

Additional file 4: The mitochondrial control region highlighting the Conserved Sequence Blocks (CSB). Insertion/deletion mutations (indels) are shown as hyphens (-). Background is colored according to the nucleotide at each position, blue for T, red for A, yellow for G and green for C, or in white for indels. The positions of the Conserved Sequence Blocks (CSB) are delimited at the right bottom of the alignment.

	1			
Corydoras schwartzi	CGATATACAGTATTACATGT	AATAACACAACCTAATGTTTC	AACACCAAGTACAGCAGCA	CAACATATGTTTAATACCAT
Corydoras nattereri			TTGTATATAGTACTGCC	CAACACATATACAACACATA
Hemipsilichthys nimius	-----	-----	-----	-----
Rineloricaria cf. lanceolata	-----	-----	-----	-----
Rineloricaria sp.	-----	-----	-----	-----
Loricariichthys platymetopon	-----	-----	-----	-----
Loricariichthys castaneus	-----	-----	-----	-----
Loricaria cataphracta	-----	-----	-----	-----
Otocinclus cf. hoppei	-----	-----	-----	-----
Hypoptopoma incognitum	-----	-----	-----	-----
Parotocinclus maculicauda	-----	-----	-----	-----
Hisonotus thayeri	-----	-----	-----	-----
Kronichthys heylandi	-----	-----	-----	-----
Neoplecostomini gen. n.	-----	-----	-----	-----
Neoplecostomus microps	-----	-----	-----	-----
Pareiorhaphis garbei	-----	AGTGCC	TATATATAGCCCACCTATAG	TACAATACATATATTACATT
Schizolecis guntheri	-----	-----	-----	-----
Ancistrus sp. 1	CAGCACACACGTATACA	CCACAAGTGCAATACATACA	CCATATTATAGTATAACACA	TGACATATGTACACTACGTA
Ancistrus sp. 2	-----	-----	-----	-----
Ancistrus multispinis	-----	-----	-----	-----
Dekeyseria amazonica	-----	-----	-----	-----
Baryancistrus xanthellus	-----	AACATGTATATAG	TACATTATGGTGTTAATACA	TATTATGTATATAGTACATT
Pterygoplichthys sp.	-----	-----	-----	-----
Pterygoplichthys pardalis	-----	-----	-----	-----
Hypostomus sp.	-----	-----	-----	-----
Hypostomus cf. plecostomus	-----	-----	-----	-----
Hypostomus affinis	-----	-----	-----	CTAACTC
Aphanotorulus emarginatus	-----	-----	-----	-----
Peckoltia furcata	-----	-----	-----	-----
Ancistomus snethlageae	-----	-----	-----	-----
Panaqolus sp.	-----	AGCATGTATATAT	TACATTATGGTGTTAATACA	TATTATGTATATATTACATT
P.disjunctivus_NC015747	-----	TAT	TACATTATGGTATTAATACA	TATTATGTATATATTACATT

Species	Gene 1	Gene 2	Gene 3	Gene 4
Corydoras schwartzi	AAATAGGTAACAAACAGGTA	CGCGTGATATGGTAAGCATG	TATGTAC-TAAGTACAT-AA	TATGTATAAATAT-TAC
Corydoras nattereri	TGTCAATAAATT		TACATAC-CITGTACATGTA	CATATGTATTAAGTACATAC
Hemipsilichthys nimius				
Rineloricaria cf. lanceolata			CACATATGGTATAAATACATA	CCATATGTACTAC-CTC
Rineloricaria sp.				AT
Loricariichthys platymetopon				
Loricariichthys castaneus				CT-GCAACAA-TAT
Loricaria cataphracta				C
Otocinclus cf. hoppei			-ATGTAT-ATAATACAT-AT	TATGTATAAATTA-TAC
Hypoptopoma incognitum	TGAGTAGTACATAT		TATGTAT-ATAGTATAT-TA	T
Parotocinclus maculicauda		AACCGTAGCGC	CCATAAT-ATAGTACATATA	TGCATGGGG-TAC
Hisonotus thayeri				ATAAA-TGC
Kronichthys heylandi			ATCATCACTCATG	GGTACACACCAAGAGTAC
Neoplecostomini gen. n.				ACAA-TGC
Neoplecostomus microps			ATAAT	TAC
Pareiorhaphis garbei	ATGGTACTAATACATATATT	ACATTTATGGTACT	AATACAT-ATATTACAT-TA	TG-GTACTAA-TAC
Schizolecis guntheri				
Ancistrus sp. 1	ATGGTGTTAATACATAA		TATGTAT-ATATTACAT-AA	TG-GTGTTAA-TAC
Ancistrus sp. 2				CAA-GGC
Ancistrus multispinis		CGA	GATGCAC-ATATTACAG-TA	TG-GTGTTAA-TGC
Dekeyseria amazonica		C	AACGTCA-ACATTTCAC-TA	TG-GTGTTAA-TGC
Baryancistrus xanthellus	ATGGTGTTAATACATAT		TATGTAT-ATAGTACAT-TA	TG-GTGTTAA-TAC
Pterygoplichthys sp.		TACATAT	TATGTAT-ATATTACAT-TA	TG-GTATTAA-TAC
Pterygoplichthys pardalis				
Hypostomus sp.		TACATAT	TATGTAT-ATATTACAT-TA	TG-GTATTAA-TAC
Hypostomus cf. plecostomus				
Hypostomus affinis	CCACCCCTAACTCCCA		AAGCTAGGATTCATAAACATAA	ACTAATTTTCATGA
Aphanotorulus emarginatus	TTCTTAACCTCCAC		CCCTAAC-TCCCAAAGC-TA	GG-ATTCTAA-ATT
Peckoltia furcata				GTC
Ancistomus snethlageae		AT	CATTATA-ATATTACAT-TA	TG-GTATTAA-TAC
Panaqolus sp.	ATGGTGTTAATACATAT		TATGTAT-ATATTACAT-TA	TG-GTGTTAA-TAC
P.disjunctivus NC015747	ATGGTATTAATACATAT		TATGTAT-ATATTACAT-TA	TG-GTATTAA-TAC

Corydoras schwartzi	ATATAT	ATATG	TATTAA	GTACA	TTATATGTATAA	T	ATTACATATATATATGTATT		
Corydoras nattereri	ATATATGTACTAAGTACATA	CATGTA		TAATA	TTACATACATATATGTACCA		AATACATATA		
Hemipsilichthys nimius									
Rineloricaria cf. lanceolata	ATACATTATGATATAGTACA	TATATATGCATTATCTTACA	TTATG	ATAT			AGTACATATA		
Rineloricaria sp.	ATA								
Loricariichthys platymetopon									
Loricariichthys castaneus	ATA				G	GGTA	T	AGTATATA	
Loricaria cataphracta	ATA		ATA	TTACA	TTATG	GTAT		AGTACATAT	
Otocinclus cf. hoppei	ATA		TA	TGTATA			T	AATACATAT	
Hypoptopoma incognitum			G	TATATA	GTACA	TAATG	GTAT	AGTACATAC	
Parotocinclus maculicauda	ATA		TTATG	CATATA	GTAC		ATATATGCATGG	GGTACATAT	
Hisonotus thayeri	ATG							GGTACATAT	
Kronichthys heylandi	ATATGTATGACACATAAATG	TATATA		CTACA	TTAT			GGTACATACATA	
Neoplecostomini gen. n.	ACC						T	AGCACATAG	
Neoplecostomus microps	ACA		CATGTA	TTACA	CTATG	GTGT		AATTCATAT	
Pareiorhaphis garbei	ATATATTTACATTATGGTATG	TATATA		TTACA	TTATG	GTAC		AATACATAT	
Schizolecis guntheri									
Ancistrus sp. 1	ATA		ATATG	TATATA	TTACA	TAATG	GTGT	T	AATACATAA
Ancistrus sp. 2	ACA				CGCA	CTAGG	ACAT		AATACATAA
Ancistrus multispinis	ATA		ATGTG	TATATA	TTACA	TTATG	GTAT	T	AATACATAA
Dekeyseria amazonica	ATA	TTT		GTGTA	TTATA	TTATG	ATAT	T	AATACATAT
Baryancistrus xanthellus	ATA		TTATG	TATATA	GTACA	TTATG	GTGT	T	AATACATAT
Pterygoplichthys sp.	ATA		TTATG	TATATA	TTACA	TTATG	GTAT	T	AATACATAT
Pterygoplichthys pardalis									TACATAT
Hypostomus sp.	ATA		TTATG	TATATA	TTACA	TTATG	GTAT	T	AATACATAT
Hypostomus cf. plecostomus									TACATAT
Hypostomus affinis			TG	TATATA	TTACA	TTATG	GTAT	T	AATACATAT
Aphanotorulus emarginatus	AAA	CTATTTTCTGAGCAA	TGTACA	TTACA	CTATG	GTAT		T	AATGCATAT
Peckoltia furcata	GTA		TGTACA	TTACA	CTATG	GTGT		T	AATGCATAT
Ancistomus snethlageae	ATA		TTATG	TATATA	TTACA	TTATG	GTAT	T	AATACATAT
Panaqolus sp.	ATA		TTATG	TATATA	TTACA	TTATG	GTGT	T	AATACATAT
P.disjunctivus NC015747	ATA		TTATG	TATATA	TTACA	TTATG	GTAT	T	AATACATAT

