AT1

Sampling sites in the area of influence of the Ituango hydroelectric project between 2010 and 2018

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Environments** | **Site** | **Code site** | **Elevation (mamsl)** | **Geographic data (WGS84)** |
| **Longitude** | **Latitude** |
| Lower basin streams (LBS) | Quebrada Valdivia parte baja | E22c | 154 | -75.39242 | 7.28701 |
| Quebrada Valdivia parte media | E19c | 141 | -75.39258 | 7.28590 |
| Lower Cauca River basin (LCR) | Achí | E32 | 19 | -74.55302 | 8.56894 |
| Cáceres | E11 | 75 | -75.35590 | 7.58267 |
| El Doce | E10 | 98 | -75.30617 | 7.44260 |
| Guaranda | E31 | 20 | -74.53420 | 8.47097 |
| Jardín | E12 | 63 | -75.25902 | 7.74825 |
| Punta Cartagena | E38 | 16 | -74.47457 | 8.89372 |
| Río Cauca sector Nechí | E18 | 30 | -74.77586 | 8.10074 |
| San Jacinto del Cauca | E25 | 28 | -74.75443 | 8.20210 |
| Tres Cruces | E35 | 17 | -74.51911 | 8.70418 |
| Middle basin creeks (MBC) | La Guamera | E09 | 135 | -75.44500 | 7.24968 |
| Quebrada Burundá | QAE17 | 739 | -75.68235 | 7.12149 |
| Quebrada Chirí | QAE16 | 577 | -75.66245 | 7.09011 |
| Quebrada La Aguada | QAE04 | 476 | -75.83764 | 6.68231 |
| Quebrada La Barbuda | QAE02 | 493 | -75.81100 | 6.63041 |
| Quebrada La Chorquina | QAE01 | 487 | -75.81765 | 6.59515 |
| Quebrada La Honda | QAE06 | 541 | -75.86097 | 6.78600 |
| Quebrada La Jerigua | QAE09 | 558 | -75.83762 | 6.92925 |
| Quebrada La Niquia | QAE08 | 524 | -75.83476 | 6.86443 |
| Quebrada La Sucia | QAE05 | 467 | -75.85384 | 6.71592 |
| Quebrada Santa María | QAE14 | 478 | -75.75786 | 7.03011 |
| Quebrada Sardinas | QAE15 | 472 | -75.73998 | 7.10313 |
| Middle basin streams (MBR) | Río Espíritu Santo parte baja | E24 | 149 | -75.43864 | 7.25121 |
| Río Espíritu Santo parte media | E23 | 529 | -75.51664 | 7.15268 |
| Río Ituango parte baja | E21 | 364 | -75.66765 | 7.14567 |
| Río Ituango parte media | E20 | 573 | -75.68951 | 7.17162 |
| Río San Andrés | E04 | 245 | -75.68781 | 7.08423 |
| Río Espíritu Santo parte alta | E22 | 1823 | -75.50455 | 7.00628 |
| Río Ituango parte alta | E19 | 543 | -75.69849 | 7.18415 |
| Quebrada Juan García | QAE03 | 513 | -75.82578 | 6.65562 |
| Quebrada La Pená | QAE13 | 554 | -75.79413 | 7.05784 |
| Quebrada Las Cuatro | QAE07 | 507 | -75.85610 | 6.86090 |
| Quebrada Peque parte alta | QAE10 | 1036 | -75.90457 | 7.01600 |
| Quebrada Peque parte baja | QAE12 | 440 | -75.82025 | 7.00066 |
| Quebrada Peque parte media | QAE11 | 903 | -75.88143 | 7.01336 |
| Middle Cauca River basin (MCR) | Bolombolo | E01 | 535 | -75.84093 | 5.96718 |
| El Aro | E08 | 225 | -75.55196 | 7.20278 |
| Gurimán | E06 | 221 | -75.60747 | 7.17404 |
| Ituango cauce principal | E05 | 231 | -75.66094 | 7.13767 |
| Palestina | E07 | 212 | -75.57918 | 7.19218 |
| Puente Real | E02 | 451 | -75.81795 | 6.51405 |
| Liborina | E3.1 | 444 | -75.83448 | 6.67606 |
| Sabanalarga | E3 | 351 | -75.84247 | 6.86374 |
| Swamp (SWP) | Barrio Chino | E14 | 46 | -75.09415 | 8.00980 |
| Ciénaga Ciritongo | E28 | 19 | -74.54261 | 8.30835 |
| Ciénaga El Floral | E34 | 12 | -74.46168 | 8.73203 |
| Ciénaga Grande | E29 | 19 | -74.49453 | 8.33257 |
| Ciénaga La Caimanera | E30 | 19 | -74.49279 | 8.27085 |
| Ciénaga La Ilusión | E15 | 41 | -75.09079 | 8.02069 |
| Ciénaga La Panela | E36 | 15 | -74.45268 | 8.87740 |
| Ciénaga La Raya | E27 | 19 | -74.51889 | 8.31838 |
| Ciénaga Las Culebras | E26 | 21 | -74.53910 | 8.33914 |
| Ciénaga Nueva | E33 | 11 | -74.46201 | 8.69821 |
| Ciénaga Palomar | E16 | 37 | -74.97574 | 8.00296 |
| Ciénaga Piqué | E37 | 15 | -74.44851 | 8.86149 |
| Margento | E17 | 37 | -74.96436 | 8.02148 |
| Río Man | E13 | 45 | -75.20753 | 7.95647 |

AT2

List of recorded species and number of collected specimens in each environment, in the area of influence of the Ituango hydroelectric project between 2010 and 2018

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Species/morphospecies** | **Voucher specimens - CIUA** | **MCR** | **MBS** | **MBC** | **LCR** | **LBS** | **SWP** | **Total** |
| **Acestrorhynchidae** |  |  |  |  |  |  |  |  |
| *Gilbertolus alatus* (Steindachner 1878) | 5768, 6726, 7103, 7121 | 2 |  |  | 66 |  | 1 191 | 1 259 |
| **Anostomidae** |  |  |  |  |  |  |  |  |
| *Abramites eques* (Steindachner 1878) | 6140, 7100, 7140, 7250  |  |  |  | 2 |  | 49 | 51 |
