

***Pethia stoliczkana* (a fish, no common name)**

Ecological Risk Screening Summary

U.S. Fish & Wildlife Service, February 2013

Revised, April 2019

Web Version, 7/9/2020

Organism Type: Fish

Overall Risk Assessment Category: Uncertain



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1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2019a):

“Asia: upper Mekong basin in Laos, Thailand and Myanmar; Salween, Irrawaddy, Meklong and upper Chao Phraya basins.”

From Dahanukar (2015):

“It occurs in Myanmar (Chindwin Basin), India (Chindwin basin in Manipur), Thailand and Laos (Linthoingambi and Vishwanath 2007).

Status in the United States

There are no records of *Pethia stoliczkana* in the wild in the United States.

P. stoliczkana is in trade in the United States.

From The Wet Spot Tropical Fish (2020):

“Stoliczkana Barb *Pethia stoliczkana* Medium (1.5"+ to 2") WILD \$8.00”

Means of Introductions in the United States

There are no records of introduction for *Pethia stoliczkana* in the United States.

Remarks

Information searches were completed using the current valid name, *Pethia stoliczkana* and the synonym, *Puntius stoliczkanus* (Fricke et al. 2019).

2 Biology and Ecology

Taxonomic Hierarchy and Taxonomic Standing

From Fricke et al. (2019):

“**Current status:** Valid as *Pethia stoliczkana* (Day 1871).”

From Froese and Pauly (2019b):

“Animalia (Kingdom) > Chordata (Phylum) > Vertebrata (Subphylum) > Gnathostomata (Superclass) > [...] Actinopterygii (Class) > Cypriniformes (Order) > Cyprinidae (Family) > Barbinae (Subfamily) > *Pethia* (Genus) > *Pethia stoliczkana* (Species)”

Size, Weight, and Age Range

From Froese and Pauly (2019a):

“Max length : 5.0 cm SL male/unsexed; [Kottelat 2001]”

Environment

From Froese and Pauly (2019a):

“Freshwater; benthopelagic.”

Climate

From Froese and Pauly (2019a):

“Tropical”

Distribution Outside the United States

Native

From Froese and Pauly (2019a):

“Asia: upper Mekong basin in Laos, Thailand and Myanmar; Salween, Irrawaddy, Meklong and upper Chao Phraya basins.”

From Dahanukar (2015):

“It occurs in Myanmar (Chindwin Basin), India (Chindwin basin in Manipur), Thailand and Laos (Linthoingambi and Vishwanath 2007).”

Introduced

There are no records of introduction for *Pethia stoliczkana* outside of its native range.

Means of Introduction Outside the United States

There are no records of introduction for *Pethia stoliczkana* outside of its native range.

Short Description

From Froese and Pauly (2019a):

“Flank behind gill opening with vertically elongated black blotch; caudal peduncle with vertically elongated black blotch; dorsal fin of sexually active male red with black margin and two rows of black spots; no barbels; last simple dorsal ray serrated posteriorly.”

Biology

No information on the biology of *Pethia stoliczkana* was found.

Human Uses

From Froese and Pauly (2019a):

“Aquarium: commercial”

P. stoliczkana is in trade in the United States.

From The Wet Spot Tropical Fish (2020):

“Stoliczkana Barb *Pethia stoliczkana* Medium (1.5"+ to 2") WILD \$8.00”

Diseases

There is no information on diseases for *Pethia stoliczkana* available. **There were no records found of OIE reportable diseases (OIE 2020) for *Pethia stoliczkana*.**

Threat to Humans

From Froese and Pauly (2019a):

“Harmless”

3 Impacts of Introductions

There are no records of introduction for *Pethia stoliczkana* outside of its native range.

4 History of Invasiveness

There are no records of introduction for *Pethia stoliczkana* outside of its native range. While this species is in trade, no information on the volume or duration of trade was found. History of invasiveness is classified as No Known Nonnative Population.

