

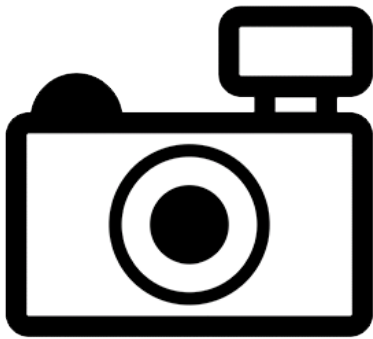
***Trichomycterus bahianus* (a catfish, no common name)**

Ecological Risk Screening Summary

U.S. Fish and Wildlife Service, December 2016

Revised, April 2017

Web Version, 4/26/2018



No Photo Available

1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2016):

“South America: tributary stream of Ribeirão Caveira, Una River basin in Bahia, Brazil.”

Status in the United States

This species has not been reported in the U.S. No evidence was found of trade in this species within the U.S.

From FFWCC (2016):

“Prohibited nonnative species are considered to be dangerous to the ecology and/or the health and welfare of the people of Florida. These species are not allowed to be personally possessed or used for commercial activities. Very limited exceptions may be made by permit from the Executive Director [...] [The list of prohibited nonnative species includes] *Trichomycterus bahianus*”

Means of Introductions in the United States

This species has not been reported in the U.S.

2 Biology and Ecology

Taxonomic Hierarchy and Taxonomic Standing

From ITIS (2016):

“Kingdom Animalia
Subkingdom Bilateria
Infrakingdom Deuterostomia
Phylum Chordata
Subphylum Vertebratas
Infraphylum Gnathostomata
Superclass Osteichthyes
Class Actinopterygii
Subclass Neopterygii
Infraclass Teleostei
Superorder Ostariophysi
Order Siluriformes
Family Trichomycteridae
Subfamily Trichomycterinae
Genus *Trichomycterus*
Species *Trichomycterus bahianus* Costa, 1992”

“Taxonomic Status: valid”

Size, Weight, and Age Range

From Froese and Pauly (2016):

“Max length : 8.9 cm male/unsexed; [de Pinna and Wosiacki 2003]”

Environment

From Froese and Pauly (2016):

“Freshwater; benthopelagic.”

Climate/Range

From Froese and Pauly (2016):

“Tropical, preferred?”

Distribution Outside the United States

Native

From Froese and Pauly (2016):

“South America: tributary stream of Ribeirão Caveira, Una River basin in Bahia, Brazil.”

Introduced

No introductions of this species have been reported.

Means of Introduction Outside the United States

No introductions of this species have been reported.

Short Description

From Bockmann and Sazima (2004):

“Pectoral-fin ray number is [...] usually I+7 (e.g. [...] *T. bahianus* [...]) [...].”

From Evers and Seidel (2005):

“*T. bahianus* is readily distinguished from its congeners by the combination of three longitudinal stripes on the body with coarse spots, especially posteriorly.”

Biology

No information available.

Human Uses

No information available.

Diseases

No information available.

Threat to Humans

From Froese and Pauly (2016):

“Harmless”

3 Impacts of Introductions

No introductions of this species have been reported. The Florida Fish and Wildlife Conservation Commission (FFWCC 2016) has listed the parasitic catfish *T. bahianus* as a prohibited species.

4 Global Distribution



Figure 1. Known global established locations of *T. bahianus* in Brazil. Map from GBIF (2016).

5 Distribution Within the United States

This species has not been reported in the United States.

6 Climate Matching

Summary of Climate Matching Analysis

The climate match (Sanders et al. 2014; 16 climate variables; Euclidean Distance) was medium across much of peninsular Florida, in extreme southeastern Louisiana, and in coastal Texas. Otherwise, the climate match was low. Climate 6 proportion indicated a low climate match overall for the contiguous United States. Proportions of 0.005 or less indicate a low climate match; the Climate 6 proportion of *T. bahianus* was 0.001.