| *Leporellus vittatus* (Valenciennes 1850) | 5624, 5675, 6936, 6976 | 7 | 7 | 36 | 6 |  | 14 | 70 |
| Leporinus striatus Kner, 1858 | 6953, 7236 | 1 | 2 |  | 5 | 1 | 22 | 31 |
| *Megaleporinus muyscorum* (Steindachner 1900) | 5573, 5695, 5855, 5857, 6125, 6354, 6443, 6502, 6808, 6849, 7227, 7286 | 66 | 46 | 67 | 616 | 1 | 898 | 1 694 |
| **Apteronotidae** |  |  |  |  |  |  |  |  |
| *Apteronotus eschmeyeri* Maldonado-Ocampo, Severi & Mendes 2004 | 5703, 6384, 6570, 6887, 7305 | 327 | 32 | 14 | 7 |  | 29 | 409 |
| *Apteronotus magdalenensis* (Miles 1945) | 6399 |  |  |  |  |  | 1 | 1 |
| *Apteronotus mariae* (Eigenmann & Fisher 1914) | 6054 | 17 | 1 | 5 | 18 |  | 54 | 95 |
| *Apteronotus rostratus* (Meek & Hildebrand 1913) |  | 1 |  |  |  |  |  | 1 |
| **Aspredinidae** |  |  |  |  |  |  |  |  |
| *Bunocephalus colombianus* Eigenmann 1912 | 6544, 7076 |  |  |  | 2 |  | 7 | 9 |
| *Dupouyichthys sapito* Schultz, 1944 |  |  |  |  |  |  | 1 | 1 |
| **Astroblepidae** |  |  |  |  |  |  |  |  |
| *Astroblepus chapmani* (Eigenmann 1912) |  | 1 | 115 | 61 |  |  |  | 177 |
| *Astroblepus frenatus* Eigenmann 1918 |  |  | 6 | 1 |  |  |  | 7 |
| *Astroblepus grixalvii* Humboldt 1805 | 6657, 7176 | 2 |  | 33 |  |  |  | 35 |
| *Astroblepus guentheri* (Boulenger 1887) |  |  | 17 | 61 |  |  |  | 78 |
| *Astroblepus homodon* (Regan 1904) |  | 14 | 84 | 115 |  |  |  | 213 |
| *Astroblepus micrescens* Eigenmann 1918 |  |  | 11 | 94 |  |  |  | 105 |
| *Astroblepus nicefori* Myers 1932 |  |  | 1 | 1 |  |  |  | 2 |
| *Astroblepus* sp. Humboldt 1805 | 5618, 5622, 5625, 5699, 5710, 5713, 5718, 5897, 5973, 6001, 6024, 6310, 6326, 6333, 6573, 6841, 6929, 7189 | 6 | 258 | 234 | 10 |  |  | 508 |
| **Auchenipteridae** |  | 3 |  |  | 1 071 |  | 4 637 | 5 711 |
| *Ageneiosus pardalis* Lütken 1874 | 5779, 6077, 6147, 6699, 6949, 7239, 7240, 7265, 7277m 7283, 7284, 7309 | 3 |  |  | 190 |  | 340 | 533 |
| *Trachelyopterus insignis* (Steindachner 1878) | 5909, 5927, 5946, 6053, 6076, 6107, 6119, 6130, 6138, 6145, 6191, 6209, 6221, 6247, 6484, 6757, 6828, 7011, 7022, 7095, 7253, 7290 |  |  |  | 881 |  | 4 297 | 5 178 |
| **Bryconidae** |  |  |  |  |  |  |  |  |
| *Brycon henni* Eigenmann, 1913 | 5605, 5606, 5613, 5623, 5636, 5643, 5702, 5704, 5841, 5970, 6003, 6111, 6320,6659, 6667, 6734, 6891, 6934, 7087 | 70 | 688 | 816 | 13 | 2 | 5 | 1 594 |
| *Brycon moorei* Steindachner, 1878 | 6371, 6377, 6606, 6935, 6962, 6965, 7081, 7313, 7314 | 27 | 69 | 20 | 7 | 2 | 18 | 143 |
| *Brycon rubricauda* Steindachner, 1879 | 5641, 5681, 5726, 5740, 5829, 5979, 5980, 6069, 6159, 6249, 6442, 6527, 6652, 7271 | 7 | 91 | 118 |  |  | 1 | 217 |
| *Salminus affinis* Steindachner, 1880 | 5834, 5836, 6059, 6066, 6357, 6402, 6444, 6551, 6607, 6612, 6648, 6780, 6945, 6959, 6966, 7005, 7044 | 5 | 38 | 25 | 10 | 1 | 17 | 96 |
| **Callichthyidae** |  |  |  |  |  |  |  |  |
| *Callichthys fabricioi* Román-Valencia, Lehmann A. & Muñoz 1999 |  |  |  |  |  |  | 45 | 45 |
| *Hoplosternum magdalenae* Eigenmann, 1913 | 5794, 6246, 6260, 6409, 6559, 6704, 6823, 6869, 7090, 7173, 7225, 7270 | 5 |  |  | 8 |  | 761 | 774 |
| **Cetopsidae** |  |  |  |  |  |  |  |  |
| *Cetopsis othonops* (Eigenmann 1912) |  | 2 | 1 |  | 14 | 2 | 6 | 25 |
| **Characidae** |  |  |  |  |  |  |  |  |
| *Argopleura magdalenensis* (Eigenmann 1913) | 5581, 5762, 5824, 5884, 5887, 5892, 5996, 6116, 6581, 6690, 6806, 7169, 7180 | 3 842 | 205 | 379 | 669 | 81 | 860 | 6 036 |
| *Astyanax caucanus* (Steindachner 1879) |  | 11 | 79 | 11 | 248 | 14 | 2 502 | 2 865 |
| *Astyanax filiferus* (Eigenmann 1913) |  | 1 |  |  | 1 |  |  | 2 |
| *Astyanax magdalenae* Eigenmann & Henn 1916 | 5593, 5598, 5785, 5796, 5812, 6040, 6103, 6204, 6291, 6352, 6415, 6436, 6477, 6503, 6691, 6742, 6772, 7010, 7032, 70657102, 7115, 7214, 7248 | 364 | 41 | 63 | 2 097 | 83 | 5 384 | 8 032 |
| *Astyanax microlepis* Eigenmann 1913 | 7144, 7150, 7160 | 26 | 4 |  |  |  | 1 | 31 |
| *Astyanax* sp. Baird & Girard 1854 | 5587, 5591, 5609, 5610, 5648, 5683, 5685, 5709, 5790, 5890, 5899, 5976, 6108, 6115, 6230, 6257, 6262, 6270, 6290, 6316, 6413, 6530, 6574, 6635, 6773, 6807, 6836, 6842, 6886, 6924, 6933, 6941, 6968, 7053, 7061, 7091, 7111, 7116 | 640 | 75 | 726 | 1 055 | 45 | 9 184 | 11 725 |
| *Creagrutus affinis* Steindachner 1880 | 5715, 6611 | 33 |  | 22 | 12 |  | 27 | 94 |