5 Global Distribution

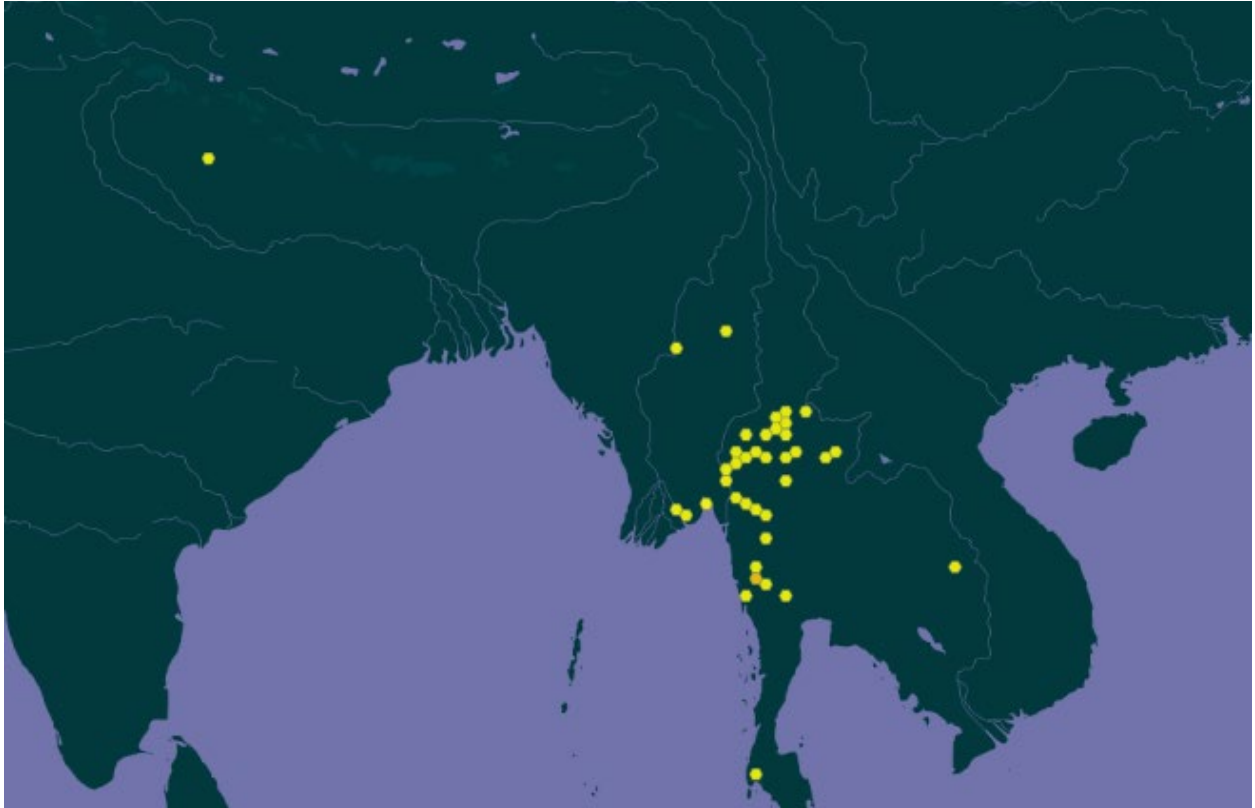


Figure 1. Known global distribution of *Pethia stoliczkana* reported from India, Myanmar, and Thailand. Map from GBIF Secretariat (2019). The location in India is well outside the range of this species and there are no introduction records for that location, therefore, it was not used to select source points for the climate match.

6 Distribution Within the United States

There are no records of *Pethia stoliczkana* in the wild in the United States.

7 Climate Matching

Summary of Climate Matching Analysis

The climate match for *Pethia stoliczkana* was low for the majority of contiguous United States with some patches of medium match in the southern Florida and southeastern Texas. There were no areas of high match. The Climate 6 score (Sanders et al. 2018; 16 climate variables; Euclidean distance) for the contiguous United States was 0.001, low (scores between 0.000 and 0.005, inclusive, are classified as low). All States had a low individual Climate 6 score except for Texas which had a medium score.

