**Supplementary Material**

**Appendix 1.** All detected, established, or extirpated records of *Pterygoplichthys* spp. through June, 2017. Redundant records, personal communications, and records missing voucher specimens and/or photographs are excluded

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Species | Continent | Country | State/Province/  Territory/District | Localities | Coordinates (WGS84) | Detected | Status | Remarks | Reference |
| *P. ambrosettii* | South America | Brazil | Paraná | Paranapanema River | N/A | 2002 | Established |  | Garcia et al. 2012 |
| *P. ambrosettii* | Asia | India | Bihar | Ganges River at Patna | 25.62194, 85.15833 | 2008 | Detected | Two individuals captured, one juvenile and one adult; Also reported by Sarkar et al. 2011 | Sinha et al. 2010 |
| *P. ambrosettii* | North America | USA | Florida | St. Johns County; Marion County | N/A | 2006 | Established |  | USGS 2017 |
| *P. ambrosettii* | North America | USA | Texas | Sims Bayou | 29.66805, -95.29750 | 1998 | Established |  | Nico and Martin 2001 |
| *P. ambrosettii* | South America | Brazil | São Paulo | Itupararanga Reservoir; Sorocaba River | N/A | 2012 | Established |  | Biagioni et al. 2013 |
| *P. disjunctivus* | Africa | South Africa | KwaZulu-Natal | Lake Mpangeni; Mthlathuze River; Nseleni River | N/A | 2000 | Established | Potentially *P. disjunctivus* x *pardalis* | Jones et al. 2013 |
| *P. disjunctivus* | Asia | China | Taiwan | Throughout Taiwan | N/A | 1996 | Established | Potentially *P. disjunctivus* x *pardalis* | Wu et al. 2011 |
| *P. disjunctivus* | Asia | India | Kanchipuram | Chembarampakkam Lake | 13.01158, 80.06063 | 2010 | Established |  | Knight 2010 |
| *P. disjunctivus* | Asia | India | Kerala | Amayizhanchan Thodu | 8.73333, 76.90000 - 8.81666, 76.96666 | 2013 | Established | Additional unidentified *Pterygoplichthys* spp. noted, possibly representing hybrid forms | Bijukumar et al. 2015 |
| *P. disjunctivus* | Asia | India | Namakkal | Cauvery River | 12.25361, 77.16055 | 2014 | Established | Reported concurrently by Meena et al. 2016 | Panikkar et al. 2015 |
| *P. disjunctivus* | Asia | Indonesia | Java | Banjar market | N/A | 1997 | Established |  | Page and Robins 2006 |
| *P. disjunctivus* | Asia | Israel | Northern District | Nahal Amal River | 32.50138, 35.46055 | 2011 | Detected | Potentially *P. disjunctivus* x *pardalis* | Golani and Snovsky 2013 |
| *P. disjunctivus* | Asia | Japan | Okinawa | Throughout Okinawa Island | N/A | 1989 | Established |  | Takeshima and Yoshino 1996 |
| *P. disjunctivus* | Asia | Phillipines | Laguna | Laguna de Bay basin | N/A | 2002 | Established |  | Chavez et al. 2006 |
| *P. disjunctivus* | Asia | Phillipines | Luzon | Marikina River | N/A | 2006 | Established | Potentially *P. disjunctivus* x *pardalis* | Jumawan et al. 2011 |
| *P. disjunctivus* | Asia | Phillipines | Mindanao | Agusan Marsh | 8.00000, 125.86666 | 2002 | Established |  | Hubilla et al. 2007 |
| *P. disjunctivus* | Asia | Singapore | N/A | Bedok Reservior; Jurong Lake; Kranji Reservoir; Lower Peirce Reservoir; MacRitchie Reservoir; Upper Peirce Reservoir | N/A | 1990 | Established | Date is earliest record (Page and Robins 2006) | Ng and Tan 2010 |
| *P. disjunctivus* | Asia | Turkey | Eskişehir | Pınarbaşı Stream | 48.81000, 30.11777 | 2016 | Established |  | Emiroğlu et al. 2016 |
| *P. disjunctivus* | Asia | Turkey | Hatay | Asi River | 36.19250, 36.15166 | 2006 | Detected | Single individual | Ozdilek 2007 |
| *P. disjunctivus* | North America | Mexico | Campeche | San Pedro River; Palizada River | N/A | 2007 | Established |  | Wakida-Kusunoki and Amador-del Angel 2008 |
| *P. disjunctivus* | North America | Mexico | Chiapas | Catazaja Lagoon; Medellin River | N/A | 2004 | Established |  | Ramírez-Soberón et al. 2004 |
| *P. disjunctivus* | North America | Mexico | Guerrero | Mezcala River; Balsas River | N/A | 1995 | Established |  | Guzmán and Barragán 1997 |
