

TABLE S1 | List of endemic fish species occurring in the Tocantins-Araguaia River basin, Brazil, found in Dagosta, de Pinna (2017, 2019), Coelho *et al.* (2021), Frainer *et al.* (2021), Melo *et al.* (2021), Chamon *et al.* (2022), and Shibatta, Souza-Shibatta (2023). Endemism was determined following occurrences described in Dagosta, de Pinna (2019). Both species marked with asterisk were included after analyses to complete the initial list of endemic species.

Order	Family	Species
Batrachoidiformes	Batrachoididae	<i>Potamobatrachus trispinosus</i> Collette, 1995
Characiformes	Acestrorhynchidae	<i>Roestes itupiranga</i> Menezes & Lucena, 1998
	Anostomidae	<i>Leporinus bistratus</i> Britski, 1997
		<i>Leporinus geminis</i> Garavello & Santos, 2009
		<i>Leporinus santosi</i> Britski & Birindelli, 2013
		<i>Leporinus taeniofasciatus</i> Britski, 1997
		<i>Leporinus venerei</i> Britski & Birindelli, 2008
		<i>Leporinus multimaculatus</i> Birindelli, Teixeira & Britski, 2016
		<i>Sartor tucuruensis</i> Santos & Jégu, 1987
	Bryconidae	<i>Brycon gouldingi</i> Lima, 2004
	Characidae	<i>Astyanax courensis</i> Bertaco, Carvalho & Jerep, 2010
		<i>Astyanax elachylepis</i> Bertaco & Lucinda, 2005
		<i>Astyanax goyanensis</i> Miranda Ribeiro, 1944
		<i>Astyanax joaovitori</i> Oliveira, Pavanelli & Bertaco, 2017
		<i>Astyanax kullanderi</i> Costa, 1995
		<i>Astyanax unitaeniatus</i> Garutti, 1998
		<i>Bryconamericus novae</i> Eigenmann & Henn, 1914
		<i>Caiapobrycon tucuru</i> Malabarba & Vari, 2000
		<i>Creagrutus atrisignum</i> Myers, 1927
		<i>Creagrutus britskii</i> Vari & Harold, 2001
		<i>Creagrutus figueiredoi</i> Vari & Harold, 2001
		<i>Creagrutus molinus</i> Vari & Harold, 2001
		<i>Creagrutus saxatilis</i> Vari & Harold, 2001
		<i>Creagrutus seductus</i> Vari & Harold, 2001
		<i>Ctenocheiroidon pristis</i> Malabarba & Jerep, 2012
		<i>Cynopotamus tocantinensis</i> Menezes, 1987
		<i>Dinopterygium uniodon</i> Frainer, Carvalho, Bertaco & Malabarba, 2021*
		<i>Dinopterygium diodon</i> Frainer, Carvalho, Bertaco & Malabarba, 2021*
		<i>Hasemania kalunga</i> Bertaco & Carvalho, 2010
		<i>Hemigrammus ataktos</i> Marinho, Dagosta & Birindelli, 2014
	<i>Hemigrammus filamentosus</i> Zarske, 2011	
	<i>Hemigrammus tocantinsi</i> Carvalho, Bertaco & Jerep, 2010	
	<i>Hyphessobrycon amandae</i> Géry & Uj, 1987	
	<i>Hyphessobrycon eilyos</i> Lima & Moreira, 2003	
	<i>Hyphessobrycon geryi</i> Guimarães, Brito, Bragança, Katz & Ottoni, 2020	
	<i>Hyphessobrycon hamatus</i> Bertaco & Malabarba, 2005	
	<i>Hyphessobrycon haraldschultzi</i> Travassos, 1960	
	<i>Hyphessobrycon langeanii</i> Lima & Moreira, 2003	
	<i>Hyphessobrycon stegemanni</i> Géry, 1961	

TABLE S1 | (Continued)