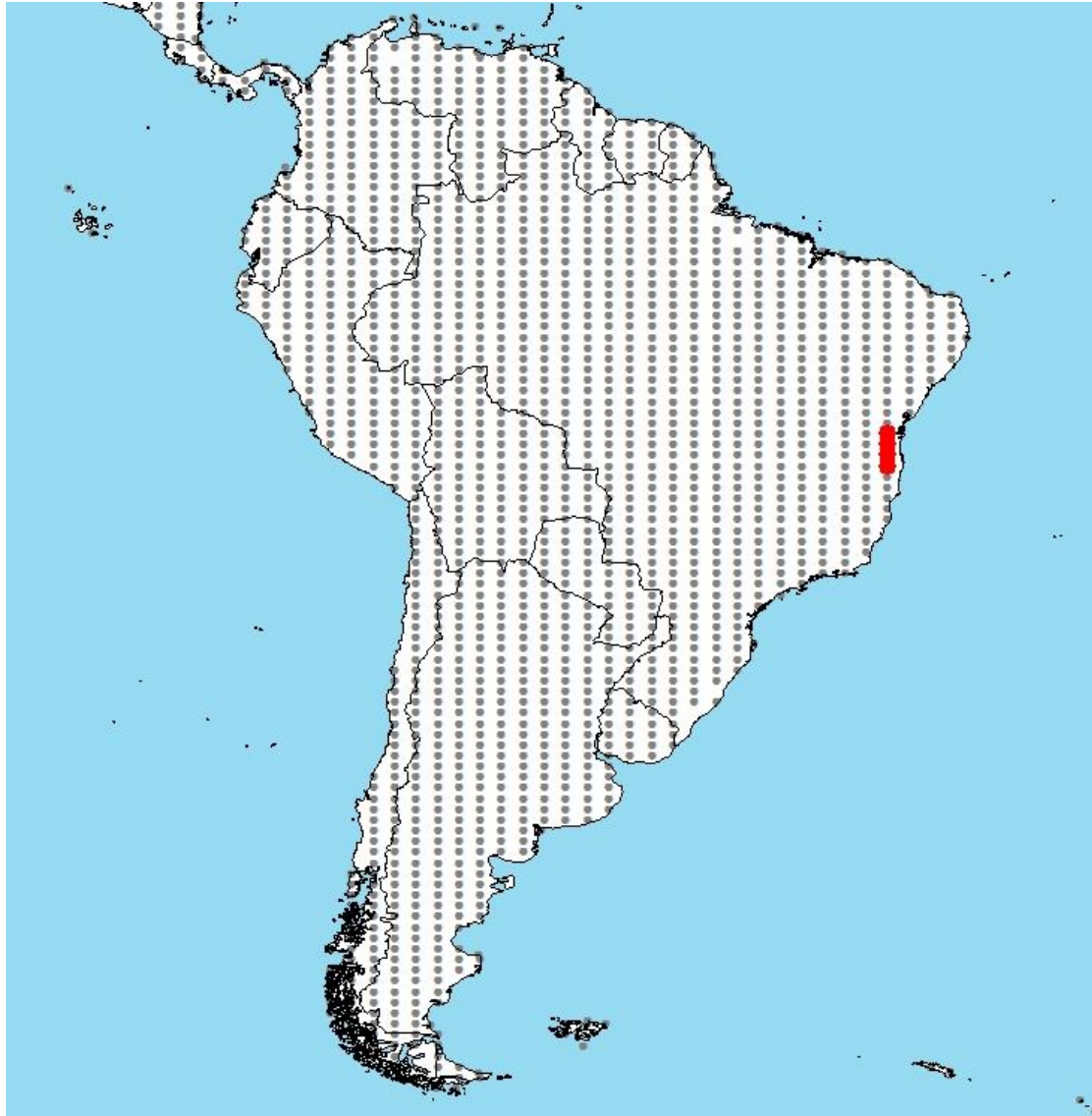


Figure 2. RAMP (Sanders et al. 2014) source map showing weather stations selected as source locations (red) and non-source locations (gray) for *T. bahianus* climate matching in Brazil. Source locations from GBIF (2016).