| *P. disjunctivus* | North America | Mexico | Michoacán | Coahuayana River | 18.68477, -103.73716 | 2010 | Detected | Single individual | Sandoval-Huerta et al. 2012 |
| *P. disjunctivus* | North America | Mexico | Morelos | Rıo River | 119.22000, 99.71000 - 17.89000. 98.63000 | 1999 | Established | Additional unidentified *Pterygoplichthys* spp., possibly representing hybrid forms, noted | Trujillo-Jiménez et al. 2010 |
| *P. disjunctivus* | North America | USA | Colorado | Smith Lake (Reservoir) | N/A | 2009 | Detected | Single individual | USGS 2017 |
| *P. disjunctivus* | North America | USA | Florida | Rainbow River | N/A | 2002 | Eradicated | Previously established population successfully eradicated by 2008 using hand and spear removal | Hill and Sowards 2015 |
| *P. disjunctivus* | North America | USA | Florida | Santa Fe River drainage | N/A | 2009 | Established | Potentially *P. disjunctivus* x *pardalis* | Nico et al. 2012 |
| *P. disjunctivus* | North America | USA | Florida | Throughout Peninsular Florida | N/A | Late 1950s | Established |  | Fuller et al. 1999 |
| *P. disjunctivus* | North America | USA | Mississippi | Franklin County | N/A | 1992 | Established |  | USGS 2017 |
| *P. disjunctivus* | North America | USA | Nevada | Las Vegas Wash | N/A | 2012 | Established |  | USGS 2017 |
| *P. disjunctivus* | North America | USA | Puerto Rico | Throughout PR | N/A | 1994 | Established |  | USGS 2017 |
| *P. disjunctivus* | North America | USA | Texas | San Antonio River | N/A | 2000 | Established | \*Author notes previous detection of this species in Texas from San Marcos River (1996) and Buffalo Bayou (2000), with vouchers deposited in TNHC muesum collection. | Edwards 2001 |
| *P. disjunctivus x pardalis (likely)* | Asia | Turkey | Eskişehir | Pınarbaşı Stream | 48.81000, 30.11777 | 2016 | Established |  | Emiroğlu et al. 2016 |
| *P. disjunctivus x pardalis (likely)* | Asia | China | Guangdong | Throughout Guangdong Province | N/A | 2017 | Established |  | Wei et al. 2017 |
| *P. disjunctivus x pardalis (likely)* | North America | USA | Alabama | Mobile Bay Watershed | 30.58735, -88.12598 | 2014 | Detected | Single ripe female | Godwin et al. 2016 |
| *P. gibbiceps* | Europe | Poland | Kuyavian-Pomeranian | Brda River, Bydgoszcz | N/A | 2006 | Detected | Single immature male | Keszka et al. 2008 |
| *P. gibbiceps* | North America | USA | Florida | Poe Spring | 29.82571, 82.64897 | 2009 | Detected | Potentially *P. gibbiceps* x *pardalis* or *P. gibbiceps* x *disjunctivus* | Nico et al. 2012 |
| *P. joselimaianus* | Asia | Singapore | N/A | Pandan Reservoir; Lower Seletar Reservoir | N/A | N/A | Detected | Likely established | Ng and Tan 2010 |
| *P. multiradiatus* | Asia | Bangladesh | Bogra | Kahalu Upazilla | 24.83138, 89.26305 | 2007 | Detected | Three individuals | Hossain et al. 2008 |
| *P. multiradiatus* | Asia | Vietnam | Dong Nai | Dong-Nai Basin | N/A | 2004 | Established |  | Levin et al. 2008 |
| *P. multiradiatus* | North America | USA | Florida | Throughout South Florida | N/A | 1981 | Established |  | Gestring et al. 2010 |
| *P. multiradiatus* | North America | USA | Hawaii | Wahiawa Reservoir | N/A | 1986 | Established |  | Hoover et al. 2004 |
| *P. multiradiatus* | North America | USA | Puerto Rico | Throughout PR | N/A | 1983 | Established |  | Bunkley-Williams et al. 1994 |
| *P. multiradiatus* | North America | USA | Texas | Harris County; Bexar County; Wilson County | N/A | 2000 | Established |  | USGS 2017 |
| *P. pardalis* | Asia | China | Taiwan | Throughout Taiwan | N/A | 1996 | Established | Potentially *P. disjunctivu*s x *pardalis* | Wu et al. 2011 |
| *P. pardalis* | Asia | India | Kanchipuram | Chembarampakkam Lake | 13.01158, 80.06063 | 2010 | Established |  | Knight 2010 |
| *P. pardalis* | Asia | India | Kerala | Amayizhanchan Thodu | 8.73333, 76.90000 - 8.81666, 76.96666 | 2013 | Established | Additional unidentified *Pterygoplichthys* spp., possibly representing hybrid forms, noted | Bijukumar et al. 2015 |