Corydoras schwartzi	AAGTACATTATATGTATAAT	ATTACATATATA-GTATAAT	ATTACATATATATATGTGCT	AAAT---ACATAA-T-ATG
Corydoras nattereri	-----CATGTATAAT	ATTACATATATATGTA	-----TT	AAAT---ACATAA-T-ATG
Hemipsilichthys nimius	-----	-----	-----	-----
Rineloricaria cf. lanceolata	-----TATGCATTAT	CTTACAT-TATG-ATA	-----T	-AGT---ACATATAC-ATA
Rineloricaria sp.	-----TATGTATTAT	CTTACATTAATTATTGGTCC	TCAAATAATTAACCAATT	-AATCAGGACATAA-A-TTG
Loricariichthys platymetopon	-----	-----	-----	-----
Loricariichthys castaneus	-----TATGCACAT	ATTACAT-TATG-GTA	-----T	-AGT---AC
Loricaria cataphracta	-----TATGCATAAT	ATTACAT-TATA-ATG	-----CTTT	AAAT---AATTAA-T-ATG
Otocinclus cf. hoppei	-----TATGCATAAT	TATACATATATGCATG	-----T	-AAT---ACATATATGGTG
Hypoptopoma incognitum	-----TATGTAT-AT	-----	-----	-AGT---ACATAA-T-ATG
Parotocinclus maculicauda	-----TATGCAT-AT	AGTACATATATGCATG	-----G	-GGT---ACATAT-T-ATG
Hisonotus thayeri	-----TATGCAT-AT	AGTACAT-TATG-GTA	-----TA	-TCC---CCACAT-C-ATG
Kronichthys heylandi	-----TATGTAC-GT	AATGCACGTATGTAT	-----TT	-AAT---ACATAT-T-ATG
Neoplecostomini gen. n.	-----TATGTAC	-----	-----T	-AGT---ACATAT-T-ATG
Neoplecostomus microps	-----TATGCCGT--	GGTACACGTATGTAT	-----TT	-AAT---ACATAT-T-ATG
Pareiorhaphis garbei	-----TATGTAT-AT	ATTACAT-TATG-GTA	-----CT	-AAT---ACATAT-T-ATG
Schizolecis guntheri	-----	-----	-----	-----
Ancistrus sp. 1	-----TATGTAT-AT	ATTACAT-AATG-GTG	-----TT	-AAT---ACATAA-T-ATG
Ancistrus sp. 2	-----TATGCAT-T	AGTACAT-TATG-GTG	-----TT	-AAT---ACATAA-T-ATG
Ancistrus multispinis	-----TATGCAT-AT	ATTACAT-TATG-GTG	-----TT	-AAT---ACATAA-T-ATG
Dekeyseria amazonica	-----TATGTAT-AT	ATTACAT-TATG-GTA	-----TT	-AAT---ACATAC-T-ATG
Baryancistrus xanthellus	-----TATGTAT-AT	AGTACAT-TATG-GTG	-----TT	-AAT---ACATAT-T-ATG
Pterygoplichthys sp.	-----TATGTAT-AT	ATTACAT-TATG-GTA	-----TT	-AAT---ACATAT-T-ATG
Pterygoplichthys pardalis	-----TATGTAT-AT	ATTACAT-TATG-GTA	-----TT	-AAT---ACATAT-T-ATG
Hypostomus sp.	-----TATGTAT-AT	ATTACAT-TATG-GTA	-----TT	-AAT---ACATAT-T-ATG
Hypostomus cf. plecostomus	-----TATGTAT-AT	ATTACAT-TATG-GTA	-----TT	-AAT---ACATAT-T-ATG
Hypostomus affinis	-----TATGTAT-AT	ATTACAT-TATG-GTG	-----TT	-AAT---ACATAC-T-ATG
Aphanotorulus emarginatus	-----TATGTAT-AT	ATTACAT-TATG-GTG	-----TT	-AAT---ACATAC-T-ATG
Peckoltia furcata	-----TATGTAT--	-----ATG-GTG	-----T	-AGT---ACATAT-T-ATG
Ancistomus snethlageae	-----TATGTAT-AT	ATTACAT-TATG-GTA	-----TT	-AAT---ACATAT-T-ATG
Panaqolus sp.	-----TATGTAT-AT	ATTACAT-TATG-GTG	-----TT	-AAT---ACATAT-T-ATG
P.disjunctivus_NC015747	-----TATGTAT-AT	ATTACAT-TATG-GTA	-----TT	-AAT---ACATAT-T-ATG

Corydoras schwartzi	TATAATATTGCATACATTTA	TATTACCCATTTCATAATGTA	AGAGTAATTAGAATAAATTC	ATCAAGACATACATTTATAT
Corydoras nattereri	TATAATATTACATACATATA	TTTTACCCATACATTATGTA	CCAGTAACGAATATAAACTC	ATCAAAACACAAAATTATAT
Hemipsilichthys nimius	-----	-----	-----	-----
Rineloricaria cf. lanceolata	CAT-ATATTACATAATTTCA	TGGTCC	-----	T
Rineloricaria sp.	AAG-ATAAAAACAATAAATTA	A	-----	-----
Loricariichthys platymetopon	-----	-----	-----	-----
Loricariichthys castaneus	-----	-----	-----	-----
Loricaria cataphracta	AAT	-----	-----	TGG
Otocinclus cf. hoppei	TAT-CCCCATTAATAGA	T	-----	A
Hypoptopoma incognitum	TAT-TTAATGCATTATGATA	TATC	-----	-----
Parotocinclus maculicauda	CAT-ATAGTACATTATGGTA	TATCCCCATTTACGA	-----	CCCATGACCTGCT
Hisonotus thayeri	A	-----	-----	T
Kronichthys heylandi	TAT-ATAGTACAT-ATGATA	TATCCCCATCTCCTGA	-----	T
Neoplecostomini gen. n.	TA	-----	-----	C
Neoplecostomus microps	TAT-ATAGTACAT-ATGATA	TATCCCCATCTCCTGA	-----	A
Pareiorhaphis garbei	TAT-ATATTACATTATGGTA	TATCCTCATTTCAGG	-----	T
Schizolecis guntheri	-----	-----	-----	-----
Ancistrus sp. 1	TAT-ATACCCCATATTACTG	T	-----	T
Ancistrus sp. 2	TAT-ATAGTACATTA	-----	-----	-----
Ancistrus multispinis	TAT-AATCCCCATATTACTG	T	-----	T
Dekeyseria amazonica	TAT-AATCCCCATAAAATTA	T	-----	A
Baryancistrus xanthellus	TAT-ATAGTACATTAAATTTA	T	-----	C
Pterygoplichthys sp.	TAT-ATATTACATCCTCCTA	T	-----	T
Pterygoplichthys pardalis	TAT-ATATTACATCTCTCTA	T	-----	T
Hypostomus sp.	TAT-ATATTACATCTCCTTA	T	-----	T
Hypostomus cf. plecostomus	TAT-ATATTACATCTCCCTA	T	-----	T
Hypostomus affinis	TAT-ATATTGCATCACCTTA	T	-----	T
Aphanotorulus emarginatus	TAT-ATATTGCATCACTCTA	T	-----	T
Peckoltia furcata	TAT-ATATTACATTACTCGG	T	-----	T
Ancistomus snethlageae	TAT-ATATTACATTACTCGG	T	-----	T
Panaqolus sp.	TAT-ATATTACATTACTCGA	T	-----	T
P.disjunctivus_NC015747	TAT-ATATTACATCTCTCTA	T	-----	T

Corydoras schwartzi	TCTAGAAATAATTTCTTTAG	ACCCGGGAAATAGATTTATC	CCCATAACTGCCCTCAAACA	TTTTCTATGAAGTATA- ACT
Corydoras nattereri	TCTACAAATAATTTCTTTAA	AGCTGGGAAATAGATTCATC	CCCATAACTGCCCTTCAACCA	TTTTCTATGAAGCTTA- ACT
Hemipsilichthys nimius	-----	-----	-----	-----
Rineloricaria cf. lanceolata	CAATAATTTAATTTAATTAAT	TAAAACTAAATTGAAAATAC	----- AACAATA	TATTAATTTAACCATCTATT
Rineloricaria sp.	-----	-----	----- TTCAACC	----- ATT
Loricariichthys platymetopon	-----	-----	-----	-----
Loricariichthys castaneus	-----	-----	-----	-----
Loricaria cataphracta	TCAAGACA	-----	TTAAATT	TAACCTACCAATAA- ATT
Otocinclus cf. hoppei	TAAAGGC- TATAACCTTTGA	-----	CTCACCT	ACTTCTATTTCATATCC- AAA
Hypoptopoma incognitum	TTTAATGTTAAATTTTTTAA	-----	TTCAAC	TATTTTATTGAACACA- GTT
Parotocinclus maculicauda	TTAATTGCTAAACCCCTCGA	-----	CTCAAC	TATCTTGTTCAATCGT- GTT
Hisonotus thayeri	TTAATTGTTAAACCCCTAGA	-----	CTCAGC	TATCTTGTTCAATAGT- ATT
Kronichthys heylandi	TTAATTGTTAAACCCCTTGA	-----	TTCAAC	TAACCTGTTGCGTAAATATC
Neoplecostomini gen. n.	TATATGCATAAT	-----	-----	-----
Neoplecostomus microps	TTAGTCGTTAAACCCCTTAA	-----	CTCAAC	TAACCTGTTTCGATAAATGTT
Pareiorhaphis garbei	TTAATTATTAAACCCCTTGA	-----	TTCAAC	TATCTTATTCAATAAATACC
Schizolecis guntheri	-----	-----	-----	-----
Ancistrus sp. 1	TAAAGGCAT- TCCCTTGA	-----	TTCAACT	TATT- ATTAAGGTCA- ACA
Ancistrus sp. 2	-----	-----	-----	-----
Ancistrus multispinis	TAAAGGCAT- TCCCTTGA	-----	TTCAACT	TATT- ATTAAGGTCA- ACA
Dekeyseria amazonica	TAATGGCATATCTTTATGA	-----	TTTAAAG	----- ATT
Baryancistrus xanthellus	TAAAGGCATAATTTCTTGA	-----	GTTGACA	TATCTAGTTAAATAGA- ATT
Pterygoplichthys sp.	TAAAGGCATAATCTCTTGA	-----	CTCAACA	TATCTAGTTGTTCCCCAATT
Pterygoplichthys pardalis	TAAAGGCATAATCTCTTGA	-----	CTCAACA	TACCTAGTTATTTACC- ATT
Hypostomus sp.	TAAAGGCATAATCTCTTGA	-----	CTCAACA	TACCTAGTTAAGAACA- ATT
Hypostomus cf. plecostomus	TAAAGGCATAATCTCTTGA	-----	CTCAACA	TACCTAGTTAAGCTCA- ATT
Hypostomus affinis	TAAAGGCATAATCTCTTGA	-----	CTCAACA	TACCTAGTTAAGAACA- ATT
Aphanotorulus emarginatus	TAAAGGCATAATCTCTTGA	-----	CTCAACA	TACCTAGTTAAAAACA- ATT
Peckoltia furcata	TAAAGGCATAATCTCTTGA	-----	CTCAACA	TATCTAGTTAAGAACA- ATT
Ancistomus snethlageae	TAAAGGCATAGTCTCTTGA	-----	CTCAACA	TATCTAGTTAAGTACA- ATT
Panaqolus sp.	TAAAGGCATAATCTCTTGA	-----	CTCAACA	TACCTAGTTAAGAACA- ATT
P.disjunctivus_NC015747	TAAAGGCATAATCTCTTGA	-----	CTCAACA	TACCTAGTTATTTACC- ATT