Order	Family	Species
		<i>Hyphessobrycon weitzmanorum</i> Lima & Moreira, 2003
		<i>Jupiaba elassonaktis</i> Pereira & Lucinda, 2007
		<i>Knodus figueiredoi</i> Esguícero & Castro, 2014
		<i>Knodus savannensis</i> Géry, 1961
		<i>Moenkhausia dasalmas</i> Bertaco, Jerep & Carvalho, 2011
		<i>Moenkhausia goya</i> Deprá, Azevedo-Santos, Vitorino Júnior, Dagosta, Marinho & Benine, 2018
		<i>Moenkhausia pankilopteryx</i> Bertaco & Lucinda, 2006
		<i>Moenkhausia tergimacula</i> Lucena & Lucena, 1999
		<i>Moenkhausia veneri</i> Petrolli, Azevedo-Santos & Benine, 2016
		<i>Psalidodon xavante</i> (Garutti & Venere, 2009)
		<i>Rhinopetitia myersi</i> Géry, 1964
		<i>Rhinopetitia paucirastra</i> Menezes & Netto-Ferreira, 2019
		<i>Serrapinnus aster</i> Malabarba & Jerep, 2014
		<i>Serrapinnus lucindai</i> Jerep & Malabarba, 2014
		<i>Serrapinnus malabarbai</i> Jerep, Dagosta & Ohara, 2018
		<i>Serrapinnus sterbai</i> Zarske, 2012
		<i>Serrapinnus tocantinensis</i> Malabarba & Jerep, 2014
		<i>Tetragonopterus anostomus</i> Silva & Benine, 2011
		<i>Tetragonopterus araguaiensis</i> Silva, Melo, Oliveira & Benine, 2013
		<i>Tetragonopterus denticulatus</i> Silva, Melo, Oliveira & Benine, 2013
		<i>Xenrobrycon coracoralinae</i> Moreira, 2005
	Crenuchidae	<i>Characidium kalunga</i> Melo, Bouquerel, Masumoto, França & Netto-Ferreira, 2021
		<i>Characidium mirim</i> Netto-Ferreira, Birindelli & Backup, 2013
		<i>Characidium stigmatosum</i> Melo & Backup, 2002
	Curimatidae	<i>Curimata acutirostris</i> Vari & Reis, 1995
		<i>Cyphocharax boiadeiro</i> Melo, 2017
		<i>Cyphocharax signatus</i> Vari, 1992
		<i>Steindachnerina gracilis</i> Vari & Williams Vari, 1989
		<i>Steindachnerina notograptos</i> Lucinda & Vari, 2009
	Iguanodectidae	<i>Bryconops tocantinensis</i> Guedes, Oliveira & Lucinda, 2016
	Parodontidae	<i>Apareiodon argenteus</i> Pavanelli & Britski, 2003
		<i>Apareiodon cavalcante</i> Pavanelli & Britski, 2003
		<i>Apareiodon tigrinus</i> Pavanelli & Britski, 2003
	Serrasalmidae	<i>Mylesinus paucisquamatus</i> Jégu & Santos, 1988
		<i>Mylossoma unimaculatum</i> (Steindachner, 1908)
		<i>Serrasalmus geryi</i> Jégu & Santos, 1988
		<i>Tometes siderocarajensis</i> Andrade, Machado, Jégu, Farias & Giarrizzo, 2017
	Triporthidae	<i>Triporthus trifurcatus</i> (Castelnau, 1855)
Cichliformes	Cichlidae	<i>Apistogramma caetei</i> Kullander, 1980
		<i>Apistogramma tucurui</i> Staeck, 2003
		<i>Apistogramma tucurui</i> Staeck, 2003
		<i>Cichla piquiti</i> Kullander & Ferreira, 2006



TABLE S1 | (Continued)