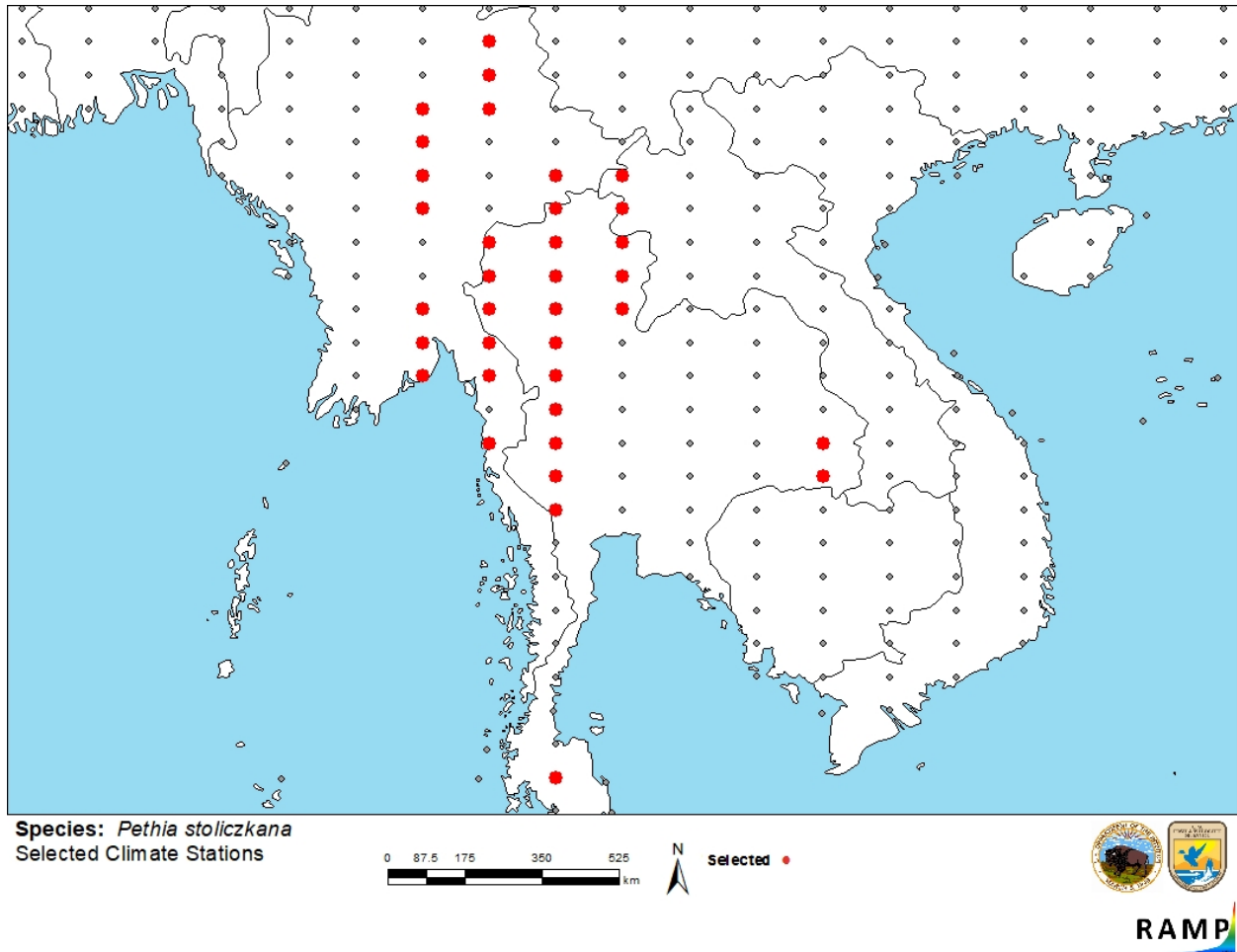


Figure 2. RAMP (Sanders et al. 2018) source map showing weather stations in southeastern Asia selected as source locations (red; Myanmar, Thailand, Laos) and non-source locations (gray) for *Pethia stoliczkana* climate matching. Source locations from GBIF Secretariat (2019). Selected source locations are within 100 km of one or more species occurrences, and do not necessarily represent the locations of occurrences themselves.