Corydoras schwartzi	AAAAATTGGTCCAAAAATATA	A	AT	GTAG	TAAGAGAC	CACCAACAA	T	CACAAGTT
Corydoras nattereri	AAAAATCGACCTAGTAAATAT	A	AT	GTAG	TAAGAGAT	CACCAACAA	T	CACAAGTT
Hemipsilichthys nimius	-----	-----	-----	G	TGAGAGAC	CACCAACCAT	TT	ATAACTC
Rineloricaria cf. lanceolata	AAGG	-----	-----	GAAG	TGAGAGAT	AACCAACGA	T	ATAAGCA
Rineloricaria sp.	ATA	T	ATTTGGAAG	-----	TGAGAGAT	AACCAACGA	T	ATAAGCA
Loricariichthys platymetopon	-----	-----	-----	-----	-----	-----	-----	-----
Loricariichthys castaneus	-----	-----	-----	-----	-----	-----	-----	-----
Loricaria cataphracta	AAA-----TAA	A	ACTAGGGAG	-----	TGAGAGAT	AACCAACGA	T	ATAAGCA
Otocinclus cf. hoppei	AAA-----	T	AT	GTAG	TAAGAAAT	CACCAATGA	T	CCAAGCA
Hypoptopoma incognitum	AGA-----	A	AT	GTAG	TAAGAAAT	CACCAATAA	T	ACAAGCA
Parotocinclus maculicauda	AGT-----	C	AT	GTAG	TAAGAAAC	CAGCAATGA	T	CCAAGCA
Hisonotus thayeri	AAC-----	T	AT	GTAG	TAAGAAAC	CAGCAATGA	T	CCAAGCA
Kronichthys heylandi	CAA-----	T	AT	GTAG	TAAGAAAC	CACCAATGA	T	CCAAGCA
Neoplecostomini gen. n.	-----	-----	AT	GTAC	TAATACATATCAATGA	-----	T	CCAAGCA
Neoplecostomus microps	GAA-----	T	AT	GTAG	TAAGAAAC	CACCAATGA	T	CCAAGCA
Pareiorhaphis garbei	ATC-----	A	AT	GTAG	TAAGAAAT	CACCAATGA	T	CCAAGCA
Schizolecis guntheri	-----	-----	-----	-----	-----	-----	-----	-----
Ancistrus sp. 1	GAA-----	C	AT	GCAG	TAAGAAAT	CACCAATCA	T	TTTAATA
Ancistrus sp. 2	-----	-----	-----	-----	-----	-----	-----	-----
Ancistrus multispinis	GAA-----	C	AT	GCAG	TAAGAAAC	CACCAATCA	T	ATCAGTA
Dekeyseria amazonica	AGA-----	A	AT	GTAG	TAAGAAAT	AACCAATAA	T	ATCAAT
Baryancistrus xanthellus	AAA-----	A	AT	GTAG	TAAGAAAT	CACCAACAA	TT	TTAATTG
Pterygoplichthys sp.	AAA-----	A	AT	GTAG	TAAGAAAT	CAGCAATAT	T	GCAAGCA
Pterygoplichthys pardalis	AAT-----	A	AT	GTAA	TAAGAAAT	CAGCAATAT	T	GTAGACA
Hypostomus sp.	AAA-----	G	AT	GTAG	TAAGAAAT	CAGCAATAT	T	GCAAGCA
Hypostomus cf. plecostomus	AAA-----	A	GT	GCAG	TAAGAAAT	CAGCAATAT	T	GCAAGCA
Hypostomus affinis	AAA-----	G	AT	GTAG	TAAGAAAT	CAGCAACAT	T	GCAAGCA
Aphanotorulus emarginatus	AAA-----	A	TT	GTAG	TAAGAAAT	CACCAATAT	T	GGAAGCA
Peckoltia furcata	AAG-----	A	AT	GTAG	TAAGAAAC	CAGCAATAA	T	ACAAGCA
Ancistomus snethlageae	AAA-----	A	AT	GTAG	TAAGAAAC	CAGCAATAA	T	ATAAGCA
Panaqolus sp.	AAA-----	A	AT	GTAG	TAAGAAAC	CAGCAATAC	T	ATAAGCA
P.disjunctivus_NC015747	AAT-----	A	AT	GCAA	TAAGAAAT	CAGCAATAT	T	GTAAACA

CSB-F

Corydoras schwartzi	AATGCATATTA	TCCTTGAA	AGGTC	-----	AGGGA	CAA	TAACT	GTGAGGG	---	-----	TTTCACAATATGA
Corydoras nattereri	AATGCATATTA	TCCTTGAA	AGGTC	-----	AGGGA	CAA	TAATT	GTGGGGG	---	-----	TTTCACAATATGA
Hemipsilichthys nimius	AATGCATATAA	TCCTTGAA	GGGTC	-----	AGGGA	CAAATTAAT	GTGGGGG	---	-----	-----	TAGCATAATATGA
Rineloricaria cf. lanceolata	AGACCATATTG	CCCATGAG	ATGGA	-----	GAAGG	CAA	TAATT	GTGGGGG	---	-----	TTTCAAAATTTGA
Rineloricaria sp.	GGACCACTG	TTAATGAT	ATGTT	-----	AAAGA	CAA	CAATT	GTGGGGG	---	-----	TCGCACAA-CTGA
Loricariichthys platymetopon	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Loricariichthys castaneus	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Loricaria cataphracta	GGACCATCCCA	TTAATGAG	ATGGT	-----	AACGA	CAA	TAATT	GTGGGGG	---	-----	TTTCACAA-CTGA
Otocinclus cf. hoppei	TGTGCATACGT	TTCTTGAT	GGGTC	-----	AGGGA	CAA	TAATC	GTGGGGG	---	-----	TTTCACAACCTGC
Hypoptopoma incognitum	AGTGCATAAATAAT	CCTTGAT	AGGTC	-----	AGGGA	CAG	TAATT	GTGGGGG	---	-----	TTACACAA-CTGA
Parotocinclus maculicauda	AGAGAATAACG	TTAATGAT	GGGTC	-----	AGGGA	CAA	TAATT	GTGGGGG	---	-----	TTTCACAA-CTGA
Hisonotus thayeri	AGAGAATAATA	TTAATGAT	GGGTC	-----	AGGGA	CAA	TAATT	GTGGGGG	---	-----	TTTCACAA-CTGA
Kronichthys heylandi	AGAGCATAATA	TGCATGAT	GGGTC	-----	AGGGA	CAA	ATATC	GTGGGGG	---	-----	TTTCACAA-TTGA
Neoplecostomini gen. n.	AGAACATAATA	TGTATGAT	GGGTC	-----	AGGGA	CAA	TTATC	GTGGGGG	---	-----	TTTCACAA-CTGA
Neoplecostomus microps	AGAACATAATA	TGCATGAT	GGGTC	-----	AGGGA	CAA	CTATC	GTGGGGG	---	-----	TCGCACAA-CTGA
Pareiorhaphis garbei	AGAGTATAATA	TGATTGAT	GGGTC	-----	AGGGG	CAA	TAATT	GTAAGA	---	-----	TAGCACAA-CTGA
Schizolecis guntheri	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Ancistrus sp. 1	AATGCAGTATC	TGCATGAT	GGGTC	-----	AGGGA	CAA	TAATT	GTGGGGG	---	-----	TCACACGA-CTGA
Ancistrus sp. 2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Ancistrus multispinis	AATGTATATCA	AGCCTGAT	GGGTC	-----	AGGGG	CAA	TGATT	GTGGGGG	---	-----	TCGCACAA-CTGA
Dekeyseria amazonica	AGCGCAATCTA	TCCATGAT	AGGTC	-----	AAGGA	CAA	TTATC	GTGGGGG	---	-----	TCGCATAA-CTGA
Baryancistrus xanthellus	AATGTAACACA	TTCATGAT	AGGTC	-----	AAGGA	TAA	TAACC	GTAAA-C	---	-----	TAACATAA-CTGA
Pterygoplichthys sp.	AGGATAATATA	TTAATGAA	AAGTC	-----	AAGGA	CAA	TAATT	ATAAAAC	---	-----	TTACATAA-CTGA
Pterygoplichthys pardalis	AGGATACTGTA	TTAATGAA	AAATC	-----	AAGGA	CAA	CAAAAC	TTAAAAC	---	-----	TCACATAA-CTGA
Hypostomus sp.	AGAATATTATA	TTCATGAA	AAGTC	-----	AAGGA	CAA	TCACT	ATAAAAT	---	-----	CCACATAA-CTGA
Hypostomus cf. plecostomus	AGGATACTATA	TTCATGAA	AAGTC	-----	AGGGA	CAA	TAATC	GTAAAAT	---	-----	CCACATAA-CTGA
Hypostomus affinis	AGAATACTATA	TTCATGAA	AAGTC	-----	AAGGA	CAA	TTATT	ACAAAAT	---	-----	CCACATAA-CTGA
Aphanotorulus emarginatus	AGAATAATAAG	TTAATGAA	AAGTC	-----	AAGGA	TAA	TAAGTAATATATC	---	-----	-----	CAACATAA-GTGA
Peckoltia furcata	AGAGTAATATA	TTCATGAA	AGGTC	-----	AAGGA	CAA	TGAGTGATATAAC	---	-----	-----	CAACATAA-CTGA
Ancistomus snethlageae	AGAGTAATATA	TTCATGAA	AAGTC	-----	AAGAA	CAA	TAAATTATATATC	---	-----	-----	CAACATAA-CTGA
Panaqolus sp.	AGGACAATAAG	TTCATGAA	AGGTC	-----	AAGGA	CAA	TAATTGATATACT	---	-----	-----	TGACATAA-CTGA
P.disjunctivus_NC015747	AGGATACTACA	TTAATGAA	AAATC	-----	AAGGA	CAA	CAAAAT	TTAAGAC	---	-----	TTACATAA-CTGA

