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**Morphological and molecular assessment of the diversity of trematode communities in freshwater gastropods and bivalves in Los Tuxtlas tropical rain forest**

**Yanet Velázquez-Urrieta and Gerardo Pérez Ponce de León**

**Supplementary Table S1**. Summary of trematodes reported in wildlife vertebrates in Los Tuxtlas tropical rain forest region, Veracruz, Mexico, organized alphabetically by host group.

|  |  |  |  |
| --- | --- | --- | --- |
| **Trematodes species** | **Host species**  | **Localities**  | **Reference** |
| **Fish** |
| *Ascocotyle nana* Ransom, 1920 | *Vieja fenestrata**Oreochromis* sp.*Pseudoxiphophorus bimaculatus* *Xiphophorus hellerii* | CatemacoBalzapoteLaguna Escondida  | Pérez-Ponce de León *et al*., 2007Scholz *et al*., 2001Salgado-Maldonado *et al*., 2005 |
| *Ascocotyle* sp. | *Bramocharax caballeroi**Heterandria* sp.*Poecilia catemaconis**Poeciliopsis catemaco* | Catemaco |  Pérez-Ponce de León *et al*., 2007 |
| *Ascocotyle tenuicollis* Price, 1935 | *Gobiomorus dormitor**Poecilia mexicana**Heterandria bimaculata**Xiphophorus hellerii* | BalzapoteCatemacoLaguna EscondidaLa PalmaRío Maquinas | Scholz *et al*., 2001 Salgado-Maldonado *et al*., 2005  |
| *Ascocotyle mcintoshi* Price, 1936 | *Xiphophorus* sp.*Poecilia mexicana**Xiphophorus hellerii* | Laguna AzulLa PalmaRío Maquinas | Scholz *et al*., 2001 Salgado-Maldonado *et al*., 2005 |
| *Ascocotyle megalocephala* Price, 1932  | *Poecilia mexicana* | Balzapote | Scholz *et al*., 2001 Salgado-Maldonado *et al*., 2005 |
| *Ascocotyle diminuta* Stunkard & Havilland, 1924 | *Poecilia mexicana* | Balzapote | Salgado-Maldonado *et al*., 2005 |
| *Austrodiplostomum compactum* (Lutz, 1928) | *Rhamdia guatemalensis* | Catemaco | Pérez-Ponce de León *et al*., 1992 |
| *Centrocestus formosanus* (Nishigori, 1924) Price, 1932 (M) | *Mugil monticola Pseudoxiphophorus bimaculatus**Poecilia mexicana**Vieja fenestrata**Xiphophorus hellerii* | BalzapoteRío Maquinas | Scholz & Salgado-Maldonado, 2000Salgado-Maldonado *et al*., 2005 |
| *Cladocystis trifolium* (Braun, 1901) Poche, 1926 | *Vieja fenestrata* | Catemaco | Pérez-Ponce de León *et al*., 2007 |
| *Crassicutis cichlasomae* Manater, 1936 | *Vieja fenestrata**Dorosoma petenense* | BalzapoteCatemacoLaguna Escondida | Pérez-Ponce de León *et al*., 2007 Lamothe-Argumedo *et al*., 1993 Salgado-Maldonado *et al*., 2005 |
| ***Pseudoparacreptotrema falciformis***Hernández-Mena & Pinacho-Pinacho, 20201 | *Dajaus monticola* | BalzapoteRío MaquinasLa Palma | Pérez-Ponce de León *et al*., 2020 |
| *Crocodilicola pseudostoma* (Willemoes-Suhm, 1870) Poche, 1926 | *Rhamdia guatemalensis* *Poecilia mexicana*  | CatemacoLa Palma | Pérez-Ponce de León *et al*., 2007 Pérez-Ponce de León *et al*., 1992 Salgado-Maldonado *et al*., 2005 |
| *Echinochasmus leopoldinae* Scholz, Ditrich & Vargas-Vázquez, 1996 (M) | *Poecilia mexicana**Vieja fesnestrara*  | BalzapoteCatemaco | Pérez-Ponce de León *et al*., 2007Salgado-Maldonado *et al*., 2005 |
| ***Gernarchella isabellae***2 LamotheArgumedo, 1977 | *Rhamdia guatemalensis*  | Catemaco | Pérez-Ponce de León *et al*., 2007 |
| *Magnivitellinum simplex* Kloss, 1966 | *Astyanax aeneus* | Laguna EscondidaLa PalmaRío Maquinas | Salgado-Maldonado *et al*., 2005 |
| *Creptotrematina aguirrepequeñoi* (Jiménez-Guzmán, 1973)  | *Bramocharax caballeroi* | La Palma | Pérez-Ponce de León *et al*., 2007 |