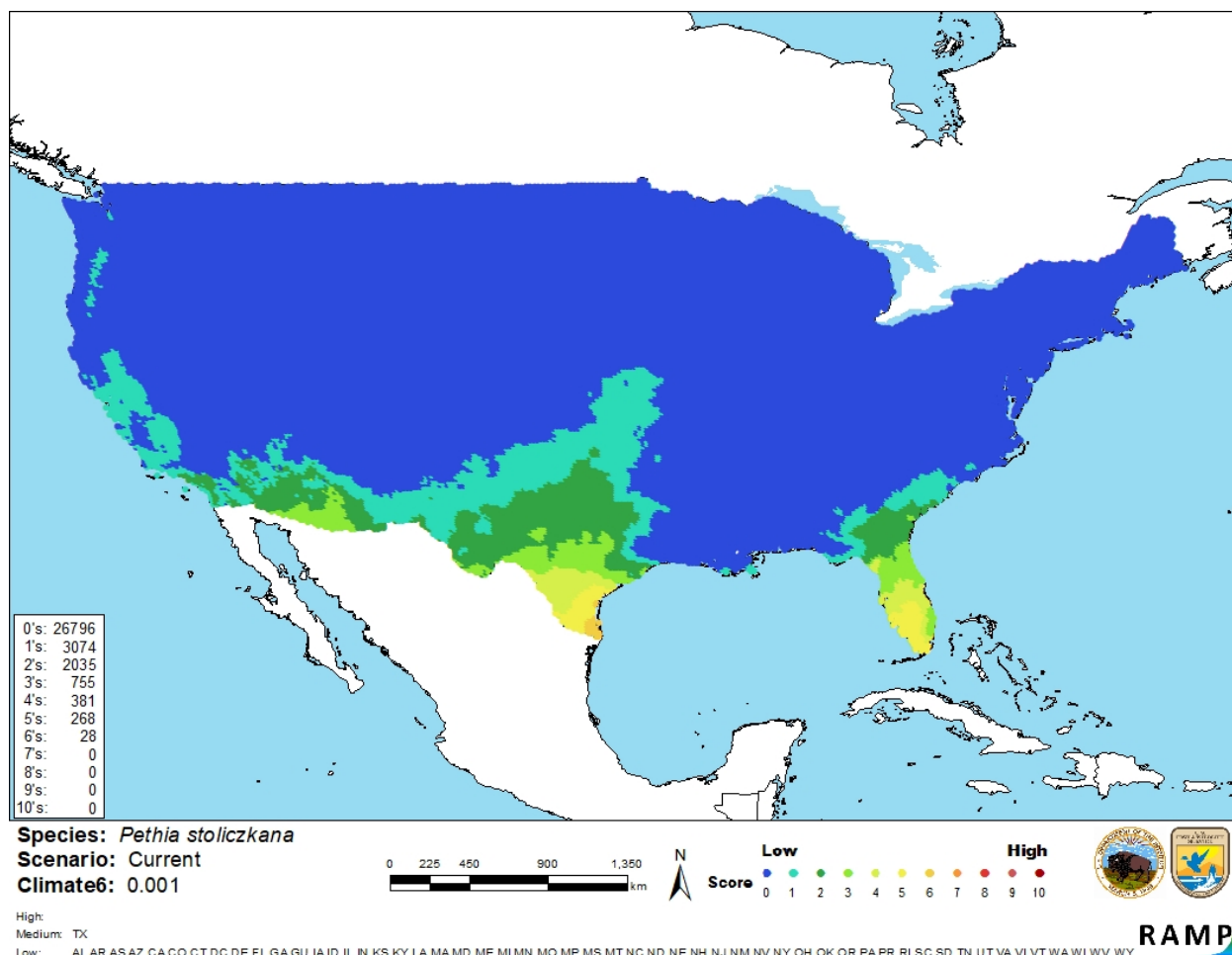


Figure 3. Map of RAMP (Sanders et al. 2018) climate matches for *Pethia stoliczkana* in the contiguous United States based on source locations reported by GBIF Secretariat (2019). Counts of climate match scores are tabulated on the left. 0/Blue = Lowest match, 10/Red = Highest match.