CSB-E

641

Corydoras schwartzi	AC	TATTACTG	GCATCTGGTTCCT	ATCTGAGAACATTTAGT	GGATA	ATTAGACATATC
Corydoras nattereri	AC	TATTACTG	GCATCTGGTTCCT	ATCTGAGCAC	ATA	ACTGAATAATTAGACATACC
Hemipsilichthys nimius	AC	TATTACTG	GCATCTGGTTCCT	ACTTCAGGAACATAAAG	TTAAGA	ATCCCCCTATTTTA
Rineloricaria cf. lanceolata	AC	TATTACTG	GCATCTGGTTCCT	ACTTCAGGGCCATAACT	TGTAAAC	TTCCCCCATAATA
Rineloricaria sp.	AT	TATTACTG	GCATCTGGTTCCT	ACTTCAGGGCCATAACT	TATAAATATTCCCTCATAAAT	
Loricariichthys platymetopon						
Loricariichthys castaneus						
Loricaria cataphracta	AC	TATTACTG	GCATCTGGTTCCT	ACTTCAGGGCCATAAAA	TGTAAA	TTCCCCCTCCTTCT
Otocinclus cf. hoppei	AC	TATTACTG	GCATCTGGTTCCT	ACTTCAGGGCCATAAAA	TTTTTA	ACCCGCATAAAT
Hypoptopoma incognitum	AC	TATTACTG	GCATTTGGTTCCT	ACTTCAGGGCCATTATA	TGGAGA	ATTCCACATTCA
Parotocinclus maculicauda	AC	TATTACTG	GCATCTGGTTCCT	ACTTCAGGTCCATAAAT	ATAGA	TATCCGCATTAG
Hisonotus thayeri	AC	TATTACTG	GCATCTGGTTCCT	ACTTCAGGTCCATAAAT	ATAAA	TATCCCCCATAAG
Kronichthys heylandi	AT	TATTACTG	GCATCTGGTTCCT	ACTTCAGGTCCATAAGT	GAGAA	CCCCCATAAAT
Neoplecostomini gen. n.	AC	TATTACTG	GCATCTGGTTCCT	ACTTCAGGTCCATAAAA	TATAAA	ACTCCACATAAC
Neoplecostomus microps	AT	TATTACTG	GCATTTGGTTCCT	ACTTCAGGTCCATAAAT	ATAAGA	TTCCCCCATAAAT
Pareiorhaphis garbei	AC	TATTACTG	GCATCTGGTTCCT	ACCTCAGGTCCATAAAG	ATAAA	TAACCCCCATAAG
Schizolecis guntheri						
Ancistrus sp. 1	AC	TATTACTG	GCATCTGGTTCCT	ACTTCAGGGTCAATAAT	TTCCA	TTCCCTCATACG
Ancistrus sp. 2						
Ancistrus multispinis	AC	TATTACTG	GCATCTGGTTCCT	ACTTCAGGGTCAATAAT	TTCT	ATTCCCCATGAA
Dekeyseria amazonica	AC	TATTACTG	GCATCTGGTTCCT	ACTTCAGGTACAATCAG	TCTAA	ACATCCCTCATAA
Baryancistrus xanthellus	AC	TATTACTG	GCATT			
Pterygoplichthys sp.	AT	TATTACTG	GCATT			
Pterygoplichthys pardalis	AT	TATTACTG	GCATT			
Hypostomus sp.	AT	TATTACTG	ACATT			
Hypostomus cf. plecostomus	AC	TATTACTG	GCATT			
Hypostomus affinis	AT	TATTACTG	ACATT			
Aphanotorulus emarginatus	AT	TATTACTG	GCATT			
Peckoltia furcata	AT	TATTACTG	GCATT			
Ancistomus snethlageae	AT	TATTACTG	GCATT			
Panaqolus sp.	AT	TATTACTG	ACATT			
P.disjunctivus_NC015747	AT	TATTACTG	GCATT			

CSB-D

Corydoras schwartzi	TCACATCGTCAACGACATC	-----TGATTATTGGTGTAG	---TATAAAATAGCACAAAC	CCACCATGCCGA-GCATTCT
Corydoras nattereri	TTACATCGTCAACGACATA	-----GATTATTGGTGGGG	---TTCAAAATAGCACAAAC	CCACCATGCCGA-GCATTCT
Hemipsilichthys nimius	ATGTATCGTCAACGGCATC	-----TGATTAATGGTGTAG	-TCCATTTTCATATCAT-GAC	CCACCATGCCAAGGCATTCT
Rineloricaria cf. lanceolata	ATCCATCGTCAACGGCATAT	GGTTGTGATTAATGGTGTTA	ACCTAATAAAT-CCAT-GAC	CCACCATGCCAAGGCATTCT
Rineloricaria sp.	ATCCATCGTCAACGGCATCT	GATTGTGATTG-TGGTGGAG	GACTGATAGT-CCAT-GAC	CCACCATGCCAAGGCATTCT
Loricariichthys platymetopon	-----	-----	-----	-----
Loricariichthys castaneus	-----	-----	-----	-----
Loricaria cataphracta	ATTCATCGTCAACGGGATT	-----TGATTAATGGTGTTA	-ACCTGTAAA-ATCAT-AAC	CCAACATGCCAAGGCATTCT
Otocinclus cf. hoppei	ATCCATCGTCAACGACATC	-----TGATTAATGGTGTAG	-ACCTGTTGATATAAT-AAC	CCACCATGCCAAGGCATTCT
Hypoptopoma incognitum	GTCCACCGTCAACGACATT	-----TGATTATTGGTGTAG	-TCTCGAGTATATCAT-GAC	CCACCATGCCAAGGCATTCT
Parotocinclus maculicauda	TTCCATCGTCAACGACATC	-----TGATTATTGGTGTAG	-TCTCGAGTATATCAT-AAC	CCAACATGCCAAGGCATTCT
Hisonotus thayeri	TTCCATCGTCAACGGCATC	-----TGATTATTGGTGTAG	-TCTCGAGTATATCAT-GAC	CCACCATGCCAAGGCATTCT
Kronichthys heylandi	ATCCATCGTCAACGGCATA	-----TGATTATTGGTGTAG	-TCTCGAGTATATCAT-GAC	CCACCATGCCAAGGCATTCT
Neoplecostomini gen. n.	ATGCATCGTCAACGGCATC	-----TGATTAATGGTGTGA	-CCCAAATTATATCAT-GAC	TCACCATGCCAAGGCATTCT
Neoplecostomus microps	ATCCATCGTCAACGGCATT	-----TGATTATTGGTGTAG	-TCTCGATTATATAAT-AAC	CCCCCATGCCAAGGCATTCT
Pareiorhaphis garbei	TTCCATCGTAAACGGCATC	-----TGATTATTGGTGTAA	-CCCTATAAATATCAT-GAC	CCCCCATGCCAAGGCATTCT
Schizolecis guntheri	-----	-----	-----	-----
Ancistrus sp. 1	TTCCACCGTCAACGACATC	-----TGATTATTGGTGTAA	-CCCTGATAAT-CCAT-GAC	TCACCATGCCAAGGCATTCT
Ancistrus sp. 2	-----	-----TGGTGTTA	-----	-----
Ancistrus multispinis	CTCCACCGTCAACGGCATC	-----TGATTATTGGTGTTA	CCCTTAATAAT-CCAT-GAC	TCACCATGCCAAGGCATTCT
Dekeyseria amazonica	CTGTATCGTCAACGACATT	-----TGATTATTGGTGTTA	ACTT--GAAATAGCACAAAC	TCACCATG-CAAAGCATTCT
Baryancistrus xanthellus	-----	-----TGATTATTGGTGTCA	ACCTTAAAAA--TCAT-AAC	CCAACATGCCAAGGCATTCT
Pterygoplichthys sp.	-----	-----TGATTATTGGTTTAA	-CCCTGTAAATATCAT-GAC	TCACCATGCCAAGGCATTCT
Pterygoplichthys pardalis	-----	-----TGATTATTGGTTTCA	-TCCTATAAATATAAT-GAC	TCACCATGCCAAGGCATTCT
Hypostomus sp.	-----	-----TGATTATTGATTTAA	GTCCTGTAAATATCAT-AAC	TCACCATGCCAAGGCATTCT
Hypostomus cf. plecostomus	-----	-----TGATTATTGCTTTAA	GTCCTGTAAATATCAT-GAC	TCACCATGCCAAGGCATTCT
Hypostomus affinis	-----	-----TGATTATTGATTTAA	GTCCTGTAAATATCAT-GAC	TCACCATGCCAAGGCATTCT
Aphanotorulus emarginatus	-----	-----TGATTATTGGTGTG	ACCTTATTAA-ATCAT-AAC	TCACCATGCCAAGGCATTCT
Peckoltia furcata	-----	-----TGATTATTGGTGTAA	ACCTTATCAA-ACCAT-GAC	CCCCCATGCCAAGGCATTCT
Ancistomus snethlageae	-----	-----TGATTATTGGTGTAT	ACCTTATTAA-ATCAT-AAC	TCACCATGCCAAGGCATTCT
Panaolus sp.	-----	-----TGATTATTGGTGTAA	ACCTTATTAA-ATCAT-GAC	TCACCATGCCAAGGCATTCT
P.disjunctivus_NC015747	-----	-----TGATTATTGGTTTTA	-TCCTGTAAATATAAT-GAC	TCACCATGCCAAGGCATTCT