| *Creagrutus brevipinnis* Eigenmann, 1913 | 5597, 5676, 5800, 5810, 5977, 5989, 6007, 6281, 6454, 6467, 6653, 6669, 6682, 6689, 6917 | 440 | 95 | 306 | 172 | 162 | 395 | 1 570 |
| *Creagrutus caucanus* Eigenmann, 1913 | 5888 | 140 | 24 | 112 | 34 |  | 148 | 458 |
| *Creagrutus magdalenae* Eigenmann, 1913 | 5580, 5619, 5634, 5821, 5826, 5900, 5924, 5999, 6047, 6105, 6188, 6236, 6266, 6279, 6323, 6661, 6688, 6892, 6895, 6913, 7048 | 182 | 29 | 94 | 65 | 148 | 230 | 748 |
| *Cynopotamus magdalenae* (Steindachner 1879) | 5761, 5844, 5868, 5913, 6052, 6151, 6152, 6525, 6526, 6538, 6637, 6710, 6721, 6771, 6907, 7071, 7113 | 1 | 5 | 4 | 320 |  | 416 | 746 |
| *Genycharax tarpon* Eigenmann, 1912 | 5963, 6308 | 3 |  |  |  |  |  | 3 |
| *Gephyrocharax melanocheir* Eigenmann, 1912 | 5788, 6280 |  |  |  | 6 |  | 6 | 12 |
| *Hemibrycon boquiae* (Eigenmann 1913) |  | 35 | 33 | 100 |  | 4 | 59 | 231 |
| *Hemibrycon caucanus* (Eigenmann 1913) | 5626, 5655, 5684, 5772, 5823, 5876, 5978, 5988, 6006, 6011, 6185, 6271, 6311, 6322, 6329, 6660, 6874, 6942, 7049, 7193, 7196, 7197, 7205 | 2 | 18 | 47 |  |  | 11 | 78 |
| *Hemibrycon dentatus* (Eigenmann 1913) |  | 1 | 3 | 25 | 1 |  |  | 30 |
| *Hyphessobrycon poecilioides* Eigenmann, 1913 |  | 1 |  |  |  |  | 220 | 221 |
| *Hyphessobrycon proteus* Eigenmann, 1913 | 5612, 5627, 5687, 5954, 5974, 5986, 6000, 6010, 6284, 6319, 6595, 6656, 6923, 6972 | 31 | 4 | 5 | 3 |  | 284 | 327 |
| *Microgenys minuta* Eigenmann, 1913 | 5584, 6670, 6846, 6975 | 8 |  |  | 1 |  | 5 | 14 |
| *Roeboides dayi* (Steindachner 1878) | 5637, 5717, 5783, 5791, 5817, 5893, 5922, 5947, 5987, 5998, 6017, 6023, 6089, 6102, 6112, 6123, 6126, 6200, 6216, 6394, 6414, 6422, 6489, 6532, 6537, 6547, 6575, 6638, 6701, 6810, 6831, 6878, 6896, 6904, 7020, 7026, 7030, 7079, 7089, 7109 | 19 | 6 | 4 | 310 | 1 | 7 154 | 7 494 |
| *Saccoderma hastata* (Eigenmann 1913) |  |  |  |  | 24 |  | 520 | 544 |
| **Cichlidae** |  |  |  |  |  |  |  |  |
| *Andinoacara latifrons* (Steindachner 1878) | 5600, 5631, 5801, 5807, 5917, 5929, 6018, 6041, 6292, 6426, 6512, 6577, 6626, 6723, 6750, 6802, 6805, 6833, 7056, 7077 | 12 |  |  | 94 |  | 840 | 946 |
| *Caquetaia kraussii* (Steindachner 1878) | 5602, 5611, 5615, 5686, 5720, 5733, 5747, 5804, 5908, 5949, 5968, 5993, 6015, 6035, 6064, 6136, 6210, 6224, 6293, 6330, 6338, 6367, 6416, 6418, 6464, 6487, 6491, 6513, 6517, 6826, 6837, 6844, 6870, 6902, 6990, 6999, 7025, 7035 | 23 | 1 |  | 104 |  | 2 766 | 2 894 |
| *Geophagus steindachneri* Eigenmann & Hildebrand, 1922 | 6946, 6967, 7218, 7237, 7238, 7297 | 15 |  |  | 1 |  | 41 | 57 |
| *Kronoheros umbriferus* (Meek & Hildebrand 1913) |  |  |  | 1 |  |  | 24 | 25 |
| *Oreochromis mossambicus* (Peters 1852) |  |  |  |  |  |  | 1 | 1 |
| *Oreochromis niloticus* (Linnaeus 1758) | 5674, 5712, 5714, 5730, 5904, 6012, 6070, 6427, 6550, 6555, 6629, 7006, 7019 | 40 |  |  | 1 |  | 102 | 143 |
| *Oreochromis* sp. Günther, 1889 |  | 2 |  | 1 |  |  | 121 | 124 |
| **Crenuchidae** |  |  |  |  |  |  |  |  |
| *Characidium caucanum* Eigenmann 1912 |  |  |  | 2 | 12 |  | 7 | 21 |
| *Characidium phoxocephalum* Eigenmann, 1912 |  |  | 1 |  |  |  |  | 1 |
| **Ctenoluciidae** |  |  |  |  |  |  |  |  |
| *Ctenolucius hujeta* (Valenciennes 1850) | 5744, 5872, 5874, 5921, 5936, 5948, 6036, 6068, 6127, 6273, 6301, 6397, 6501, 6518, 6740, 6752, 6803, 6825, 6850 | 8 |  | 1 | 102 |  | 1 316 | 1 427 |
| **Curimatidae** |  |  |  |  |  |  |  |  |
| *Curimata mivartii* Steindachner, 1878 | 6166, 6192, 6193, 6205, 6400, 6441, 6534, 6601, 6755, 6851, 6881, 6992, 6994, 7018, 7031, 7070 | 1 | 2 | 1 | 149 |  | 711 | 864 |
| *Cyphocharax magdalenae* (Steindachner 1878) | 6404, 6410, 6425, 6437, 6446, 6505, 6506, 6564, 6762, 6788, 6800, 6822, 6866, 6894, 6995, 7034, 7074, 7097, 7106, 7108, 7114, 7217 | 3 | 5 |  | 919 |  | 20 538 | 21 465 |
| **Doradidae** |  |  |  |  |  |  |  |  |
| *Centrochir crocodili* (Humboldt 1821) | 5764, 5856, 5932, 6144, 6146, 6235, 6481, 6695, 6737, 6751, 6795, 7007, 7098, 7249, 7273, 7274 |  |  |  | 266 |  | 830 | 1 096 |
| **Engraulidae** |  |  |  |  |  |  |  |  |
| *Anchoa trinitatis* (Fowler 1915) | 6797, 6952, 7241, 7254, 7255 |  |  |  | 1 |  | 28 | 29 |
| **Erythrinidae** |  |  |  |  |  |  |  |  |
