan | Irrawaddy | GenBank | MG238280 | MG237986 | MG238397 | - | MG238092 | - |
| *Schistura pridii* | Thailand | Ornamental fish trade | A7548A7549 | KP738602KP738603 | KP738562KP738563 | KP738522KP738523 | OL191357OL191358 | PP259945PP259946 | -- |
| *Schistura reticulofasciata* | India | Assam | Brahmaputra | GenBank | KY379150 | - | - | - | - | - |
| *Schistura robertsi* | Thailand | Phang Nga | Tam Nang | A2424 | MK886959 | OL191501 | MK886869 | OL191383 | PP259810 | - |
| *Schistura rupecula* | Nepal | No detail | Ganges | A3443 | PP279971 | PP315807 | - | PP280402 | PP259854 | - |
| *Schistura semiarmatus* | India | Tamil Nadu | Vaigai | A5529A5530 | PP280013PP280014 | -- | -- | -- | -- | -- |
| *Schistura sikmaensis* | China  | Yunnan | Irrawaddy | GenBank | JF340405 | JF340413 | - | - | - | - |
| *Schistura* sp. *Myanmar* | Myanmar | Ornamental fish trade | A2569A2570 | PP279938PP279939 | PP315775PP315776 | -- | -- | -- | -- |
| *Schistura thavonei* | Laos | Louang Namtha | Mekong | CMK 26066 CMK25944\_1 | OL191243OL191244 | OL191492OL191493 | OL345559OL345560 | OL191374OL191375 | PP259744PP259739 | -- |
| *Schistura tirapensis* | India | Ornamental fish trade | A3703A3704 | OL191187OL191188 | OL191436OL191437 | OL345505OL345506 | OL191301OL191302 | -- | -- |
| *Schistura udomritthiruji*  | Thailand | Ranong | Kapoe | A2546A2547 | OL191168MK886969 | OL191418PP315772 | OL345487PP280149 | OL191283- | PP259817PP259818 | PP259661- |
| *Schistura yingjiangensis* | China  | Yunnan | Irrawaddy | GenBank | MG238294 | MG237999 | MG238411 | - | MG238103 | - |
| *Seminemacheilus ispartensis* | Turkey  | Isparta | Egidir | A4833A4834 | KP738577KP738578 | KP738537KP738538 | KP738497KP738498 | PP280423PP280424 | PP259872PP259873 | -- |
| *Turcinoemacheilus ekmekciae* | Turkey | Diyarbakir | Tigris | A2089 | PP279925 | PP315758 | PP280136 | PP280347 | PP259801 | - |
| *Turcinoemacheilus* sp. 1 | Iran | Kurdistan | Choman | GenBank | KT861416 | - | - | - | - | - |
| *Turcinoemacheilus* sp. 2 | Iran | Khuzestan | Karoon | GenBank | GQ338827 | - | - | - | - | - |
|  |  |  |  |  |  |  |  |  |  |  |
| OUTGROUP |  |  |  |  |  |  |  |  |  |  |
| Catostomidae |  |  |  |  |  |  |  |  |  |  |
| *Cycleptus elongatus* |  |  |  | GenBank | NC\_03163414392-15532 | EU409613 | EU409671 | - | EU409639 | EU409767 |
| *Catostomus commersonii* |  |  |  | GenBank | JX488781 | EU409612 | EU409670 | FJ918841 | EU409638 | EU409766 |
| *Hypentelium nigricans* |  |  |  | GenBank | AF454909 | EU711134 | JX470004 | JX190418 | FJ197033 | - |
| Gyrinocheilidae |  |  |  |  |  |  |  |  |  |  |
| *Gyrinocheilus aymonieri* |  |  |  | GenBank | NC\_008672 14393-15533 | EU292682 | FJ197122 | - | FJ197071 | EU409791 |
| *Gyrinocheilus pennocki* |  |  |  | GenBank | NC\_031544 14395-15535 | FJ650415 | FJ650486 | - | FJ650474 | FJ650461 |
| Botiidae |  |  |  |  |  |  |  |  |  |  |
| *Leptobotia pellegrini* |  |  |  | GenBank | NC\_031602 14385-15525 | EU292683 | EU409672 | - | EU409640 | EU409768 |
| *Botia dario* |  |  |  | GenBank | KU517084 | KU517026 | MF681756 | - | EU409641 | - |
| *Yasuhikotakia morleti* |  |  |  | GenBank | NC\_031600 14377-15517 | FJ650412 | FJ650483 | - | FJ650471 | FJ650457 |
| *Syncrossus beauforti* |  |  |  | GenBank | NC\_031546 14387-15527 | FJ650411 | FJ650482 | - | FJ650470 | FJ650456 |
| Vaillantellidae |  |  |  |  |  |  |  |  |  |  |
| *Vaillantella maassi* |  |  |  | GenBank | NC\_008680 14378-15518 | EU711132 | FJ197080 | - | FJ197031 | FJ650469 |
| Cobitidae |  |  |  |  |  |  |  |  |  |  |
| *Pangio oblonga* |  |  |  | GenBank | NC\_031592 14386-15526 | EU711141 | FJ197091 | - | FJ197041 | FJ650459 |
| *Canthophrys gongota* |  |  |  | GenBank | NC\_031576 14380-15516 | FJ650414 | FJ650485 | - | FJ650473 | FJ650460 |
| *Cobitis takatsuensis* |  |  |  | GenBank | NC\_015306 14445-15585 | EU409616 | EU409675 | - | EU409643 | EU409771 |
| *Cobitis lutheri* |  |  |  | GenBank | JN858887 | EF508614 | KM818238 | KM818242 | KM583634 | - |
| *Cobitis taenia* | Germany | Lower Saxonia | Weser | A1860 | EF508508 | EF056334 | MK608315 | OL191279 | PP259793 | PP259653 |
| *Cobitis multifasciata* |  |  |  | GenBank | NC\_027166 14376-15516 | EU409615 | EU409674 | - | EU409642 | EU409770 |
| *Cobitis tetralineata* |  |  |  | GenBank | KF661673 | OK661770 | - | OK661564 | - | - |
| Ellopostomatidae |  |  |  |  |  |  |  |  |  |  |
| *Ellopostoma mystax* |  |  |  | GenBank | NC\_031642 14377-15517 | FJ650417 | FJ650489 | - | FJ650477 | FJ650464 |
| Balitoridae |  |  |  |  |  |  |  |  |  |  |
| *Homaloptera parclitella* |  |  |  | GenBank | NC\_031634 14392-15532 | EU409610 | EU409668 | - | EU409636 | EU409764 |
| Gastromyzonidae |  |  |  |  |  |  |  |  |  |  |
| *Sewellia lineolata* |  |  |  | GenBank | NC\_015534 14375-515 | EU409609 | EU409667 | - | EU409635 | EU409763 |
|  |  |  |  |  |  |  |  |  |  |  |
| Cyprinidae |  |  |  |  |  |  |  |  |  |  |
| *Enteromius callipterus*  |  |  |  | GenBank | KP712230 | FJ531247 | FJ531365 | - | FJ531345 | FJ531317 |