801

Corydoras schwartzi	TT-T-ATATGCATATGG--- -TTTTTTTTTAAAGGTCTACA	TTCATCTGACATCTG--GTC	ACTTTCA-----
Corydoras nattereri	TT-T-ATATGCATATGG--- -TTTTTTTTTTAAGGTCTACA	TTCATCTGGCATTGATGACC	ACTTTCA-----
Hemipsilichthys nimius	TT-T-ATATGCATTTGG--- -TTTTTTTTTTAGGTCTACT	TTCATTTGACATTGATGGCC	ATTTTCA-----AGGAAAT
Rineloricaria cf. lanceolata	TTCCAAAGGGGCATATGG-TA TTTTTTAATTT---TTCCT	TTCATCTGACATTT-CCAGT	GAAAAAT-----
Rineloricaria sp.	TTCCAAAGGGGCATATGG-TA TTTTTT---TAATTTTCCT	TTCATCTGACATTT-CTAGT	GAAAAAT-----AA
Loricariichthys platymetopon	-----	-----GTC	ACTTTCA-----
Loricariichthys castaneus	-----	-----	-----
Loricaria cataphracta	TTCCAAAGGGGCATATGG-TA TTTTTT---TTAAATTTTTCCT	TTCATCTGGCATTTC-CCAGT	GAATGTC-----AGGAGAT
Otocinclus cf. hoppei	TT-T-ATATGCATAGGG-TA TTTTT---TTTTAGGTCTATT	TTCATTTGACATTT-CCAGT	GCGCACT-----AAA
Hypoptopoma incognitum	TT-T-ATAGGCATTTAG-TA TTTTTT---TAAGGTTTATT	TTCATCTGGCAT-TACAAGT	GCCTGGA-----AAAAGT
Parotocinclus maculicauda	TT-T-AAATGCATTTGG-TA TCTTT---TTTTAGGTTTATT	TTCATTTTGACATCT-CCAGT	GTTTCGAT-----
Hisonotus thayeri	TT-T-ATATGCATTTGG-TA TTTTTT---TTTTAGGTTTATT	TTTATCTTGACATTT-CAGAGT	GTATGAT-----
Kronichthys heylandi	TT-T-AAATGCATTTGG-TA TTTTTT---TTATCTTTTATT	TTCATCTAGCATTT-CCAGT	GGTTGAT-----
Neoplecostomini gen. n.	CT-T-AAATGCATTTGG-TA TTTTTTTATATT---TTATT	TTCATCTGGCATCT-CAAGT	GTAAAAT-----AATAAT
Neoplecostomus microps	CT-T-AAATGCATTTGG-TA TTTTTT---TTATAGGTTTATT	TTCACCTGGCATTTC-CCAGT	GTTTCGAT-----
Pareiorhaphis garbei	TT-CTAAGTGCATTTGG-TA TTTTTTTTTTTT-----	---TTTGGCATA-----	-----A
Schizolecis guntheri	-----	-----	-----
Ancistrus sp. 1	TT-T-AAATGCATTTGG-TA TCTTT---TTTAGGGGTCCT	TTCATCC-ACATATACCAGT	GCACTGC-----
Ancistrus sp. 2	-----	-----	-----
Ancistrus multispinis	CT-T-AAATGCATTTGG-TA TTTTTT---TTTTGGGGTTACT	TTCATCC-ACACATGCCAGT	GCAGTGC-----AG
Dekeyseria amazonica	TT-CAATGTGCATCTGG-TA TTTTTTTTTTTTAGGATCACT	TTCATTTGACATATACCAGT	GCTCGCCCCAAAAGGAAAGAG
Baryancistrus xanthellus	TT-C-ACGCACATATGGTTA TTTTTTAATTTTAAAGTCACT	TTCATTTGACATAAACAAGT	GTAATTT-----AT
Pterygoplichthys sp.	TT-C-ACGTGCATTTGG-TA TTTTTT---TTTTCAGGTCACT	TTCATTTGACATATACAAGT	GTTGCCC-----GCAGGGA
Pterygoplichthys pardalis	TT-C-ACGTGCATTTGG-TA TCTTTTATTTTATAGGTCACT	TTCATCTGACATATACAAGT	GCTTCCC-----GCAGGGA
Hypostomus sp.	TT-C-ACGTGCATTTGG-TA TTTTTTATTTTAAAGTCACT	TTCATTTGACATATACAAGT	GCAGCCC-----GCAGGGA
Hypostomus cf. plecostomus	CT-C-CCGTGCATTTGG-TA TTTTTTATTTTATAGGTCACT	TTCATTTGACATATACAAGT	GTAGCCC-----GCAGGGA
Hypostomus affinis	TT-C-CCGTGCATTTGG-TA TTTTTTATTTTATAGGTCACT	TTCATTTGACATATACAAGT	GTAACCC-----GCAGGGA
Aphanotorulus emarginatus	TT-C-ACGTGCATTTGGTTC TTTTTATTTTAAAGTCACT	TTCATCTGACATATACAAGT	GTAGCCT-----GTGGGA
Peckoltia furcata	TT-C-ATGTGCATTTGG-TA TTTTTTATTTTAAAGTCACT	TTCATCTGACATATACCAGT	GCAGCCG-----CGGAG
Ancistomus snethlageae	TT-C-ACGTGCATTTGG-TA TTTTTT---TTTTAAGTCACT	TTCATTTGGCATATACCAGT	GCAGCCG-----CGGAG
Panaolus sp.	TT-C-ATGTGCATTTGG-TA TTTTTTTTTTTTAAAGTCACT	TTTCACTTGACATATACCAGT	GCAGCCG-----CGGAG
P.disjunctivus_NC015747	TT-C-ACGTGCATTTGG-TA TTTTTTATTTTATAGGTCACT	TTCATCTGACATATACAAGT	GTTACCC-----GCAGGGA

—————
T-homopolymer

Corydoras schwartzi	-AGAATTAAACAGACAGGGTC	GTAC-ATTTAGTAACA----	TCATGAGTAAATATTCTG-A	ATTATTTT-AATGACATAATT
Corydoras nattereri	-AGAGCTAACAGACAAGGTG	GTACTATTTAGTAATA----	TCATAAGTAAATATTCTG-A	ATTATTTT-AATGACATATTC
Hemipsilichthys nimius	AGTAATTA-----AGGTG	G--T-ATTAATCCATT-TTG	CTTTAACCATTATTTCATCCA	AAAAATTCAAGAGTATCAAA
Rineloricaria cf. lanceolata	AAGAAATATGGTTTAAGGTT	GAAC-ATTTTCCAAGC----	--ATCCGCACTATTAATGTC	ATGGTTT-CATGACATAACC
Rineloricaria sp.	GAAATTTGGTTTA--AGGTT	GAAC-ATTTTCCAAGC----	--ATCCGCTCTAATAATGTA	ATGGTTTAAATGACATAATT
Loricariichthys platymetopon	-AGAATTAAACAGACAGGGTC	GTAC-ATTTAGTAATA----	TCATGAGTAAATATTCTG-A	ATTATTTT-AATGACATAATT
Loricariichthys castaneus	-----	-----	-----	-----
Loricaria cataphracta	AGTATTTTA-----AGGTA	GAAC-ATTTTCCAAGCATGG	GTATA-----TAAATGTA	ATGATTTT-AATGACATGACA
Otocinclus cf. hoppei	AAGAAATAGA-----AGGTT	GAAC-ATTTTTTAGATTATTA	TCTCA--AACAGTAAATGTA	ATGATTTT-AATGACATATAC
Hypoptopoma incognitum	TCCAATTA-----GGGTG	GTCC-AATTCTGGATC-TTG	GTGTAAGCAATGTTAATGTA	ATGATTC-AATGACATACAG
Parotocinclus maculicauda	AATAAACCAAAATTTA-AGGTG	GAAC-GCAAAATATAAC-TGC	CCAGC--AAATGATAATGTA	TTGATTTT-AATGACATATAT
Hisonotus thayeri	AAGAAACCAAAATTTA-AGGTG	GAAC-ATAAAATTTACT----	GCCCCGCAGAAGATAATGTA	TTGATTTT-AATGACATATAC
Kronichthys heylandi	AATGATTATAATTA-AGGTG	GAAC-ATATTTAATCT-TAC	TTAAA--TAATGTTAATGTA	GTGATTTT-AATGACATTTAC
Neoplecostomini gen. n.	TATAATTA-----AGGTG	GGAC-ATAATAAACAT-TCA	CCCAAG-TAATATGAATGTA	ATGATTTT-AATGACATATAT
Neoplecostomus microps	AATAATTATATTTA-AGGTT	GGAC-ATTTTTTAATCT-GGC	TTCAA--TAATATAAATGTA	ATTATCTT-AATGACATTTAC
Pareiorhaphis garbei	TGTATATATAATGTATAGAA	GCACCCAGCCATACAGCACT	ATTCTACCATCTAAATATAT	ATATA-T-AAACGCACGACT
Schizolecis guntheri	-----	-----	-----	-----
Ancistrus sp. 1	AAGTACTGAAAAATCAAGGTA	GTTC-TTATATTAAAG-TTA	ATGCG--TCCATGAAATGTA	AAGATTTT-AAAGACATAATC
Ancistrus sp. 2	-----	-----	-----	-----
Ancistrus multispinis	AGTACTAAAAAATA-AGGTA	GTTC-TAAAATTAGTA-TTA	ATAAG--TCCATTTAATGTG	AAGATTTT-AAAGACATAATA
Dekeyseria amazonica	GACAATTGAATTA-AGGTG	G--T-ACTAATAAGTA-TTG	TTAAAGTTACAGATAATGAA	AAGATTTT-AATGACATATTA
Baryancistrus xanthellus	AATAATTAAATA-----AGGTA	GA--ATATAATAGTCATTC	ATGAA--TTACATAACATGAA	AAGATTTT-AAAGACATA-TC
Pterygoplichthys sp.	GATATTTTAAATA-AGGTG	GAAT-AATAAATAGTT-GGG	TTAAA--TACAGTAAATGTA	AAGATTTT-AAAGACATAATC
Pterygoplichthys pardalis	GATATTTTAAATA-GGGTG	GAAT-AATAAATAACT-GGG	TTAAA--TACAGTAAATGTA	AAGATTTT-AAAGACATAATC
Hypostomus sp.	AACATATAATAATACAGGTG	GAAC-ATAAATTAAC-TAA	TTAAA--TACAGATTATGTA	AAGATTTT-AAGGACATAATA
Hypostomus cf. plecostomus	GACATTTTAAAAATT-AGGTG	GAAC-ATAAGTTAAAT-TAA	TTAAA--TACAGTTTATGTG	AAGATTTT-AAAGACATAATA
Hypostomus affinis	GACATTTTAAAAATT-AGGTG	GAAC-ATAAGTTGTTT-TAG	TTAAA--TACAGTTTATGTA	AAGATTTT-AAGGACATAATA
Aphanotorulus emarginatus	GATATTTCTATATA-AGGTG	GAAC-ATGAATTAATA-TTA	TTAAG--TACAGTTTATGTA	GAGATTTT-AAAGACATAATC
Peckoltia furcata	GACATTTTATATTTA-AGGTG	GAAT-ATGGATTAAAT-TAG	TTAAA--TACATTTTATGTA	AAGATTTT-AAGGACATAATT
Ancistomus snethlageae	GACATTTTATATTTA-AGGTG	GAAC-ATAAATTAAT-TAG	TTAAA--TACATCTATGTA	GAGATTTT-AAAGACATAATC
Panaqolus sp.	GACAA-TAATATATAGGGTG	GAAT-ATAAATTAAC-TGA	TTAAG--CACATTTTATGTA	ATGATTTT-AAGGACATAATA
P.disjunctivus_NC015747	AATATTTTGAGATA-AGGTG	GAAT-AATAAATAACT-GGA	TTAAA--TACAGTGAATGTA	AAGATTTT-AAAGACATAATC