| *Hoplias malabaricus* (Bloch 1794) | 5915, 6051, 6401, 6412, 6482, 6510, 6514, 6562, 6622, 6713, 6955, 6957, 6964 |  |  |  | 14 |  | 376 | 390 |
| **Heptapteridae** |  |  |  |  |  |  |  |  |
| *Cetopsorhamdia boquillae* Eigenmann, 1922 |  |  | 1 |  |  |  |  | 1 |
| *Cetopsorhamdia nasus* Eigenmann & Fisher, 1916 | 5616, 5633, 6014, 6029, 6309, 6335, 6358, 6686, 6919, 6930, 6977, 6979 | 3 | 17 | 48 |  | 2 | 13 | 83 |
| *Imparfinis nemacheir* (Eigenmann & Fisher 1916) | 6022, 6462, 6817 |  | 1 |  | 5 |  | 18 | 24 |
| *Pimelodella chagresi* (Steindachner 1876) |  | 11 |  |  | 47 | 13 | 187 | 258 |
| *Pimelodella macrocephala* (Miles 1943) | 5592, 5596, 5652, 5708, 5802, 5984, 6046, 6131, 6285, 6470, 6811, 6853 | 6 |  |  | 18 |  | 29 | 53 |
| *Rhamdia guatemalensis* (Günther 1864) | 5628, 5639, 5660, 5672, 5691, 5696, 6214, 6222, 6345, 6673, 6705, 6813, 6905, 6928, 6954, 6956 | 5 |  | 2 | 65 |  | 169 | 241 |
| **Loricariidae** |  |  |  |  |  |  |  |  |
| *Chaetostoma brevilabiatum* Dahl, 1942 | 5664, 5812, 6008, 6021, 6250, 6268, 6340, 6816, 6880, 6884, 6890, 6898, 6939, 7047, 7085 | 91 | 45 | 56 | 11 | 6 | 10 | 219 |
| *Chaetostoma fischeri* Steindachner, 1879 |  | 66 | 19 | 18 | 7 | 3 | 7 | 120 |
| *Chaetostoma milesi* Fowler, 1941 |  | 14 | 3 | 3 | 2 |  |  | 22 |
| *Chaetostoma thomsoni* Regan, 1904 | 5575, 5603, 5640, 5694, 5697, 5789, 5805, 5859, 5880, 5928, 5965, 6058, 6067, 6251, 6347, 6450, 6889, 7041 | 131 | 36 | 34 | 7 | 14 | 6 | 228 |
| *Cordylancistrus pijao* Provenzano & Villa-Navarro 2017 | 6037 |  |  |  | 1 |  |  | 1 |
| *Crossoloricaria cephalaspis* Isbrücker 1979 | 7326 |  |  | 2 | 38 | 4 | 50 | 94 |
| *Dasyloricaria filamentosa* (Steindachner 1878) | 5766, 5786, 5939, 6048, 6122, 6423, 6474, 6504, 6557, 6568, 6709, 6862, 6864, 6900, 7302, 7315, 7316, 7325 | 1 |  |  | 71 |  | 515 | 587 |
| *Hypostomus hondae* (Regan 1912) | 5574, 5576, 5734, 5742, 5803, 6157, 6177, 6180, 6254, 6350, 6370, 6651, 6859, 6879, 6882, 7088 | 241 | 13 | 24 | 15 |  | 35 | 328 |
| *Isorineloricaria tenuicauda* (Steindachner 1878) | 5585, 6189, 6432 | 434 |  | 7 | 12 | 4 | 35 | 492 |
| *Lasiancistrus caucanus* Eigenmann, 1912 | 5663, 5828, 6666, 6685 |  |  |  |  | 1 |  | 1 |
| *Loricariichthys brunneus* (Hancock 1828) | 5586, 5757, 5847, 5861, 5867, 5944, 6050, 6155, 6207, 6231, 6233, 6241, 6269, 6421, 6541, 6578, 6583, 6665, 6697, 6708, 6720, 6732, 6778, 6783, 6784, 6791, 6865, 6909, 6927, 7038, 7072 | 40 |  |  | 17 | 1 | 203 | 261 |
| *Panaque cochliodon* (Steindachner 1879) |  | 5 |  |  |  |  |  | 5 |
| *Pterygoplichthys undecimalis* (Steindachner 1878) | 6097, 6100, 6101, 6337 | 9 |  | 2 | 1 |  | 12 | 24 |
| *Rineloricaria magdalenae* (Steindachner 1879) | 5719, 5945, 6234, 6529, 7223, 7256, 7324 | 25 | 1 |  | 18 |  | 173 | 217 |
| *Spatuloricaria gymnogaster* (Eigenmann & Vance 1912) | 5799, 5863, 6039, 6057, 6141, 6298, 6304, 6718, 6719, 6899, 6920 | 3 |  | 2 | 20 |  | 32 | 57 |
| *Sturisomatichthys aureus* (Steindachner 1900) | 7233, 7234, 7235, 7257, 7260, 7304, 7308 |  |  |  | 2 |  | 3 | 5 |
| *Sturisomatichthys leightoni* (Regan 1912) | 5583, 5822, 6033, 6256, 6277, 6456, 6471, 6580, 6717, 6861, 7213 | 1 |  |  | 1 |  | 7 | 9 |
| *Sturisomatichthys panamensis* (Eigenmann & Eigenmann 1889) | 5763, 5798, 5811, 5820,6083 | 11 | 2 | 5 | 22 | 1 | 77 | 118 |
| **Megalopidae** |  |  |  |  |  |  |  |  |
| *Megalops atlanticus* Valenciennes, 1847 |  |  |  |  |  |  | 2 | 2 |
| **Osphronemidae** |  |  |  |  |  |  |  |  |
| *Trichopodus pectoralis* Regan, 1910 | 5792, 5797, 6287, 6455, 6712, 6838, 6893, 7228, 7300, 7303 | 2 |  |  | 66 |  | 821 | 889 |
| **Parodontidae** |  |  |  |  |  |  |  |  |
| *Parodon magdalenensis* Londoño-Burbano, Román-Valencia & Taphorn, 2011 | 5594, 5629, 5671, 5673, 6274, 6318, 6324, 6359, 6360, 6931, 6969, 6983 | 6 | 1 | 26 | 6 | 6 | 14 | 59 |
| *Saccodon dariensis* (Meek & Hildebrand 1913) | 5677, 6981 |  |  | 1 |  |  |  | 1 |
| **Pimelodidae** |  |  |  |  |  |  |  |  |
| *Megalonema xanthum* Eigenmann, 1912 |  | 6 | 13 | 2 | 45 |  | 23 | 89 |
| *Pimelodus grosskopfii* Steindachner, 1879 | 5595, 5651, 5658, 5700, 57455825, 5905, 5991, 6027, 6199, 6201, 6227, 6313, 6341, 6390, 6419, 6678, 6855, 6901, 6940, 7002, 7013, 7107, 7251, 7262, 7281 | 440 | 101 | 80 | 1 849 | 2 | 1 053 | 3 525 |