Order	Family	Species
		<i>Crenicichla compressiceps</i> Ploeg, 1986
		<i>Crenicichla cyclostoma</i> Ploeg, 1986
		<i>Crenicichla jegui</i> Ploeg, 1986
		<i>Crenicichla stocki</i> Ploeg, 1991
		<i>Geophagus sveni</i> Lucinda, Lucena & Assis, 2010
		<i>Retroculus acherontos</i> Landim, Moreira & Figueiredo, 2015
		<i>Retroculus lapidifer</i> (Castelnau, 1855)
		<i>Rondonacara hoehnei</i> (Miranda Ribeiro, 1918)
		<i>Teleocichla cinderella</i> Kullander, 1988
Cyprinodontiformes	Poeciliidae	<i>Cnesterodon septentrionalis</i> Rosa & Costa, 1993
		<i>Poecilia akroa</i> Figueiredo & Moreira, 2018
		<i>Phalloceros leticiae</i> Lucinda, 2008
	Rivulidae	<i>Anablepsoides tocantinensis</i> (Costa, 2010)
		<i>Cynolebias griseus</i> Costa, Lacerda & Brasil, 1990
		<i>Hypsolebias brunoi</i> (Costa, 2003)
		<i>Hypsolebias flammeus</i> (Costa, 1989)
		<i>Hypsolebias marginatus</i> (Costa & Brasil, 1996)
		<i>Hypsolebias multiradiatus</i> (Costa & Brasil, 1994)
		<i>Hypsolebias notatus</i> (Costa, Lacerda & Brasil, 1990)
		<i>Hypsolebias radiosus</i> (Costa & Brasil, 2004)
		<i>Hypsolebias tocantinensis</i> Nielsen, Cruz & Baptista, 2012
		<i>Maratecoara formosa</i> Costa & Brasil, 1995
		<i>Maratecoara lacortei</i> (Lazara, 1991)
		<i>Maratecoara splendida</i> Costa, 2007
		<i>Melanorivulus crixas</i> (Costa, 2007)
		<i>Melanorivulus ignescens</i> Costa, 2017
		<i>Melanorivulus imperatrizensis</i> Nielsen & Pinto, 2015
		<i>Melanorivulus jalapensis</i> (Costa, 2010)
		<i>Melanorivulus javahe</i> (Costa, 2007)
		<i>Melanorivulus karaja</i> (Costa, 2007)
		<i>Melanorivulus kayapo</i> (Costa, 2006)
		<i>Melanorivulus kunzei</i> Costa, 2012
		<i>Melanorivulus litteratus</i> (Costa, 2005)
		<i>Melanorivulus petrisecundi</i> Costa, 2016
		<i>Melanorivulus pindorama</i> Costa, 2012
		<i>Melanorivulus planaltinus</i> (Costa & Brasil, 2008)
		<i>Melanorivulus rubromarginatus</i> (Costa, 2007)
		<i>Melanorivulus salmonicaudus</i> (Costa, 2007)
		<i>Melanorivulus spixi</i> Costa, 2016



TABLE S1 | (Continued)

Order	Family	Species
		<i>Melanorivulus ubirajarai</i> Costa, 2012
		<i>Melanorivulus violaceus</i> (Costa, 1991)
		<i>Melanorivulus wallacei</i> Costa, 2016
		<i>Pituna compacta</i> (Myers, 1927)
		<i>Pituna obliquoseriata</i> Costa, 2007
		<i>Pituna poranga</i> Costa, 1989
		<i>Plesiolebias aruana</i> (Lazara, 1991)
		<i>Plesiolebias canabravensis</i> Costa & Nielsen, 2007
		<i>Plesiolebias filamentosus</i> Costa & Brasil, 2007
		<i>Plesiolebias fragilis</i> Costa, 2007
		<i>Plesiolebias lacerdai</i> Costa, 1989
		<i>Plesiolebias xavantei</i> (Costa, Lacerda & Tanizaki, 1988)
		<i>Simpsonichthys cholopteryx</i> Costa, Moreira & Lima, 2003
		<i>Spectrolebias costai</i> (Lazara, 1991)
		<i>Spectrolebias gracilis</i> Costa & Amorim, 2018
		<i>Spectrolebias inaequipinnatus</i> (Costa & Brasil, 2008)
		<i>Spectrolebias semiocellatus</i> Costa & Nielsen, 1997
		<i>Trigonectes rubromarginatus</i> Costa, 1990
		<i>Trigonectes strigabundus</i> Myers, 1925
Gymnotiformes	Apteronotidae	<i>Apteronotus camposdapazi</i> de Santana & Lehmann A., 2006
		<i>Sternarchorhynchus axelrodi</i> de Santana & Vari, 2010
		<i>Sternarchorhynchus mesensis</i> Campos-da-Paz, 2000
		<i>Sternarchorhynchus schwassmanni</i> de Santana & Vari, 2010
	Sternopygidae	<i>Archolaemus blax</i> Korringa, 1970
		<i>Eigenmannia vicentespelaea</i> Triques, 1996
Myliobatiformes	Potamotrygonidae	<i>Potamotrygon garmani</i> Fontenelle & Carvalho, 2017
		<i>Potamotrygon henlei</i> (Castelnau, 1855)
		<i>Potamotrygon rex</i> Carvalho, 2016
Pleuronectiformes	Achiridae	<i>Achirus achirus</i> (Linnaeus, 1758)
Siluriformes	Aspredinidae	<i>Xyliphius anachoretetes</i> Figueiredo & Britto, 2010
	Auchenipteridae	<i>Centromochlus akwe</i> Coelho, Chamon & Sarmiento-Soares, 2021
		<i>Gelanoglanis varii</i> Calegari & Reis, 2016
		<i>Tatia akroa</i> Souza e Souza, Sarmiento-Soares, Canto & Ribeiro, 2020
	Callichthyidae	<i>Aspidoras albater</i> Nijssen & Isbrücker, 1976
		<i>Aspidoras belenos</i> Britto, 1998
		<i>Aspidoras brunneus</i> Nijssen & Isbrücker, 1976
		<i>Aspidoras eurycephalus</i> Nijssen & Isbrücker, 1976
		<i>Aspidoras gabrieli</i> Wosiacki, Graças Pereira & Reis, 2014
		<i>Aspidoras mephisto</i> Tencatt & Bichuette, 2017