| *Posthodiplostomum minimum* (MacCallum, 1921) Dubois, 1936 (M) | *Poecilia catemaconis**Vieja fenestrata* | CatemacoLaguna Escondida | Pérez-Ponce de León *et al*., 2007Salgado-Maldonado *et al*., 2005 |
| *Saccocoelioides sogandaresi* Lumsden, 1963 | *Poecilia mexicana* *Xiphophorus hellerii**Poecilia mexicana,*  | BalzapoteLaguna EscondidaCatemacoRío Maquinas | Salgado-Maldonado *et al*., 2005 |
| ***Saccocoelioides chauhani***Lamothe-Argumedo, 1974 | *Bramocharax caballeroi**Dorosoma* sp.*Poecilia catemaconis Poeciliopsis catemaco Xiphophorus* sp. | Catemaco |  Pérez-Ponce de León *et al*., 2007 |
| *Saccocoelioides sogandaresi* Lumsden 1963 | *Poecilia mexicana**Xiphophorus hellerii**Poeciliopsis catemaco**Astyanax aeneus**Poecilia mexicana**Xiphophorus hellerii* | BalzapoteCatemacoRío Maquinas |  Salgado-Maldonado *et al.*, 2005 |
| *Uvulifer ambloplites* (Hughes, 1927) Dubois, 1938 | *Dejaus monticola**Vieja fenestra* | BalzapoteLaguna Escondida | Salgado-Maldonado *et al*., 2005 |
| **Amphibians** |
| *Catadiscus propinquus* Teixeira de Freitas & Dobbin, 1956 | *Rana vaillanti*  | Lagunas Escondida |  Paredes-Calderón *et al*., 2004 |
| *Catadiscus rodriguezi* Caballero, 1955 | *Rana vaillanti*  | Lagunas Escondida | Pérez-Ponce de León *et al*., 2000 |
| *Cephalogonimus americanus* Stafford, 1902 | *Rana berlandieri**Rana vaillanti* | Lagunas Escondida | Lamothe-Argumedo *et al*., 1993 Guillén-Hernández *et al*., 2000Pérez-Ponce de León *et al*., 2000 |
| *Glypthelmins parva* Travassos, 1924 | *Rana vaillanti* | Lagunas Escondida | Pérez-Ponce de León *et al*., 2000Paredes-Calderón *et al*., 2004Razo-Mendivil *et al*., 2004 |
| ***Glypthelmins tuxtlasensis*** Razo-Mendívil, León-Règagnon & Pérez-Ponce de León, 2004 | *Rana vaillanti**Rana berlandieri* | Lagunas Escondida | Razo-Mendivil *et al*., 1999Guillén-Hernández *et al*., 2000 Pérez-Ponce de León *et al*., 2000Paredes-Calderón *et al*., 2004 Razo-Mendivil *et al*., 2004 |
| *Gorgoderina attenuata* (Stafford 1902) Stafford 1905 | *Eleutherodactylus rhodopis* *Rana vaillanti**Leptodactylus melanonotus*  | Lagunas Escondida | Pérez-Ponce de León *et al*., 2000Goldberg *et al*., 2002Paredes-Calderón *et al*., 2004 |
| ***Gorgoderina festoni***Mata-López & León-Règagnon, 2005 | *Gastrophryne usta* | Laguna Zacatal | Mata-López & León-Règagnon, 2005 |
| ***Gorgoderina rosamondae***Velázquez-Urrieta & Pérez-Ponce de León, 2021 | *Rana berlandieri*  | Laguna Zacatal | Velázquez-Urrieta & Pérez-Ponce de León, 2021 |
| *Gorgoderina parvicava* Travassoso, 1922 | *Rana vaillanti**Rana berlandieri* | Laguna Zacatal  | Guillén-Hernández *et al*., 2000Paredes-Calderón *et al*., 2004  |
| ***Haematoloechus danbrooksi***León-Règagnon & Paredes-Calderón, 2002  | *Rana berlandieri**Rana vaillanti*  | Lagunas Escondida | Guillén-Hernández *et al*., 2000Pérez-Ponce de León *et al*., 2000León-Règagnon & Paredes-Calderón, 2002Paredes-Calderón *et al*., 2004 |
| *Haematoloechus illismis* Caballero, 1942 | *Rana vaillanti* | Lagunas Escondida | Paredes-Calderón *et al*., 2004 |
| ***Haematoloechus veracruzanus***León-Règagnon & Topan, 2018  | *Rana vaillanti* | Lagunas Escondida | León-Règagnon & Topan, 2018 |
| ***Haematoloechus mexicanus***León-Règagnon & Topan, 2018 | *Rana vaillanti* | Lagunas Escondida | León-Règagnon & Topan, 2018 |
| *Halipegus eschi* Zelmer & Brooks, 2000 | *Rana vaillanti* | Lagunas Escondida | Paredes-Calderón *et al*., 2004 |
| *Langeronia macrocirra* Caballero & Bravo-Hollis, 1949 | *Rana vaillanti**Bufo marinus* *Bufo marinus* *Rana berlandieri**Smilisca baudini* | CatemacoLagunas Escondida | Guillén-Hernández *et al*., 2000 Goldberg *et al*., 2002Paredes-Calderón *et al*., 2004 |