| *Pimelodus yuma* Villa-Navarro & Acero P., 2017 | 5665, 5782, 5819, 5842, 5850, 5940, 6044, 6117, 6219, 6408, 6466, 6714, 6775, 6832, 6853, 6996, 7003, 7222, 7229, 7266, 7268, 7269, 7282 | 76 | 34 | 37 | 528 |  | 1 281 | 1 956 |
| *Pseudoplatystoma magdaleniatum* Buitrago-Suárez & Burr, 2007 | 5951, 6511, 6707, 6730, 6747, 7051, 7289 | 1 | 2 | 1 | 51 |  | 142 | 197 |
| *Sorubim cuspicaudus* Littmann, Burr & Nass, 2000 | 5865, 5918, 6043, 6603, 6614, 6621, 6641, 6644, 6739, 6765, 6781, 6950, 6963, 7264, 7291, 7299 | 4 | 18 | 5 | 163 |  | 309 | 499 |
| **Poeciliidae** |  |  |  |  |  |  |  |  |
| *Poecilia caucana* (Steindachner 1880) | 6114, 7306 | 433 | 51 | 373 | 21 |  | 9 | 887 |
| **Potamotrygonidae** |  |  |  |  |  |  |  |  |
| *Potamotrygon magdalenae* (Duméril 1865) | 6938, 6951 |  |  |  | 11 |  | 75 | 86 |
| **Prochilodontidae** |  |  |  |  |  |  |  |  |
| *Ichthyoelephas longirostris* (Steindachner 1879) | 5735, 5736, 5746, 5752, 5832, 5862, 6062, 6069, 6171, 6353, 6355, 6452, 6588, 6588, 6598, 6615, 6639, 6646, 6650, 6662, 6987, 7052, 7082, 7298 | 22 | 43 | 15 | 15 | 7 | 102 | 204 |
| *Prochilodus magdalenae* Steindachner, 1879 | 5743, 5750, 5755, 5728, 5831, 5840, 5843, 5845, 5870, 5911, 5930, 6056, 6060, 6099, 6143, 6174, 6175, 6356, 6374, 6378, 6407, 6448, 6453, 6567, 6586, 6597, 6600, 6602, 6642, 6647, 6731, 6756, 6787, 6857, 6906, 7021, 7023, 7050, 7058, 7063, 7083, 7093, 7112 | 290 | 117 | 76 | 541 | 26 | 1 265 | 2 315 |
| **Pseudopimelodidae** |  |  |  |  |  |  |  |  |
| *Pseudopimelodus atricaudus* Restrepo-Gómez, Rangel-Medrano, Márquez & Ortega-Lara 2020 | 7242, 7244, 7246, 7287, 7310, 7319, 7320, 7321, 7322, 7323 |  |  |  | 109 | 3 | 94 | 206 |
| *Pseudopimelodus magnus* Restrepo-Gómez, Rangel-Medrano, Márquez & Ortega-Lara 2020 | 7275, 7292, 7295, 7307, 7311 | 40 | 13 | 6 |  |  |  | 59 |
| **Sciaenidae** |  |  |  |  |  |  |  |  |
| *Plagioscion magdalenae* (Steindachner 1878) | 6055, 6081, 6160, 6206, 6655, 6700, 6711, 6758, 6947 |  | 6 |  | 16 |  | 140 | 162 |
| **Serrasalmidae** |  |  |  |  |  |  |  |  |
| *Colossoma macropomum* (Cuvier 1816) | 7293 |  |  |  |  |  | 20 | 20 |
| *Piaractus brachypomus* (Cuvier 1818) | 6095, 6098, 6332, 6376, 7263, 7276 | 1 |  |  |  |  | 10 | 11 |
| **Sternopygidae** |  |  |  |  |  |  |  |  |
| *Eigenmannia humboldtii* (Steindachner 1878) | 5778, 5813, 5938, 5959, 6080, 6135, 6194, 6196, 6430, 6475, 6540, 6546, 6618, 6619, 6631, 6643, 6768, 6794, 6827, 6854, 6858, 6863 |  |  |  | 11 |  | 32 | 43 |
| *Eigenmannia virescens* (Valenciennes 1836) |  | 7 |  | 3 | 487 |  | 1 522 | 2 019 |
| *Eigenmannia zenuensis* Herrera-Collazos, Galindo-Cuervo, Maldonado-Ocampo & Rincón-Sandoval 2020 | 7258, 7259 |  |  |  | 1 |  | 2 | 3 |
| *Sternopygus aequilabiatus* (Humboldt 1805) | 6232, 6302, 6358, 6391, 6396, 6593, 6599, 6674, 6888, 6960, 7294 | 17 |  | 1 | 153 |  | 229 | 400 |
| **Synbranchidae** |  |  |  |  |  |  |  |  |
| *Synbranchus marmoratus* Bloch, 1795 |  |  |  |  |  |  | 2 | 2 |
| **Trichomycteridae** |  |  |  |  |  |  |  |  |
| *Trichomycterus chapmani* (Eigenmann 1912) | 6973 |  | 4 | 2 |  |  |  | 6 |
| *Trichomycterus* sp. Valenciennes 1832 | 5577, 5578, 5579, 5707, 5727, 5972, 6668, 6912, 6915, 6922, 6980, 7194, 7209 | 5 |  | 21 |  |  |  | 26 |
| **Triportheidae** |  |  |  |  |  |  |  |  |
| *Triportheus magdalenae* (Steindachner 1878) | 5780, 5781, 5833, 5848, 5851, 5866, 6049, 6071, 6133, 6134, 6149, 6208, 6215, 6243, 6252, 6294, 64066424, 6429, 6434, 6438, 6440, 6486, 6509, 6548, 6509, 6610, 6630, 6989, 7004, 7014, 7016, 7037, 7039, 7067, 7104, 7280, 7288 | 79 | 20 | 101 | 3 040 | 3 | 5 441 | 8 684 |
| **Overall Total** |  | 8 973 | 2 658 | 4 558 | 16 029 | 643 | 77 032 | 109 893 |

MCR: middle Cauca River basin, MBC: middle basin creeks, MBS: streams flowing into the middle Cauca River basin, LCR: lower Cauca River basin, LBS: streams flowing into the lower Cauca River basin, and SWP: swamps.

AT3

Diversity values of sampling sites. The first column presents the codes of each of the 58 sampled sites (the information of each site is available on Appendix 1); the rest of the columns present sample size (number of individuals (n)), diversity order (q), diversity order estimate q (qD), confidence limit of diversity above and below 95% (qD.LCL, qD.UCL), and sample coverage (SC) along with 95% below and above the confidence limits of the sample coverage (SC.LCL, SC.UCL).