| *P. pardalis* | Asia | India | Namakkal | Cauvery River at Mohanur | 11.08000, 78.17000 | 2013 | Established |  | Muralidharan et al. 2015 |
| *P. pardalis* | Asia | Indonesia | Java | Banjar market; Kampung Patro | N/A | 1993 | Established | \*First reported in Indonesia by Kottelat et al. 1993 | Page and Robins 2006 |
| *P. pardalis* | Asia | Indonesia | Sumatra | Medan, Sungai Deli | N/A | 1993 | Established | \*First reported in Indonesia by Kottelat et al. 1993 | Page and Robins 2006 |
| *P. pardalis* | Asia | Israel | Northern District | Nahal Amal River; Lake Kinneret | 32.50138, 35.46055; 32.70583, 35.58777 (respectively) | 2012 | Detected | Potentially *P. disjunctivus* x *pardalis* | Golani and Snovsky 2013 |
| *P. pardalis* | Asia | Malaysia | Johor | Sungai Machap | N/A | 1991 | Established |  | Page and Robins 2006 |
| *P. pardalis* | Asia | Phillipines | Laguna | Laguna de Bay basin | N/A | 2002 | Established |  | Chavez et al. 2006a |
| *P. pardalis* | Asia | Phillipines | Luzon | Marikina River | N/A | 2006 | Established | Potentially *P. disjunctivus* x *Pardalis* | Jumawan et al. 2011 |
| *P. pardalis* | Asia | Singapore | N/A | Kranji Reservoir; Lower Seletar Reservoir; MacRitchie Reservoir; Pandan Reservoir | N/A | 1989 | Established | Date is earliest record (Page and Robins 2006) | Ng and Tan 2010 |
| *P. pardalis* | Asia | Sri Lanka | Central Province | Polgolla reservoir\* | 7.32166, 80.64500 | N/A | Established | \*Authors note populations in Kala wewa, Balalu wewa, Kandalama wewa, and Usgala Siyambangamuwa wewa reservoirs throughout Sri Lanka as well, but study focused on Polgolla population. | Sumanasinghe and Amarasinghe 2013 |
| *P. pardalis* | Asia | Thailand | Chonburi | Nong Yai Canal | 12.96076, 100.91322 | 2008 | Established |  | Chaichana et al. 2011 |
| *P. pardalis* | Asia | Vietnam | Khanh Hoa | Dinh River | 12.49277, 109.13194 | 2010 | Established | Identified as *Pterygoplichthys* aff. *Pardalis* | Zworykin and Budaev 2013 |
| *P. pardalis* | Asia | Vietnam | Yen Bai | Red River near Yen Bai City | 21.70000, 104.85000 | 2006 | Detected | Single Specimen | Levin et al. 2008 |
| *P. pardalis* | Europe | Serbia | South Banat | Danube River | 44.65805, 20.82916 | 2009 | Detected | Single ripe female | Simonović et al. 2010 |
| *P. pardalis* | North America | Canada | Ontario | Duffins Creek | N/A | N/A | Detected |  | Mendoza-Alfaro et al. 2009 |
| *P. pardalis* | North America | Guatemala | Petén | Lake Petén Itzá | 16.98333, -89.80000 | 2012 | Established |  | Barrientos et al. 2015 |
| *P. pardalis* | North America | Mexico | Campeche | San Pedro River; Palizada River | N/A | 2007 | Established |  | Wakida-Kusunoki and Amador-del Angel 2008 |
| *P. pardalis* | North America | Mexico | Morelos | Amacuzac River | 18.33472, -99.41638 | 2008 | Established | \*Authors also note previously documented *P. disjunctivus* population | Mejía-Mojica et al. 2012 |
| *P. pardalis* | North America | Mexico | Tobasco | Pond near Frontera, Grijalva-Usumacinta River basin | 18.52398, -92.63445 | 2005 | Established |  | Wakida-Kusunoki et al. 2007 |
| *P. pardalis* | North America | Mexico | Tobasco | San Pedro River | 16.77816, -90.9875 | 2007 | Established |  | Castillo-Domínguez et al. 2015 |
| *P. pardalis* | North America | Mexico | Veracruz | Coatzacoalcos River; Lagartos lagoon in Veracruz City | 18.14888, -94.41138; 19.16666, -96.23333 | 2009 | Established |  | Wakida-Kusunoki et al. 2016 |
| *P. pardalis* | North America | USA | California | Los Angeles County | N/A | 2007 | Established |  | USGS 2017 |
| *P. pardalis* | North America | USA | Puerto Rico | Cidra; Arecibo | N/A | 1999 | Established |  | USGS 2017 |
| *P. pardalis* | North America | USA | South Carolina | N/A | N/A | N/A | Detected | Single individual | Hoover et al. 2004 |
| *P. pardalis* | Asia | Turkey | Eskişehir | Pınarbaşı Stream | 48.81000, 30.11777 | 2016 | Established |  | Emiroğlu et al. 2016 |