| *Mesocoelium monas* (Rudolphi, 1819) Texeira de Freitas, 1958 | *Bufo marinus* *Smilisca cyanosticta**Smilisca baudini* | Lagunas Escondida Laguna ZacatalCatemaco | Lamothe-Argumedo *et al*., 1993Goldberg *et al*., 2002Guillén-Hernández *et al*., 2000  |
| ***Rauschiella poncedeleoni***Razo-Mendivil & León-Règagnon, 2001 | *Leptodactylus melanonotus*  | Lagunas Escondida | Razo-Mendivil & León-Règagnon, 2001 |
| **Reptiles** |
| *Crocodilicola pseudostoma* (Willemoes-Suhm, 1870) Poche, 1926 | *Crocodylus moreleti* | CatemacoLa Palma | Caballero, 1948 |
| *Massoprostatum longum* Caballero, 1947 | *Crocodylus moreleti* | Catemaco | Pérez-Ponce de León *et al*., 2007 |
| *Renifer crotali* (Self, 1945) Skrjabin & Antipin, 1957 | *Bothrops asper* | Estación de Biología | Pérez-Ponce de León *et al*., 2007 |
| *Parallopharynx arctus* Caballero, 1946 | *Basiliscus vittatus* | Estación de Biología  | Pérez-Ponce de León *et al*., 2007 |
| *Pseudoneodiplostomum groschafti* Moravec, 2001 | *Crocodylus moreleti* | Estación de Biología | Pérez-Ponce de León *et al*., 2007 |
| **Birds** |
| *Apharyngostrigea* sp. | *Egretta thula* | Catemaco | Lamothe-Argumedo *et al*., 1993 |
| *Ascocotyle gemina* Font, Overstreet & Heard, 1948 | *Egretta thula* | Catemaco | Lamothe-Argumedo *et al*., 1993 |
| *Clinostomum tataxumui* Sereno-Uribe, Pinacho-Pinacho, García-Varela & Pérez-Ponce de León, 2013  | *Ardea herodias* *Egretta thula* | Sontecomapan | Sereno-Uribe *et al*., 1993 |
| *Drepanocephalus spathans* Dietz, 1909 | *Nannopterum brasilianus* | Catemaco | Hernández-Cruz *et al*., 2018  |
| *Posthodiplostomum minimum* (MacCallum, 1921) Dubois, 1936 | *Egretta thula* | Catemaco | Lamothe-Argumedo & Pérez-Ponce de León, 1986 |
| **Mammals** |
| *Amphimerus caudalitestis* Caballero, Crocott & Zerecero 1952 | *Philander opossum* | Laguna Escondida | Pérez-Ponce de León *et al*., 2007 |
| *Controrchis biliophilus* Price, 1928 | *Alouatta palliata* | Catemaco |  Pérez-Ponce de León *et al*., 2007 |
| *Duboisiella proloba* Baer, 1938 | *Didelphis virginiana*  | Laguna Escondida | Monet-Mendoza *et al*., 2005 |
|  |
| *Paragonimus mexicanus*Miyazaki & Ischii, 1968 | *Philander opossum* *Didelphis virginiana*  | SontecomapanLaguna Escondida | Lamothe-Argumedo *et al*., 1985Cañeda-Guzmán, 1997 |
| *Philandrophilus magnacirrus* Tratcher, 1970 | *Philander opossum* | Ejido Lázaro Cardenas | Pérez-Ponce de León *et al*., 2007 |
| *Rhopalias coronatus* (Rudolphi, 1819) Stiles & Hassall, 1898 | *Didelphis marsupialis* *Didelphis virginiana**Philander opossum* | Laguna Escondida Ejido Lázaro Cardenas | Pérez-Ponce de León *et al*., 2007 |
| *Rhopalias baculifer* Braun, 1901 | *Philander opossum* | Catemaco | Acosta-Virgen *et al*., 2015 |
| *Rhopalias caballeroi* Kifune y Uyema, 1982 | *Didelphis* sp. | Playa Escondida | Acosta-Virgen *et al*., 2015 |
| *Rhopalias macracanthus* Chandler, 1932 | *Didelphis* sp. | Ejido Lázaro Cardenas | Acosta-Virgen *et al*., 2015 |

M= metacercariae. In bold, the new species described from Los Tuxtlas

1 this species was originally reported as *Creptotrema agonostomi* but later transferred to the genus *Pseudoparacreptotrema* and described as *P. falciformis*

2 this species was originally described a *Caballeroiella isabellae* as a parasite of a heptapterid catfish, and later transferred to the genus *Genarchella*

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