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Code site** | **n** | **q** | **qD** | **qD (LCL)** | **qD (UCL)** | **SC** | **SC (LCL)** | **SC (UCL)** |
| **E01** | 9 490 | 0 | 55.03 | 49.66 | 60.39 | 1 | 0.99 | 1 |
| **E01** | 9 490 | 1 | 5.73 | 5.46 | 6.00 | 1 | 0.99 | 1 |
| **E01** | 9 490 | 2 | 2.81 | 2.69 | 2.94 | 1 | 0.99 | 1 |
| **E02** | 4 368 | 0 | 59.89 | 52.24 | 67.54 | 0.99 | 0.99 | 1 |
| **E02** | 4 368 | 1 | 13.80 | 13.09 | 14.51 | 0.99 | 0.99 | 1 |
| **E02** | 4 368 | 2 | 8.20 | 7.76 | 8.64 | 0.99 | 0.99 | 1 |
| **E04** | 184 | 0 | 21.35 | 14.43 | 28.28 | 0.97 | 0.93 | 1.01 |
| **E04** | 184 | 1 | 12.57 | 9.96 | 15.17 | 0.97 | 0.93 | 1.01 |
| **E04** | 184 | 2 | 9.93 | 7.67 | 12.19 | 0.97 | 0.93 | 1.00 |
| **E05** | 254 | 0 | 31.54 | 23.38 | 39.70 | 0.96 | 0.92 | 1.01 |
| **E05** | 254 | 1 | 16.60 | 13.25 | 19.95 | 0.96 | 0.93 | 1.00 |
| **E05** | 254 | 2 | 11.77 | 9.39 | 14.15 | 0.96 | 0.93 | 1.00 |
| **E06** | 502 | 0 | 29.55 | 22.41 | 36.70 | 0.99 | 0.97 | 1.01 |
| **E06** | 502 | 1 | 11.18 | 9.70 | 12.67 | 0.99 | 0.98 | 1.01 |
| **E06** | 502 | 2 | 7.67 | 6.59 | 8.75 | 0.99 | 0.98 | 1.01 |
| **E07** | 524 | 0 | 29.30 | 23.13 | 35.48 | 0.99 | 0.98 | 1.01 |
| **E07** | 524 | 1 | 13.20 | 11.50 | 14.90 | 0.99 | 0.98 | 1.01 |
| **E07** | 524 | 2 | 8.85 | 7.62 | 10.09 | 0.99 | 0.98 | 1.01 |
| **E08** | 1 008 | 0 | 37.51 | 29.15 | 45.87 | 0.99 | 0.98 | 0.99 |
| **E08** | 1 008 | 1 | 14.20 | 12.80 | 15.60 | 0.99 | 0.98 | 0.99 |
| **E08** | 1 008 | 2 | 10.89 | 9.99 | 11.78 | 0.99 | 0.98 | 1 |
| **E09** | 2 474 | 0 | 45.92 | 40.62 | 51.22 | 1 | 1 | 1 |
| **E09** | 2 474 | 1 | 14.89 | 13.97 | 15.81 | 1 | 1 | 1 |
| **E09** | 2 474 | 2 | 9.63 | 8.91 | 10.35 | 1 | 1 | 1 |
| **E10** | 2 630 | 0 | 54.61 | 47.77 | 61.45 | 1 | 1 | 1 |
| **E10** | 2 630 | 1 | 13.48 | 12.47 | 14.49 | 1 | 1 | 1 |
| **E10** | 2 630 | 2 | 7.56 | 6.83 | 8.28 | 1 | 1 | 1 |
| **E11** | 2 364 | 0 | 48.29 | 43.32 | 53.25 | 1 | 1 | 1 |
| **E11** | 2 364 | 1 | 18.83 | 17.47 | 20.20 | 1 | 1 | 1 |
| **E11** | 2 364 | 2 | 12.37 | 11.58 | 13.16 | 1 | 1 | 1 |
| **E12** | 2 574 | 0 | 65.17 | 58.84 | 71.50 | 1 | 1 | 1 |
| **E12** | 2 574 | 1 | 8.01 | 7.73 | 8.30 | 1 | 1 | 1 |
| **E12** | 2 574 | 2 | 3.64 | 3.50 | 3.77 | 1 | 1 | 1 |
| **E14** | 22 212 | 0 | 63.98 | 58.54 | 69.43 | 1 | 1 | 1 |
| **E14** | 22 212 | 1 | 13.59 | 13.25 | 13.93 | 1 | 1 | 1 |
| **E14** | 22 212 | 2 | 8.36 | 8.17 | 8.56 | 1 | 1 | 1 |
| **E15** | 23 348 | 0 | 66.35 | 59.88 | 72.81 | 1 | 1 | 1 |
| **E15** | 23 348 | 1 | 14.56 | 14.24 | 14.89 | 1 | 1 | 1 |
| **E15** | 23 348 | 2 | 8.69 | 8.44 | 8.93 | 1 | 1 | 1 |
| **E16** | 8 960 | 0 | 72.58 | 63.77 | 81.40 | 1 | 1 | 1 |
| **E16** | 8 960 | 1 | 20.43 | 19.72 | 21.14 | 1 | 1 | 1 |
| **E16** | 8 960 | 2 | 12.02 | 11.42 | 12.61 | 1 | 1 | 1 |
| **E17** | 4 972 | 0 | 62.81 | 52.67 | 72.96 | 1 | 1 | 1 |
| **E17** | 4 972 | 1 | 20.95 | 20.11 | 21.79 | 1 | 1 | 1 |
| **E17** | 4 972 | 2 | 15.85 | 15.28 | 16.42 | 1 | 1 | 1 |
| **E18** | 5 064 | 0 | 55.09 | 45.01 | 65.17 | 1 | 1 | 1 |
| **E18** | 5 064 | 1 | 16.76 | 16.11 | 17.41 | 1 | 1 | 1 |
| **E18** | 5 064 | 2 | 11.49 | 10.91 | 12.07 | 1 | 1 | 1 |
| **E19** | 162 | 0 | 7.16 | 4.26 | 10.07 | 1 | 0.99 | 1 |
| **E19** | 162 | 1 | 2.11 | 1.54 | 2.69 | 1 | 0.98 | 1 |
| **E19** | 162 | 2 | 1.41 | 1.15 | 1.68 | 1 | 0.99 | 1 |
| **E19c** | 732 | 0 | 25.16 | 20.26 | 30.06 | 1 | 0.99 | 1 |
| **E19c** | 732 | 1 | 8.38 | 7.26 | 9.51 | 1 | 0.99 | 1 |
| **E19c** | 732 | 2 | 5.26 | 4.60 | 5.92 | 1 | 0.99 | 1 |
| **E20** | 400 | 0 | 9.26 | 6.29 | 12.23 | 1 | 0.99 | 1 |
| **E20** | 400 | 1 | 1.78 | 1.49 | 2.08 | 1 | 0.99 | 1 |