TABLE S1 | (Continued)

Order	Family	Species
		<i>Aspidoras velites</i> Britto, Lima & Moreira, 2002
		<i>Corydoras araguaiaensis</i> Sands, 1990
		<i>Corydoras cochui</i> Myers & Weitzman, 1954
		<i>Corydoras eversi</i> Tencatt & Britto, 2016
		<i>Corydoras maculifer</i> Nijssen & Isbrücker, 1971
	Cetopsidae	<i>Cetopsis arcana</i> Vari, Ferraris & de Pinna, 2005
		<i>Cetopsis caiapo</i> Vari, Ferraris & de Pinna, 2005
		<i>Cetopsis sarcodes</i> Vari, Ferraris & de Pinna, 2005
		<i>Denticetopsis epa</i> Vari, Ferraris & de Pinna, 2005
	Doradidae	<i>Doras zuanoni</i> Sabaj Pérez & Birindelli, 2008
		<i>Hassar wilderi</i> Kindle, 1895
	Heptapteridae	<i>Pimelodella spelaea</i> Trajano, Reis & Bichuette, 2004
		<i>Phenacorhamdia somnians</i> (Mees, 1974)
	Loricariidae	<i>Acanthicus adonis</i> Isbrücker & Nijssen, 1988
		<i>Ancistomus micrommatos</i> (Cardoso & Lucinda, 2003)
		<i>Ancistomus spinosissimus</i> (Cardoso & Lucinda, 2003)
		<i>Ancistrus aguaboensis</i> Fisch-Muller, Mazzoni & Weber, 2001
		<i>Ancistrus cryptophthalmus</i> Reis, 1987
		<i>Ancistrus jataiensis</i> Fisch-Muller, Cardoso, da Silva & Bertaco, 2005
		<i>Ancistrus karajas</i> de Oliveira, Rapp Py-Daniel, Zawadzki & Zuanon, 2016
		<i>Ancistrus minutus</i> Fisch-Muller, Mazzoni & Weber, 2001
		<i>Ancistrus reisi</i> Fisch-Muller, Cardoso, da Silva & Bertaco, 2005
		<i>Ancistrus stigmaticus</i> Eigenmann & Eigenmann, 1889
		<i>Corumbataia acanthodela</i> Thimotheo, Benine, Oliveira & Silva, 2020
		<i>Corumbataia canoeiro</i> (Roxo, Silva, Ochoa & Zawadzki, 2017)
		<i>Corumbataia tocantinensis</i> Britski, 1997
		<i>Corumbataia veadeiros</i> Carvalho, 2008
		<i>Curculionichthys tukana</i> Roxo, Dias, Silva & Oliveira, 2017
		<i>Farlowella henriquei</i> Miranda Ribeiro, 1918
		<i>Gymnotocinclus anosteos</i> Carvalho, Lehmann A. & Reis, 2008
		<i>Harttia duriventris</i> Rapp Py-Daniel & Oliveira, 2001
		<i>Harttia punctata</i> Rapp Py-Daniel & Oliveira, 2001
		<i>Hemiancistrus cerrado</i> de Souza, Melo, Chamon & Armbruster, 2008
		<i>Hypoptopoma muzuspi</i> Aquino & Schaefer, 2010
		<i>Hypostomus asperatus</i> Castelnau, 1855
		<i>Hypostomus atropinnis</i> (Eigenmann & Eigenmann, 1890)
		<i>Hypostomus delimai</i> Zawadzki, de Oliveira & Debona, 2013
		<i>Hypostomus ericae</i> Hollanda Carvalho & Weber, 2005
		<i>Hypostomus goyazensis</i> (Regan, 1908)



TABLE S1 | (Continued)

