**Table S1.** Terminal taxa for molecular phylogeny and respective vouchers and GenBank accession numbers

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| *Trichomycteridae* | Voucher | CYTB | MYH6 | *COI* | RAG2 |
| *Cambeva davisi* | UFRJ9762.1 | MK123714 | MK123741 | – | MK123762 |
| *Trichomycterus alternatus* | UFRJ9854.1 | MK123715 | MK123742 | MK123690 | MN812991 |
| *Trichomycterus albinotatus* | UFRJ9873.1 | MK123716 | MK123743 | MN813007 | MN812990 |
| *Trichomycterus auroguttatus* | UFRJ10477.1 | MT436452 | MT436450 | MT435135 | – |
| *Trichomycterus brasiliensis* | UFRJ10642.1 | MK123717 | MK123744 | MK123691 | MK123763 |
| *Trichomycterus caudofasciatus* | UFRJ10322.1 | MK123719 | MN812995 | – | MK123764 |
| *Trichomycterus giganteus* | UFRJ11689.1 | MK123720 | MK123746 | MK123693 | MT446426 |
| *Trichomycterus goeldii* | UFRJ12467.1 | MT436453 | MT436451 | MT435136 | MT446427 |
| *Trichomycterus immaculatus* | UFRJ10001.1 | MK144348 | MK123747 | MK123694 | MF431120 |
| *Trichomycterus mimosensis* | LBPV38358 | KY858057 | KY858140 | KY857989 | KY858208 |
| *Trichomycterus nigricans* | UFRJ10989.1 | MK123723 | MK123750 | MN813005 | MK123765 |
| *Trichomycterus nigroauratus* | UFRJ10305.1 | MK123724 | MK123751 | MK123696 | MK123766 |
| *Trichomycterus pantherinus* | UFRJ11015.1 | MK123725 | MK123752 | MK123697 | MN812989 |
| *Trichomycterus pirabitira* | LBPV72641 | KY858051 | KY858133 | KY857982 | – |
| *Trichomycterus piratymbara* | LBPV42138 | KY858040 | KY858121 | KY857970 | KY858194 |
| *Trichomycterus pradensis* | LBPV38359 | KY858058 | KY858141 | – | KY858209 |
| *Trichomycterus reinhardti* | UFRJ9489.1 | MK123727 | MF431106 | MK123698 | MF431119 |
| *Trichomycterus rubiginosus* | UFRJ9657.1 | MK123728 | MK123754 | MK123699 | MK123767 |
| *Trichomycterus septemradiatus* | UFRJ9888.1 | MK123729 | MK123755 | MK123700 | MN812987 |
| *Trichomycterus travassosi* | UFRJ10314.1 | MK123730 | MK123756 | MK123701 | MN812986 |
| *Trichomycterus vitalbrazili* | UFRJ12125.1 | MK748279 | MK748280 | MT435137 | MT446428 |