The High, Medium, and Low Climate match Categories are based on the following table:

Climate 6: (Count of target points with climate scores 6-10)/ (Count of all target points)	Overall Climate Match Category
$0.000 \leq X \leq 0.005$	Low
$0.005 < X < 0.103$	Medium
≥ 0.103	High

8 Certainty of Assessment

The certainty of assessment for *Pethia stoliczkana* is low. There is good information on this species about its distribution, but other information is minimal. *Pethia stoliczkana* has not been introduced anywhere outside of its native range.

9 Risk Assessment

Summary of Risk to the Contiguous United States

Pethia stoliczkana is a fish native to Laos, Thailand, Myanmar, and India. *Pethia stoliczkana* has not been introduced anywhere outside of its native range. This fish is found in the aquarium trade but information on volume of trade was unavailable. The history of invasiveness is classified as No Known Nonnative Population. The climate match for the contiguous United States is low. There only areas of medium climate match were in southern Texas and Florida. The certainty of assessment is low due to a lack of information. The overall risk assessment category for *Pethia stoliczkana* is uncertain.

Assessment Elements

- **History of Invasiveness (Sec. 4): No Known Nonnative Population**
- **Overall Climate Match Category (Sec. 7): Low**
- **Certainty of Assessment (Sec. 8): Low**
- **Remarks/Important additional information: No additional remarks**
- **Overall Risk Assessment Category: Uncertain**

10 Literature Cited

Note: The following references were accessed for this ERSS. References cited within quoted text but not accessed are included below in Section 11.

- Dahanukar N. 2015. *Pethia stoliczkanus*. The IUCN Red List of Threatened Species 2015: e.T168504A70417496. Available: <https://www.iucnredlist.org/species/168504/70417496> (March 2019).
- Fricke R, Eschmeyer WN, van der Laan R, editors. 2019. Eschmeyer's catalog of fishes: genera, species, references. California Academy of Science. Available: <http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatmain.asp> (March 2019).
- Froese R, Pauly D, editors. 2019a. *Pethia stoliczkana*. FishBase. Available: <https://www.fishbase.de/summary/Pethia-stoliczkana.html> (March 2019).
- Froese R, Pauly D, editors. 2019b. *Pethia stoliczkana*. In World Register of Marine Species. Available: <http://www.marinespecies.org/aphia.php?p=taxdetails&id=1020561> (March 2019).
- GBIF Secretariat. 2019. GBIF backbone taxonomy: *Pethia stoliczkana* (Day, 1871). Copenhagen: Global Biodiversity Information Facility. Available: <https://www.gbif.org/species/8040366> (March 2019).

[OIE] World Organisation for Animal Health. 2020. OIE-listed diseases, infections and infestations in force in 2020. Available: <http://www.oie.int/animal-health-in-the-world/oie-listed-diseases-2020/> (July 2020).

Sanders S, Castiglione C, Hoff M. 2018. Risk Assessment Mapping Program: RAMP. Version 3.1. U.S. Fish and Wildlife Service.

The Wet Spot Tropical Fish. 2020. Tropical fish – current stock. Portland, Oregon: The Wet Spot Tropical Fish. Available: <https://www.wetspottropicalfish.com/current-stock/> (July 2020).

11 Literature Cited in Quoted Material

Note: The following references are cited within quoted text within this ERSS, but were not accessed for its preparation. They are included here to provide the reader with more information.

Kottelat M. 2001. Fishes of Laos. Colombo 5, Sri Lanka: WHT Publications.

Linthoingambi I, Vishwanath W. 2007. Two new fish species of the genus *Puntius* Hamilton (Cyprinidae) from Manipur, India, with notes on *P. ticto* (Hamilton) and *P. stoliczkanus* (Day). Zootaxa 1450:45–56.