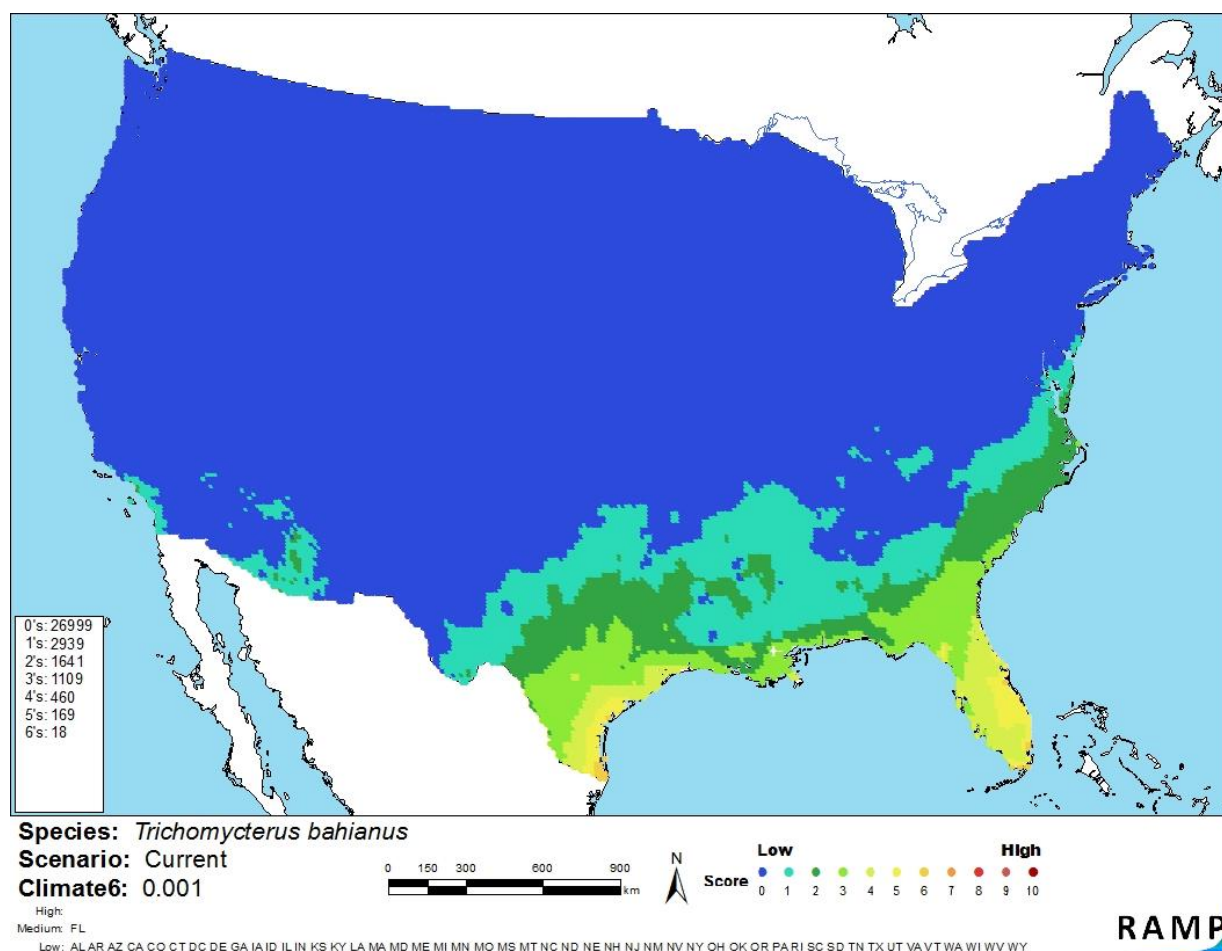


Figure 3. Map of RAMP (Sanders et al. 2014) climate matches for *T. bahianus* in the contiguous United States based on source locations reported by GBIF (2016). 0=Lowest match, 10=Highest match. Counts of climate match scores are tabulated on the left.