Corydoras schwartzi	CCTATATCAC	CATATATT	TATTTCA	CGAGCATACATA	CCAT	TTACCTTCCCCAT
Corydoras nattereri	TTTATATCAC	CATATATT	TATTTCA	TGAGCATACATA	CTAT	TTACCTTCCCTCAT
Hemipsilichthys nimius	TTTAAATTTG	CATATTTT	TCTATCA	AGTGCATA	CTCTTA	TTGCTTCATCCCC
Rineloricaria cf. lanceolata	TTAAGCATTG	CATACTTT	TATATCA	AGTGCATAA	CATA	TTACTACT CCC
Rineloricaria sp.	TCAAGAATTG	CATTAATT	TATATCA	AGTGCATAA	CATA	TTATTACT CCC
Loricariichthys platymetopon	CCTATATCAC	CATATATT	TATTTCA	CGAGCATACATA	CCAT	TTACCTTCCCCAT
Loricariichthys castaneus						
Loricaria cataphracta	TTGAAGAATTG	CATATTAC	GATATCA	AGTGCATACATA	TCCA	TTACTCCCCTAAT
Otocinclus cf. hoppei	TATAGAATTG	CATAATA	AGCGTTA	AAGACATAA	TCTA	TTATACTT CCGC
Hypoptopoma incognitum	AGAAGAACCA	CTATTAC	AGTATTA	AGTGCATAA	CCTA	TTATTACT CAAC
Parotocinclus maculicauda	TTAAGAATCA	CATACG	GATATTT	AGTACATAA	TGTA	TCCATCTTCCAC
Hisonotus thayeri	TTAAGAAACA	CATACG	GATATTT	AGTACATAA	CGTA	TCCATCTTCCAC
Kronichthys heylandi	TAAAAAACA	CATATA	AATATTT	AGCACATAA	TGTA	TCTATATCTCAAC
Neoplecostomini gen. n.	TGAAGAATTG	CATACG	GATATTT	AGTGCATAA	CCTA	CTTGTACCTTTAC
Neoplecostomus microps	TTAAGAAACA	CATATA	AATATTT	AGCACATAA	GTTG	CTTGTCTCTCCAC
Pareiorhaphis garbei	GAACATA					
Schizolecis guntheri						
Ancistrus sp. 1	TTATAAACACA	CATTTTAT	TATATCA	GGTACATA	CCCTA	TTACCTCCATCAC
Ancistrus sp. 2				ATACA		
Ancistrus multispinis	TTATAAACCA CA	CATTTTAT	TATATCA	AGTGCATA	CTCTA	TTACCTCT TCAC
Dekeyseria amazonica	TTGATAACTC	CATAAACAATC	TATATCA	GGAGCATA	TCATA	CTGTCTCT TCAC
Baryancistrus xanthellus	CAGTAAATATCA	CATTTAAT	TATATTA	AGTACATAA	CCTA	TTACTCAT TCAC
Pterygoplichthys sp.	TTATTACAT CA	CATTGGAT	TATATCA	GGTACATAA	CCTA	TTACCTTTATCAC
Pterygoplichthys pardalis	TTACAATAT CA	CATTAGAT	TATATCA	GGTACATAA	CCTA	TTACCTTTATCAC
Hypostomus sp.	TTACAAGTTTTA	CATAAAAT	TATATCA	AGTACATAA	CCTTAT	TTACCTCTACCAC
Hypostomus cf. plecostomus	CTATAAAATCCA	CATAAGAT	TATATCA	GGTACATAA	CCTTA	TTACTTCTACCAC
Hypostomus affinis	CTATAGAATTTG	CATAGAGT	TATATCA	AGTACATAA	CCTTAT	TTACTTCTACCAC
Aphanotorulus emarginatus	TGATAATAATTA	CATTAGAT	TATATCA	AGTGCATAA	CCTA	TTACTTCC TCAC
Peckoltia furcata	TGATAAACCCTG	CATAATAT	TATATCA	GGTGCATAA	CCTA	TTACCTCT TCAC
Ancistomus snethlageae	AAGTAAGAACCA	CATAAGAT	TATATCA	AGTACATAA	CCTA	TTACCTCTATCAC
Panaqolus sp.	TTATAAATACCA	CATAAGAT	TATATCA	AGTACATAA	CCTA	TTACCTCTATCAC
P.disjunctivus_NC015747	TTATAATAT CA	CATTAGAT	TATATCA	AGTACATAA	TCTA	TTACCTTTATCAC

CSB-1

1041

Corydoras schwartzi	AC-----CTGTATAAGA	TGCCCCCTGGGCGTCTATACG	CGGT-----AAA-C	CCCCCTACCCCC
Corydoras nattereri	TC-----CTGTATAAGA	TGCCCCCTGGGCGTCTATACG	CGGT-----AAA-C	CCCCCTACCCCC
Hemipsilichthys nimius	ATAGC--CTGCCTATT---	-----TACCCCCGTTTCTTACG	CGGT-----AAA-C	CCCCCTACCCCC
Rineloricaria cf. lanceolata	CTAAT-TTTTCCCTTATAGA	CTGCCCCCCTCTCTCCCGCG	CG-T-----AAAC-C	CCCCTTACCCCC
Rineloricaria sp.	CTAAT-TTATCTATTATAG	ACTGCCCTCCCGTTCCTACG	CG-T-----AAA-C	CCCCCTACCCCC
Loricariichthys platymetopon	AC-----CTGTATAAGA	TGCCCCCTGGGCGTCTATACG	CGGT-----AAA-C	CCCCCTACCCCC
Loricariichthys castaneus	-----	-----	-----	-----
Loricaria cataphracta	AATCCAGATACAACCTG---	-----CCCCCCCCGTCTCTTGCG	CG-T-----AAAC-C	CCCCCTACCCCC
Otocinclus cf. hoppei	CCATCCTGTATTGATT---	-----CCCCCCCCGCTTCGCTGCG	CGGC-----AAA-CC	CCCCCTACCCCC
Hypoptopoma incognitum	CCATTCTGTATT-----GT	ATCCCCCCCCGCTACCTGCG	CGGC-----AAA-C	CCCCCTACCCCC
Parotocinclus maculicauda	CTAAC-TTTACTGTTT---	-----CCCCCCCCTTTTTGGCG	CGTC-----AAAC-C	-----
Hisonotus thayeri	CCTAT-TTTACT-----GT	TTCCCC-----	-----C	CCCCCT
Kronichthys heylandi	CCGAT-TCTATTGTTT---	-----CCCCCGCTTCCTGCG	CGTC-----AAA-C	CCCCCTACCCCC
Neoplecostomini gen. n.	CTAAT-TCTACTGTTA---	-----TACCCCCAGGTTTTTGGCG	CGGT-----AAA-CC	CCCCTTACCC
Neoplecostomus microps	CTAAC-TCTACTGTTT---	-----CCCCCGCTTTTCTTGCG	CGTT-----AAA-CC	CCCCCTACCCCC
Pareiorhaphis garbei	-----	-----	-----	-----
Schizolecis guntheri	-----	-----	-----	-----
Ancistrus sp. 1	CTATC-----TTTCCTACGTT	TGCCCCCCCCCGCTTCTTACG	CGTC-----AAA-CC	CCCCCTCCCC
Ancistrus sp. 2	-----	-----	-----	-----
Ancistrus multispinis	CTATC-----TTTCCTACGT	TTCCCCCCCCCGCTTCTTGCG	CGTC-----AAA-C	CCCC
Dekeyseria amazonica	CTACCAACTACTTATA---	-----CCCCCCCCGCTTCTGCG	CGTC-----AAA-CC	CCCCCTACCCCC
Baryancistrus xanthellus	CTACT--TTACTCATA---	AGTACCCCCCTCTTTTTGCA	CGTT-----AAACCC	CCCCCTACCCCC
Pterygoplichthys sp.	CTACT-TCTACTCACA--GT	GCCCCCTCTCGCTCCTGCG	CGTC-----AAA-C	CCCCCTACCCCC
Pterygoplichthys pardalis	CTACT-TCTACTCACA--GT	GCCCCCCTTCGCTCCTACG	CGTC-----AAA-C	CCCCCTACCCCC
Hypostomus sp.	TTACT--CCTACTCACA--G	TGCCCCCCTCCTCTTCTGCG	CGTC-----AAA-CC	CCCCCTACCCCC
Hypostomus cf. plecostomus	TTACT--CCTACTCACA--G	TGCCCCCCTCCTTTTCTGCG	CGTC-----AAA-CC	CCCCCTACCCCC
Hypostomus affinis	TTACT--CCTACTCATA--G	TGCCCCCCTTTTCTTTGCG	CGTC-----AAA-CC	CCCCCTACCCCC
Aphanotorulus emarginatus	CTAAACCCTACTCATAGTGC	CCTCCTCCTGCTTTTACGCG	CGTT-----AAA-C	CCCCCTACCCCC
Peckoltia furcata	CTACT--CTACCCACAATGT	GCCCCCCTCCGTTTTACGCG	CGTC-----AAA-CC	CCCCCTACCCCC
Ancistomus snethlageae	CTATC--CTACCCATA-TGT	GCCCCCCTCCTTTTACGCG	CGTT-----AAA-C	CCCCCTACCCCC
Panaqolus sp.	CTACT--CTACTCACA--AT	GTGCCCCCCTTTTCGCGCG	CGTC-----AAA-CC	CCCCCTACCCCC
P.disjunctivus_NC015747	CTACT-TCTACTCATA--GT	GCCCCCCTTCGCTCCTACG	CGTC-----AAA-C	CCCCCTACCCCC