Order	Family	Species
		<i>Hypostomus krishnamurtii</i> Zawadzki, Penido & Lucinda, 2020
		<i>Hypostomus paucipunctatus</i> Hollanda Carvalho & Weber, 2005
		<i>Lamontichthys avacanoeiro</i> de Carvalho Paixão & Toledo-Piza, 2009
		<i>Lamontichthys parakana</i> de Carvalho Paixão & Toledo-Piza, 2009
		<i>Loricaria lata</i> Eigenmann & Eigenmann, 1889
		<i>Microplecostomus forestii</i> Silva, Roxo, Ochoa & Oliveira, 2016
		<i>Nannoplecostomus eleonora</i> Ribeiro, Lima & Pereira, 2012
		<i>Otocinclus tapirape</i> Britto & Moreira, 2002
		<i>Peckoltia oligospila</i> (Günther, 1864)
		<i>Pseudacanthicus major</i> Chamon & Costa e Silva, 2018
		<i>Pseudacanthicus pitanga</i> Chamon, 2015
		<i>Pterygoplichthys joselimaianus</i> (Weber, 1991)
		<i>Rhinolekos capetinga</i> Roxo, Ochoa, Silva & Oliveira, 2015
		<i>Rineloricaria hasemani</i> Isbrücker & Nijssen, 1979
		<i>Rineloricaria osvaldoi</i> Fichberg & Chamon, 2008
		<i>Rhinotocinclus dinizae</i> (Ribeiro-Silva, Silva, Venere, da Silva & Roxo, 2020)
		<i>Rhinotocinclus pentakelis</i> (Roxo, Messias & Silva, 2019)
		<i>Spectracanthicus javae</i> Chamon, Pereira, Mendonça & Akama, 2018
		<i>Spectracanthicus tocantinensis</i> Chamon & Rapp Py-Daniel, 2014
		<i>Sturisoma rostratum</i> (Spix & Agassiz, 1829)
	Pimelodidae	<i>Aguarunichthys tocantinsensis</i> Zuanon, Rapp Py-Daniel & Jégu, 1993
		<i>Pimelodus halisodous</i> Ribeiro, Lucena & Lucinda, 2008
		<i>Pimelodus joannis</i> Ribeiro, Lucena & Lucinda, 2008
		<i>Pimelodus luciae</i> Rocha & Ribeiro, 2010
		<i>Pimelodus quadratus</i> Lucinda, Ribeiro & Lucena, 2016
		<i>Pimelodus speciosus</i> Costa e Silva, Ribeiro, Lucena & Lucinda, 2018
		<i>Pimelodus stewarti</i> Ribeiro, Lucena & Lucinda, 2008
		<i>Pimelodus tetramerus</i> Ribeiro & Lucena, 2006
		<i>Propimelodus araguayae</i> Rocha, de Oliveira & Rapp Py-Daniel, 2007
	Pseudopimelodidae	<i>Microglanis maculatus</i> Shibatta, 2014
		<i>Microglanis oliveirai</i> Ruiz & Shibatta, 2011
		<i>Microglanis robustus</i> Ruiz & Shibatta, 2010
		<i>Microglanis xerente</i> Ruiz, 2016
		<i>Rhyacoglanis varii</i> Shibatta & Souza-Shibatta, 2023
		<i>Microglanis xylographicus</i> Ruiz & Shibatta, 2011
	Trichomycteridae	<i>Ammoglanis diaphanus</i> Costa, 1994
		<i>Henonemus intermedius</i> (Eigenmann & Eigenmann, 1889)
		<i>Ituglanis bambui</i> Bichuette & Trajano, 2004



TABLE S1 | (Continued)

Order	Family	Species
		<i>Ituglanis boticario</i> Rizzato & Bichuette, 2015
		<i>Ituglanis epikarsticus</i> Bichuette & Trajano, 2004
		<i>Ituglanis ina</i> Wosiacki, Dutra & Mendonça, 2012
		<i>Ituglanis macunaima</i> Datovo & Landim, 2005
		<i>Ituglanis mambai</i> Bichuette & Trajano, 2008
		<i>Ituglanis passensis</i> Fernández & Bichuette, 2002
		<i>Ituglanis ramiroi</i> Bichuette & Trajano, 2004
		<i>Trichomycterus punctatissimus</i> Castelnau, 1855
		<i>Tridentopsis tocantinsi</i> LaMonte, 1939
Tetraodontiformes	Tetraodontidae	<i>Colomesus tocantinensis</i> Amaral, Brito, Silva & Carvalho, 2013

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