| **E20** | 400 | 2 | 1.27 | 1.14 | 1.41 | 1 | 0.99 | 1 |
| **E21** | 438 | 0 | 24.43 | 18.48 | 30.38 | 0.99 | 0.98 | 1 |
| **E21** | 438 | 1 | 11.56 | 9.82 | 13.29 | 0.99 | 0.98 | 1 |
| **E21** | 438 | 2 | 8.06 | 6.76 | 9.37 | 0.99 | 0.98 | 1 |
| **E22** | 314 | 0 | 22.32 | 15.03 | 29.61 | 0.98 | 0.95 | 1 |
| **E22** | 314 | 1 | 6.89 | 5.50 | 8.28 | 0.98 | 0.95 | 1 |
| **E22** | 314 | 2 | 4.27 | 3.49 | 5.05 | 0.98 | 0.95 | 1 |
| **E22c** | 554 | 0 | 27.95 | 18.85 | 37.06 | 0.98 | 0.96 | 1 |
| **E22c** | 554 | 1 | 9.48 | 8.00 | 10.96 | 0.98 | 0.96 | 1 |
| **E22c** | 554 | 2 | 7.02 | 6.36 | 7.69 | 0.98 | 0.96 | 1 |
| **E23** | 296 | 0 | 17.92 | 11.14 | 24.70 | 0.98 | 0.96 | 1 |
| **E23** | 296 | 1 | 6.00 | 4.85 | 7.15 | 0.98 | 0.96 | 1 |
| **E23** | 296 | 2 | 3.89 | 3.13 | 4.65 | 0.98 | 0.96 | 1 |
| **E24** | 1 364 | 0 | 41.72 | 34.72 | 48.72 | 1 | 0.99 | 1 |
| **E24** | 1 364 | 1 | 16.66 | 15.16 | 18.17 | 1 | 0.99 | 1 |
| **E24** | 1 364 | 2 | 9.19 | 7.87 | 10.51 | 1 | 0.99 | 1 |
| **E25** | 2 486 | 0 | 59.70 | 49.24 | 70.17 | 0.99 | 0.99 | 1 |
| **E25** | 2 486 | 1 | 20.54 | 19.40 | 21.68 | 0.99 | 0.99 | 1 |
| **E25** | 2 486 | 2 | 14.77 | 13.89 | 15.64 | 0.99 | 0.99 | 1 |
| **E26** | 6 120 | 0 | 51.70 | 44.74 | 58.66 | 1 | 1 | 1 |
| **E26** | 6 120 | 1 | 13.11 | 12.39 | 13.82 | 1 | 1 | 1 |
| **E26** | 6 120 | 2 | 6.70 | 6.25 | 7.14 | 1 | 1 | 1 |
| **E27** | 4 190 | 0 | 58.07 | 47.50 | 68.64 | 1 | 0.99 | 1 |
| **E27** | 4 190 | 1 | 14.78 | 13.82 | 15.74 | 1 | 0.99 | 1 |
| **E27** | 4 190 | 2 | 8.49 | 7.98 | 9.00 | 1 | 0.99 | 1 |
| **E28** | 5 532 | 0 | 47.38 | 40.48 | 54.28 | 1 | 1 | 1 |
| **E28** | 5 532 | 1 | 11.79 | 11.21 | 12.36 | 1 | 1 | 1 |
| **E28** | 5 532 | 2 | 6.29 | 5.94 | 6.65 | 1 | 1 | 1 |
| **E29** | 8 942 | 0 | 52.79 | 47.16 | 58.42 | 1 | 1 | 1 |
| **E29** | 8 942 | 1 | 13.69 | 13.13 | 14.25 | 1 | 1 | 1 |
| **E29** | 8 942 | 2 | 6.97 | 6.62 | 7.31 | 1 | 1 | 1 |
| **E3** | 590 | 0 | 25.32 | 18.18 | 32.46 | 0.99 | 0.97 | 1 |
| **E3** | 590 | 1 | 5.28 | 4.46 | 6.11 | 0.99 | 0.97 | 1 |
| **E3** | 590 | 2 | 3.21 | 2.82 | 3.61 | 0.99 | 0.97 | 1 |
| **E3.1** | 1 210 | 0 | 34.62 | 26.29 | 42.96 | 0.99 | 0.99 | 1 |
| **E3.1** | 1 210 | 1 | 6.86 | 5.92 | 7.79 | 0.99 | 0.99 | 1 |
| **E3.1** | 1 210 | 2 | 3.12 | 2.67 | 3.58 | 0.99 | 0.99 | 1 |
| **E30** | 9 172 | 0 | 55.11 | 49.87 | 60.35 | 1 | 1 | 1 |
| **E30** | 9 172 | 1 | 12.36 | 11.88 | 12.84 | 1 | 1 | 1 |
| **E30** | 9 172 | 2 | 6.20 | 5.88 | 6.52 | 1 | 1 | 1 |
| **E31** | 5 020 | 0 | 52.27 | 43.10 | 61.43 | 1 | 1 | 1 |
| **E31** | 5 020 | 1 | 11.94 | 11.26 | 12.61 | 1 | 1 | 1 |
| **E31** | 5 020 | 2 | 7.73 | 7.37 | 8.09 | 1 | 1 | 1 |
| **E32** | 3 734 | 0 | 55.57 | 47.17 | 63.97 | 1 | 1 | 1 |
| **E32** | 3 734 | 1 | 19.92 | 18.88 | 20.96 | 1 | 1 | 1 |
| **E32** | 3 734 | 2 | 13.81 | 13.07 | 14.55 | 1 | 1 | 1 |
| **E33** | 8 440 | 0 | 51.57 | 44.88 | 58.25 | 1 | 1 | 1 |
| **E33** | 8 440 | 1 | 12.56 | 12.04 | 13.08 | 1 | 1 | 1 |
| **E33** | 8 440 | 2 | 7.51 | 7.15 | 7.86 | 1 | 1 | 1 |
| **E34** | 10 020 | 0 | 48.05 | 43.43 | 52.67 | 1 | 1 | 1 |
| **E34** | 10 020 | 1 | 11.98 | 11.57 | 12.39 | 1 | 1 | 1 |
| **E34** | 10 020 | 2 | 7.16 | 6.86 | 7.45 | 1 | 1 | 1 |
| **E35** | 3 242 | 0 | 47.17 | 39.46 | 54.88 | 1 | 1 | 1 |
| **E35** | 3 242 | 1 | 15.45 | 14.61 | 16.30 | 1 | 1 | 1 |
| **E35** | 3 242 | 2 | 10.15 | 9.49 | 10.81 | 1 | 1 | 1 |
| **E36** | 9 164 | 0 | 55.44 | 49.74 | 61.14 | 1 | 1 | 1 |
| **E36** | 9 164 | 1 | 13.15 | 12.66 | 13.64 | 1 | 1 | 1 |
| **E36** | 9 164 | 2 | 6.74 | 6.46 | 7.03 | 1 | 1 | 1 |
| **E37** | 14 548 | 0 | 64.48 | 55.70 | 73.26 | 1 | 1 | 1 |