The “High”, “Medium”, and “Low” climate match categories are based on the following table:

Climate 6: Proportion of (Sum of Climate Scores 6-10) / (Sum of total Climate Scores)	Climate Match Category
$0.000 \leq X \leq 0.005$	Low
$0.005 < X < 0.103$	Medium
≥ 0.103	High

7 Certainty of Assessment

The biology and ecology of *T. bahianus* are poorly known. The species has never been reported outside its native range, so impacts of introduction are unknown. The certainty of this assessment is low.

8 Risk Assessment

Summary of Risk to the Contiguous United States

Trichomycterus bahianus is a trichomycterid catfish from eastern Brazil. The species has a low climate match with the contiguous United States overall, with highest matches in Florida, extreme southeast Louisiana and coastal Texas. *T. bahianus* has not been introduced outside of its native range. Without being able to observe introductions in other parts of the world, it is impossible to know the potential impacts of introduction of *T. bahianus* to the U.S. The Florida Fish and Wildlife Conservation Commission has listed the parasitic catfish *T. bahianus* as a prohibited species. The overall risk posed by this species is uncertain.

Assessment Elements

- **History of Invasiveness (Sec. 3): Uncertain**
- **Climate Match (Sec. 6): Low**
- **Certainty of Assessment (Sec. 7): Low**
- **Overall Risk Assessment Category: Uncertain**

9 References

Note: The following references were accessed for this ERSS. References cited within quoted text but not accessed are included below in Section 10.

Bockmann, F., and I. Sazima. 2004. *Trichomycterus maracaya*, a new catfish from the upper rio Paraná, southeastern Brazil (Siluriformes: Trichomycteridae), with notes on the *T. brasiliensis* species-complex. *Neotropical Ichthyology* 2(2):61-74.

Evers, H. G., and I. Seidel. 2005. Catfish atlas volume 1: South American catfishes of the families Loricariidae, Cetopsidae, Nematogenyidae and Trichomycteridae, first edition. MERGUS Verlag GmbH, Melle, Germany.

FFWCC (Florida Fish and Wildlife Conservation Commission). 2016. Prohibited species list. Florida Fish and Wildlife Conservation Commission, Tallahassee, Florida. Available: <http://myfwc.com/wildlifehabitats/nonnatives/regulations/prohibited/>. (December 2016).

Froese, R., and D. Pauly, editors. 2016. *Trichomycterus bahianus* Costa, 1992. FishBase. Available: <http://www.fishbase.org/summary/53670>. (December 2016).

GBIF (Global Biodiversity Information Facility). 2016. GBIF backbone taxonomy: *Trichomycterus bahianus* Costa, 1992. Global Biodiversity Information Facility, Copenhagen. Available: <http://www.gbif.org/species/2343016>. (December 2016).

ITIS (Integrated Taxonomic Information System). 2016. *Trichomycterus bahianus* Costa, 1992. Integrated Taxonomic Information System, Reston, Virginia. Available: https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=682178#null. (December 2016).

Sanders, S., C. Castiglione, and M. H. Hoff. 2014. Risk Assessment Mapping Program: RAMP. U.S. Fish and Wildlife Service.

10 References Quoted But Not Accessed

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.

de Pínna, M. C. C., and W. Wosiacki. 2003. Trichomycteridae (pencil or parasitic catfishes). Pages 270-290 *in* R. E. Reis, S. O. Kullander, and C. J. Ferraris, Jr., editors. Checklist of the freshwater fishes of South and Central America. EDIPUCRS, Porto Alegre, Brazil.