CSB-2

Corydoras schwartzi	---A---ACGCCGAGAGATGC	CTGTTTAAATC	---	TGTTAAACCCCTAAACCA	---	GATTAGG	---
Corydoras nattereri	---A---ACGTCGAGAGATGC	CTGTTTAAATC	---	TGTTAAACCCCTAAACCA	---	GATTAGG	---
Hemipsilichthys nimius	---ATACGCCGAACGAATGC	CTA-ATTCTCC	---	TGTTAAACCCCTAAACCA	---	GGTAGGC	---
Rineloricaria cf. lanceolata	---GCTCTCAAAAACTT	CTA-ATACTCC	---	TGTTAAACCCCTAAACCA	---	GGTAGAA	---
Rineloricaria sp.	---	---	---	ACTCCAAAAATT	---	C	---
Loricariichthys platymetopon	---AACGCCGAGAGATGC	CTGTTTAAATC	---	TGTTAAACCCCTAAACCA	---	GATTAGG	---
Loricariichthys castaneus	---	---	---	---	---	---	---
Loricaria cataphracta	---CACATCCCAAAATAT-T	CTA-ATACTCC	---	TGTTAAACCCCTAAACCA	---	GGTAGAATATT	---
Otocinclus cf. hoppei	---C-ATGTCGCTATAATC	CTA-ATATTCC	---	TGTTAAACCCCTAAACCA	---	GGAAGGA-CA	---
Hypoptopoma incognitum	---A---CTGAAATC-C	TAT-ATTCTCC	---	TGTTAAACCCCTAAACCA	---	GGTAGGA-CA	---
Parotocinclus maculicauda	---	---	---	---	---	---	---
Hisonotus thayeri	---	---	---	---	---	---	---
Kronichthys heylandi	---T-ATGTCGAGAAAT-C	CTA-ATACTCC	---	TGTTAAACCCCTAAACCA	---	GGTAGGA	---
Neoplecostomini gen. n.	---	---	---	---	---	---	---
Neoplecostomus microps	---CTACGTTGGAAAAAT-C	CTA-ATACTCC	---	TGTTAAACCCCTAAACCA	---	GGTAGGA-ATA	---
Pareiorhaphis garbei	---	---	---	---	---	---	---
Schizolecis guntheri	---	---	---	---	---	---	---
Ancistrus sp. 1	---ATGCCGGTAAAT-	TATATATACC	---	TGTTAAACCCCTAAACCA	---	GGTAAA-TAC	---
Ancistrus sp. 2	---	---	---	---	---	---	---
Ancistrus multispinis	---	---	---	---	---	---	---
Dekeyseria amazonica	---C-ATGCTGGCAAAT-C	TTA-GTATTCC	---	TGTTAAACCCCTAAACCA	---	GGTAAGA-TAC	---
Baryancistrus xanthellus	---CCATGCTGGTAA--T	ATTAATTCTTC	---	TGTTAAACCCCTAAACCA	---	GATAATATTAC	---
Pterygoplichthys sp.	---T-ACGCTGGCAAAT-C	TTA-GTATT-C	---	TGTTAAACCCCTAAACCA	---	GAAAAAA-TGC	---
Pterygoplichthys pardalis	---T-ACGCTGGCAAAT-A	TTA-ATACT-C	---	TGTTAAACCCCTAAACCA	---	GATAAAA-TGC	---
Hypostomus sp.	---C-ATGCTGGCAAAT-C	TTT-ATACT-C	---	TGTTAAACCCCTAAACCA	---	GATGAAA-TGC	---
Hypostomus cf. plecostomus	---CAATGCTGGCAAAT-C	TTA-GTATT-C	---	TGTTAAACCCCTAAACCA	---	GATAAGA-TGC	---
Hypostomus affinis	---C-ATGCTGGCAAAT-C	TTA-ATATT-C	---	TGTTAAACCCCTAAACCA	---	GATAAAA-TGC	---
Aphanotorulus emarginatus	---ATGCTGGCAAAT-T	TTA-ATACT-C	---	TGTTAAACCCCTAAACCA	---	GATAAAA-TGC	---
Peckoltia furcata	---C-ATGCTAGCGAAT-C	TTA-ATACT-C	---	TGTTAAACCCCTAAACCA	---	GATAGAA-CGC	---
Ancistomus snethlageae	---ATGCTAGCAAAT-C	TTA-ATACT-C	---	TGTTAAACCCCTAAACCA	---	GATAAAA-TGC	---
Panaqolus sp.	---C-ATGCTGGCAACT-T	TTA-ATATT-C	---	TGTTAAACCCCTAAACCA	---	GATAAAA-TGC	---
P.disjunctivus_NC015747	---T-ACGCTGGCAAAT-A	TTA-ATACT-C	---	TGTTAAACCCCTAAACCA	---	GATAAAA-TGC	---

CSB-3

Corydoras schwartzi	-----CTCGATC-----GGCGACAA--GC
Corydoras nattereri	-----CTCGACC-----GACGACAA--GC
Hemipsilichthys nimius	-----GACGACAA--CC
Rineloricaria cf. lanceolata	-----TTTTTCGAT-----A GCTCATGTCAACCACC--ACTCAC--
Rineloricaria sp.	-----CTCGATC-----GGCGACAA--GC
Loricariichthys platymetopon	-----CTCGATC-----GGCGACAA--GC
Loricariichthys castaneus	-----CTCGATC-----GGCGACAA--GC
Loricaria cataphracta	CAGTGTATGTA AAAACCA--A GCCCACACATTACATT--ATACATTATACATT
Otocinclus cf. hoppei	CAACAT--GCGTAGTACTCAA AATATGATAAAGCCCCGACC ACCTAAACACACAACCCACA CAATGTAGGGACATCCCCAT
Hypoptopoma incognitum	CAGCGGGTAACCCATTAAAA CACACAACCCA--A ACATGTACATTATTTTCTCTCCCC--AC
Parotocinclus maculicauda	-----ACATGTACATTATTTTCTCTCCCC--AC
Hisonotus thayeri	-----AGTTAACCTAAAACAC--AAATAAAC--CC
Kronichthys heylandi	---CACAACATATAAAACAC ATAAGTACAAA--C AGTTAACCTAAAACAC--AAATAAAC--CC
Neoplecostomini gen. n.	-----AGTTAACCTAAAACAC--AAATAAAC--CC
Neoplecostomus microps	CAACATATAAAACACCTAAA ACAACAAAAATGAGCCTAAA AAATACAAAAAACCCC--GGACATACAACACT
Pareiorhaphis garbei	-----AAATACAAAAAACCCC--GGACATACAACACT
Schizolecis guntheri	-----AAATACAAAAAACCCC--GGACATACAACACT
Ancistrus sp. 1	--CAACATACAATACAC--GTA ATTCTTAAAAAT--T ATTTGC--CGACCC--AGACATAT--AT
Ancistrus sp. 2	-----ATTTGC--CGACCC--AGACATAT--AT
Ancistrus multispinis	-----ATTTGC--CGACCC--AGACATAT--AT
Dekeyseria amazonica	CAACAT--AAAAAT--A ATATACACACCGACCC--AGACATAT--AT
Baryancistrus xanthellus	CAACATAAAACATTTAATTTC TTCACCAAAAT--A ACTTACACATCAACCC--AGATATAC--CT
Pterygoplichthys sp.	CATCATAATAAAATTACATAA ATTACCAAAAT--A ACTTGCATA--CAACCC--AGACATAT--CT
Pterygoplichthys pardalis	CACCATAATAAAATTATATAA ACTACCAAACT--A ACTTGCACA--CAACCC--AGACATAC--CT
Hypostomus sp.	CAACAC--AATTATATAA CCTTTTCAAAT--A ATTTGTACA--CAACCC--AGACATAC--CC
Hypostomus cf. plecostomus	CAACACAAATAAAATTATATAA CCTTTTCAAAT--A ACTTGTACA--CAACCC--AGACATAC--CC
Hypostomus affinis	CAACACAGTAAATTATATAA CCTTTTCAAAT--A ACTTGTACA--CAACCC--AGACATAC--CC
Aphanotorulus emarginatus	CAACATTGAATCATATAATT TCTCTCAAAT--A ACTTACACATCGACCC--AGACATAC--CT
Peckoltia furcata	CAACACTGAATTTTATAACC ACTATCAAAT--A ACTTATACATCAACCC--AGACATAT--CT
Ancistomus snethlageae	CAACACTGAATTATATAACC ACTATTAAGAT--A ACCTACACATCAACCC--AGACATAT--CT
Panaqolus sp.	CAACACTGAATTGTACAATC ACTATCAAAT--A ATTTACACATCGACCC--AGACATAC--CT
P.disjunctivus_NC015747	CACCATAATAAAATTATATAA ACTACCAAACT--A ACTTGCACA--CAACCC--AGACATAC--CT

1281

Corydoras schwartzi	AACGAGTATA			ATGTGTCAC	
Corydoras nattereri	AACGAGTATA			ATGTGTCAC	
Hemipsilichthys nimius	GATCAGCGTG			AT	
Rineloricaria cf. lanceolata	TACA			GTATATTGC	
Rineloricaria sp.					
Loricariichthys platymetopon	AACGAG				
Loricariichthys castaneus					
Loricaria cataphracta	ATACAATATA			TAATATTACATTATACAT	TATATAA
Otocinclus cf. hoppei	AATATATTTT			ATACCCCACTACTATATA	TATATAGTCATATATAGTTA
Hypoptopoma incognitum	AAACAAACCC			ACAAACCAACCACGTAA	CACATCAGTAT
Parotocinclus maculicauda					
Hisonotus thayeri					
Kronichthys heylandi	CGGACGTACA			CGCCATTAAACATGCTAG	AATAAGTACAAAGACACCTA
Neoplecostomini gen. n.					
Neoplecostomus microps	ACCAAGCATATTAAAGTAGG	CACATGGACACACCGCACCA	TTATATAGTATTTTATACCA	TAAATAT	
Pareiorhaphis garbei					
Schizolecis guntheri					
Ancistrus sp. 1	AATAAAATTTA			AT TACCACATCAGACGG	CAAAACT
Ancistrus sp. 2					
Ancistrus multispinis					
Dekeyseria amazonica	AGTATATTCA			ATCCACCTCTCCAAACGA	CACCTGTT AG
Baryancistrus xanthellus	AATAAAATATA			ACTTACCGCATCAAACGG	CATATAT
Pterygoplichthys sp.	AAT AACACA			AAACATTACACCAAACGG	TATATAT
Pterygoplichthys pardalis	AAT AACACA			AAACATTTACCAAACGG	CATATAT
Hypostomus sp.	AAT AATACA			AAACATTACCTCAAACGG	CATATAT
Hypostomus cf. plecostomus	AAT AATATA			AAATATCACCTCAAACGG	CACATAT
Hypostomus affinis	AATAAAATATA			AAATATTACCTCAAACGG	TACATAT
Aphanotorulus emarginatus	AAT AGTATA			AAACACTATACTACACAG	TATAAAT AA
Peckoltia furcata	AAT AATATA			AAATATTAC	
Ancistomus snethlageae	AAT AACATA			AAATATTATG	
Panaqolus sp.	AAT AACATA			AAAAATTCTA	
P.disjunctivus_NC015747	AAT AACACA			AAACATTTACCAAACGG	CATATAT