| **E37** | 14 548 | 1 | 12.01 | 11.61 | 12.40 | 1 | 1 | 1 |
| **E37** | 14 548 | 2 | 6.33 | 6.09 | 6.56 | 1 | 1 | 1 |
| **E38** | 4 944 | 0 | 56.20 | 44.84 | 67.57 | 1 | 0.99 | 1 |
| **E38** | 4 944 | 1 | 11.87 | 11.27 | 12.48 | 1 | 0.99 | 1 |
| **E38** | 4 944 | 2 | 5.39 | 4.98 | 5.80 | 1 | 0.99 | 1 |
| **QAE01** | 324 | 0 | 1.00 | 1.00 | 1.00 | 1 | 1.00 | 1 |
| **QAE01** | 324 | 1 | 1.00 | 1.00 | 1.00 | 1 | 1.00 | 1 |
| **QAE01** | 324 | 2 | 1.00 | 1.00 | 1.00 | 1 | 1.00 | 1 |
| **QAE02** | 348 | 0 | 14.86 | 12.54 | 17.18 | 1 | 0.99 | 1 |
| **QAE02** | 348 | 1 | 9.39 | 8.30 | 10.48 | 1 | 0.99 | 1 |
| **QAE02** | 348 | 2 | 7.35 | 6.19 | 8.51 | 1 | 0.99 | 1 |
| **QAE03** | 358 | 0 | 11.86 | 9.30 | 14.42 | 1 | 0.99 | 1 |
| **QAE03** | 358 | 1 | 6.68 | 5.89 | 7.47 | 1 | 0.99 | 1 |
| **QAE03** | 358 | 2 | 5.34 | 4.58 | 6.11 | 1 | 0.99 | 1 |
| **QAE04** | 414 | 0 | 3.86 | 3.08 | 4.64 | 1 | 1 | 1 |
| **QAE04** | 414 | 1 | 1.07 | 1.00 | 1.14 | 1 | 1 | 1 |
| **QAE04** | 414 | 2 | 1.02 | 0.99 | 1.05 | 1 | 1 | 1 |
| **QAE05** | 1 064 | 0 | 29.15 | 23.38 | 34.92 | 1 | 0.99 | 1 |
| **QAE05** | 1 064 | 1 | 10.73 | 9.64 | 11.83 | 1 | 0.99 | 1 |
| **QAE05** | 1 064 | 2 | 6.18 | 5.48 | 6.89 | 1 | 0.99 | 1 |
| **QAE06** | 1 324 | 0 | 32.79 | 26.95 | 38.62 | 1 | 0.99 | 1 |
| **QAE06** | 1 324 | 1 | 9.00 | 8.11 | 9.90 | 1 | 0.99 | 1 |
| **QAE06** | 1 324 | 2 | 4.91 | 4.36 | 5.46 | 1 | 0.99 | 1 |
| **QAE07** | 426 | 0 | 23.37 | 16.24 | 30.50 | 0.99 | 0.97 | 1 |
| **QAE07** | 426 | 1 | 7.17 | 5.77 | 8.58 | 0.99 | 0.97 | 1 |
| **QAE07** | 426 | 2 | 4.39 | 3.58 | 5.21 | 0.99 | 0.97 | 1 |
| **QAE08** | 994 | 0 | 35.88 | 28.06 | 43.69 | 0.99 | 0.98 | 1 |
| **QAE08** | 994 | 1 | 7.44 | 6.54 | 8.33 | 0.99 | 0.98 | 1 |
| **QAE08** | 994 | 2 | 4.25 | 3.80 | 4.70 | 0.99 | 0.98 | 1 |
| **QAE09** | 672 | 0 | 23.33 | 15.85 | 30.80 | 0.99 | 0.98 | 1 |
| **QAE09** | 672 | 1 | 7.11 | 6.25 | 7.97 | 0.99 | 0.98 | 1 |
| **QAE09** | 672 | 2 | 5.29 | 4.74 | 5.84 | 0.99 | 0.98 | 1 |
| **QAE10** | 270 | 0 | 6.00 | 4.80 | 7.20 | 1 | 1 | 1 |
| **QAE10** | 270 | 1 | 4.11 | 3.68 | 4.54 | 1 | 1 | 1 |
| **QAE10** | 270 | 2 | 3.58 | 3.13 | 4.02 | 1 | 1 | 1 |
| **QAE11** | 282 | 0 | 7.43 | 5.19 | 9.67 | 1 | 1 | 1 |
| **QAE11** | 282 | 1 | 4.68 | 4.16 | 5.20 | 1 | 1 | 1 |
| **QAE11** | 282 | 2 | 3.94 | 3.33 | 4.56 | 1 | 1 | 1 |
| **QAE12** | 402 | 0 | 12.26 | 8.53 | 15.99 | 1 | 0.99 | 1 |
| **QAE12** | 402 | 1 | 4.55 | 3.83 | 5.27 | 1 | 0.99 | 1 |
| **QAE12** | 402 | 2 | 2.84 | 2.21 | 3.47 | 1 | 0.99 | 1 |
| **QAE13** | 420 | 0 | 19.49 | 15.67 | 23.30 | 1 | 0.99 | 1 |
| **QAE13** | 420 | 1 | 9.83 | 8.18 | 11.48 | 1 | 0.99 | 1 |
| **QAE13** | 420 | 2 | 5.74 | 4.39 | 7.10 | 1 | 0.99 | 1 |
| **QAE14** | 298 | 0 | 21.58 | 16.23 | 26.92 | 1 | 0.98 | 1 |
| **QAE14** | 298 | 1 | 7.40 | 5.89 | 8.92 | 1 | 0.97 | 1 |
| **QAE14** | 298 | 2 | 4.29 | 3.43 | 5.15 | 1 | 0.98 | 1 |
| **QAE15** | 628 | 0 | 14.25 | 11.13 | 17.36 | 1 | 1 | 1 |
| **QAE15** | 628 | 1 | 5.44 | 4.73 | 6.15 | 1 | 1 | 1 |
| **QAE15** | 628 | 2 | 3.14 | 2.66 | 3.62 | 1 | 1 | 1 |
| **QAE16** | 348 | 0 | 8.86 | 8.19 | 9.53 | 1 | 1 | 1 |
| **QAE16** | 348 | 1 | 4.48 | 3.88 | 5.09 | 1 | 1 | 1 |
| **QAE16** | 348 | 2 | 3.18 | 2.55 | 3.80 | 1 | 1 | 1 |
| **QAE17** | 228 | 0 | 11.91 | 7.05 | 16.77 | 0.98 | 0.96 | 1 |
| **QAE17** | 228 | 1 | 3.98 | 3.25 | 4.70 | 0.98 | 0.97 | 1 |
| **QAE17** | 228 | 2 | 2.69 | 2.03 | 3.35 | 0.98 | 0.96 | 1 |

AF1

β diversity distribution for all sampling sites. General β diversity (β*sor*, solid line) and its nestedness component (β*sne*, gray dotted line) and rotation component (β*sim*, black dotted line)