Corydoras schwartzi	-----	-----	-----	-----
Corydoras nattereri	-----	-----	-----	-----
Hemipsilichthys nimius	-----	-----	-----	-----
Rineloricaria cf. lanceolata	-----	-----	-----	-----
Rineloricaria sp.	-----	-----	-----	-----
Loricariichthys platymetopon	-----	-----	-----	-----
Loricariichthys castaneus	-----	-----	-----	-----
Loricaria cataphracta	-----	-----	-----	-----
Otocinclus cf. hoppei	TATAGTTATATAGTTATATA	GTTATATAGTTATATAGTTA	TATAGTTATATAGATTTATT	TATATAGTGTATATATTTAT
Hypoptopoma incognitum	-----	-----GCTATATA	TACGTGTTATATAGTGTGTT	ATATAGTGTGTTATATAGTG
Parotocinclus maculicauda	-----	-----	-----	-----
Hisonotus thayeri	-----	-----	-----	-----
Kronichthys heylandi	CACATCATGGTATTATATAT	AGTACTGTATTATATATAGT	ACTGTATTATATATAGTACT	GTATTATATATAGTACTGTA
Neoplecostomini gen. n.	-----	-----	-----	-----
Neoplecostomus microps	-----	-----	-----	-----GGTAATATAGGG
Pareiorhaphis garbei	-----	-----	-----	-----
Schizolecis guntheri	-----	-----	-----	-----
Ancistrus sp. 1	-----	-----	-----	-----
Ancistrus sp. 2	-----	-----	-----	-----
Ancistrus multispinis	-----	-----	-----	-----
Dekeyseria amazonica	-----	-----	-----	-----
Baryancistrus xanthellus	-----	-----	-----TAGCATATATT	TATTTACACTAATTATATAA
Pterygoplichthys sp.	-----	-----	-----	-----
Pterygoplichthys pardalis	-----	-----	-----	-----
Hypostomus sp.	-----	-----	-----	-----
Hypostomus cf. plecostomus	-----	-----	-----	-----
Hypostomus affinis	-----	-----	-----	-----
Aphanotorulus emarginatus	-----	-----	-----	-----
Peckoltia furcata	-----	-----	-----	-----
Ancistomus snethlageae	-----	-----	-----	-----
Panaqolus sp.	-----	-----	-----	-----
P.disjunctivus_NC015747	-----	-----	-----	-----TG

1441

Corydoras schwartzi	TATATAT	TGTTGCAT	ATACA	CTATATA	
Corydoras nattereri	TATATAT	TGTTGCAT	ATACA	CTATATA	
Hemipsilichthys nimius					
Rineloricaria cf. lanceolata			TACA	GTATA	
Rineloricaria sp.					
Loricariichthys platymetopon					
Loricariichthys castaneus					
Loricaria cataphracta		TATTACATT	ATACA	TTATATAATATTACAT	TATAC
Otocinclus cf. hoppei	TTATATAGTG	TATATATTTT	ATTTATATAGTGTATATATT	TATTTATATAGTGTATATAT	AATGCATACATGTATATATA
Hypoptopoma incognitum	TGTTATATAG	TGTGTTATA	TAGTGTGTTAT	ATAGT	GTGTTATATAGTGTGT
Parotocinclus maculicauda					TATAT
Hisonotus thayeri					AATGCT
Kronichthys heylandi	TTATATATAG	TACTGTATT	AACTGTATTATAGTACTGTA	TTATAGTACTGTATTA	TAGTACTGTATTAT
Neoplecostomini gen. n.					
Neoplecostomus microps	CTATAGAA	T AGTGCAACA	CAATACAATACTAGAAATATA	GTATATTATATTATAT	TATAT
Pareiorhaphis garbei					TATATT
Schizolecis guntheri					
Ancistrus sp. 1	AGCCTACTC	TTTTTTCCC	CCATCAATTTA	TTTTT	ATATATTATATTATAT
Ancistrus sp. 2					ATTATATATATATA
Ancistrus multispinis					
Dekeyseria amazonica	TCTATAT	T TATAGATTT	ATTTAGTTTTAT	TTATA	TATTATATTATATTAT
Baryancistrus xanthellus	TTATATAT		ATATATTATATATATATA		ATATATATAATTAT
Pterygoplichthys sp.		TGG	TATGTGTCT	TTTTTATATCATACCAAAATTT	ATATATA
Pterygoplichthys pardalis			TAGTATAT	ATCTT	TTATATTGCACCAATT
Hypostomus sp.	TAGTATATAT		TATGTCAC	TTATA	TTATATTATATTATAT
Hypostomus cf. plecostomus	TCCCATATAGATCCACACCA		ATATATATTAA	TTATA	TTATATTATATTATAT
Hypostomus affinis		TCTCAATCT	CCCTACTACAA		
Aphanotorulus emarginatus	TATATAT	T TACCTACAT	TATTATATTAT	TATA	TATTATTATATTAT
Peckoltia furcata	ATATGC	CCCTTATAT	ATATACTATAT	ATATA	CTATATA
Ancistomus snethlageae			TATGTCCC	TTATA	TTATATTATATTATAT
Panaqolus sp.			TGCACCCC	TTATA	TTATATTATATTATAT
P.disjunctivus_NC015747	GTATATATCT	TT	TATATTGC	ACCAA	TTATATATATATATAT

Corydoras schwartzi	-----	-----	-----	-----
Corydoras nattereri	-----	-----	-----	-----
Hemipsilichthys nimius	-----	-----	-----	-----
Rineloricaria cf. lanceolata	-----	-----	-----	-----
Rineloricaria sp.	-----	-----	-----	-----
Loricariichthys platymetopon	-----	-----	-----	-----
Loricariichthys castaneus	-----	-----	-----	-----
Loricaria cataphracta	---ATTATATAAATTATTACAT	TATACATT	-----	-----
Otocinclus cf. hoppei	CATAATGTATTATAGTGTTA	CATATA	-----	-----
Hypoptopoma incognitum	AGTGTATATATAGCACAATAT	ATATACATATCACACAGTAC	ACTGTACCACCTGACCCCTAA	CATAAACTATTTATTTTACA
Parotocinclus maculicauda	-----	-----	-----	-----
Hisonotus thayeri	-----	-----	-----	-----
Kronichthys heylandi	AGTACTGTATTATGTTACAC	ACGATCCTGTAATGCTGTAC	TACTGTAATACACCCCAACA	CATTGTAGGATATTATAGTA
Neoplecostomini gen. n.	-----	-----	-----	-----
Neoplecostomus microps	A-TATTATATTATATTATAT	TATATTATATTATATTAT	-----	-----
Pareiorhaphis garbei	-----	-----	-----	-----
Schizolecis guntheri	-----	-----	-----	-----
Ancistrus sp. 1	GATTTTATATAAATAAAAAAA	-----	-----	-----
Ancistrus sp. 2	-----	-----	-----	-----
Ancistrus multispinis	-----	-----	-----	-----
Dekeyseria amazonica	A-TATTATATTATA	-----	-----	-----
Baryancistrus xanthellus	AATTATACATTACACCTGAT	TCTACAT	-----	-----
Pterygoplichthys sp.	TAAAATACAT	-----	-----	-----
Pterygoplichthys pardalis	TATATAAAATCACAC	-----	-----	-----
Hypostomus sp.	A-TATTATATTATATTATAT	TA	-----	-----
Hypostomus cf. plecostomus	A-TATTATATTATATTATAT	TATATTATATTATATTATAT	TATATTATATTATATTATTC	CACAC
Hypostomus affinis	TATATTATAT	-----	-----	-----
Aphanotorulus emarginatus	A-TTAT-TATATTATTATAT	TATTATATTA	-----	-----
Peckoltia furcata	TATACATATATATATACT	-----	-----	-----
Ancistomus snethlageae	A-TATTATATTATATTATAT	TATATTA	-----	-----
Panaqolus sp.	A-TATTATATTA	-----	-----	-----
P.disjunctivus_NC015747	TATATTATAATATAATATAT	TACAAAATCACAC	-----	-----

1601

Corydoras schwartzi	-----	-----	-----
Corydoras nattereri	-----	-----	-----
Hemipsilichthys nimius	-----	-----	-----
Rineloricaria cf. lanceolata	-----	-----	-----
Rineloricaria sp.	-----	-----	-----
Loricariichthys platymetopon	-----	-----	-----
Loricariichthys castaneus	-----	-----	-----
Loricaria cataphracta	-----	-----	-----
Otocinclus cf. hoppei	-----	-----	-----
Hypoptopoma incognitum	TACACAATAATAACAACACAC	CCAG	-----
Parotocinclus maculicauda	-----	-----	-----
Hisonotus thayeri	-----	-----	-----
Kronichthys heylandi	TATCCTTATATATTCTATTA	TGATCATTATATATATATAT	AACAT
Neoplecostomini gen. n.	-----	-----	-----
Neoplecostomus microps	-----	-----	-----
Pareiorhaphis garbei	-----	-----	-----
Schizolecis guntheri	-----	-----	-----
Ancistrus sp. 1	-----	-----	-----
Ancistrus sp. 2	-----	-----	-----
Ancistrus multispinis	-----	-----	-----
Dekeyseria amazonica	-----	-----	-----
Baryancistrus xanthellus	-----	-----	-----
Pterygoplichthys sp.	-----	-----	-----
Pterygoplichthys pardalis	-----	-----	-----
Hypostomus sp.	-----	-----	-----
Hypostomus cf. plecostomus	-----	-----	-----
Hypostomus affinis	-----	-----	-----
Aphanotorulus emarginatus	-----	-----	-----
Peckoltia furcata	-----	-----	-----
Ancistomus snethlageae	-----	-----	-----
Panaqolus sp.	-----	-----	-----
P.disjunctivus_NC015747	-----	-----	-----