

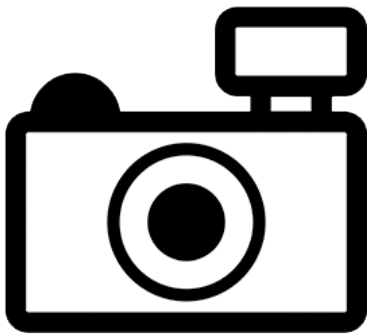
***Ituglanis guayaberensis* (a catfish, no common name)**

Ecological Risk Screening Summary

U.S. Fish & Wildlife Service, December 2016

Revised, February 2017

Web Version, 1/27/2018



No Photo Available

1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2016):

“South America: Guayabero River basin, Orinoco drainage [Colombia].”

Status in the United States

This species has not been reported in the United States.

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. [...]

Freshwater Aquatic Species [...]

Parasitic catfishes [...]

Ituglanis guayaberensis”

Means of Introductions in the United States

This species has not been reported in the United States.

2 Biology and Ecology

Taxonomic Hierarchy and Taxonomic Standing

From ITIS (2016):

“Kingdom Animalia
 Infrakingdom Deuterostomia
 Phylum Chordata
 Subphylum Vertebrata
 Infraphylum Gnathostomata
 Superclass Osteichthyes
 Class Actinopterygii
 Subclass Neopterygii
 Infraclass Teleostei
 Superorder Ostariophysi
 Order Siluriformes
 Family Trichomycteridae
 Subfamily Trichomycterinae
 Genus *Ituglanis*
 Species *Ituglanis guayaberensis* (Dahl, 1960)”

“Taxonomic Status: valid”

Size, Weight, and Age Range

From Froese and Pauly (2016):

“Max length : 5.7 cm NG male/unsexed; [de Pínna 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: Guayabero River basin, Orinoco drainage [Colombia].”

Introduced

This species has not been reported as introduced outside of its native range.

Means of Introduction Outside the United States

This species has not been reported as introduced outside of its native range.

Short Description

No information available.

Biology

From Wosiacki et al. (2012):

“The species of *Ituglanis* inhabit small streams and rapids, and include a few troglomorphic forms (Bichuette & Trajano, 2004, 2008).”

From Datovo and de Pinna (2014):

“Most epigeal species of *Ituglanis* have microhabitat preferences favouring interstices within leaf litter, wood debris and gravel.”

Human Uses

No information available.

Diseases

No information available.

Threat to Humans

From Froese and Pauly (2016):

“Harmless”

3 Impacts of Introductions

This species has not been reported as introduced outside of its native range.

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. [...]

Freshwater Aquatic Species [...]

Parasitic catfishes [...]

Ituglanis guayaberensis”

4 Global Distribution



Figure 1. Rivers of Colombia, including Guayabero River (circled) where *Ituglanis guayabernsis* is endemic (see Distribution Outside the United States, above). Map: Shadowxfox. Licensed under Creative Commons BY-SA 3.0. Available: [https://commons.wikimedia.org/wiki/File:Mapa_de_Colombia_\(r%C3%ADos\).svg#/media/File:Mapa_de_Colombia_\(r%C3%ADos\).svg](https://commons.wikimedia.org/wiki/File:Mapa_de_Colombia_(r%C3%ADos).svg#/media/File:Mapa_de_Colombia_(r%C3%ADos).svg). (February 2017).

5 Distribution Within the United States

This species has not been reported within the United States.

6 Climate Matching

Summary of Climate Matching Analysis

The climate match (Sanders et al. 2014; 16 climate variables; Euclidean Distance) for *Ituglanis guayaberensis* was low throughout the contiguous U.S., reflected in a Climate 6 proportion of 0.0. The range of proportions indicating a low climate match is 0.000-0.005.

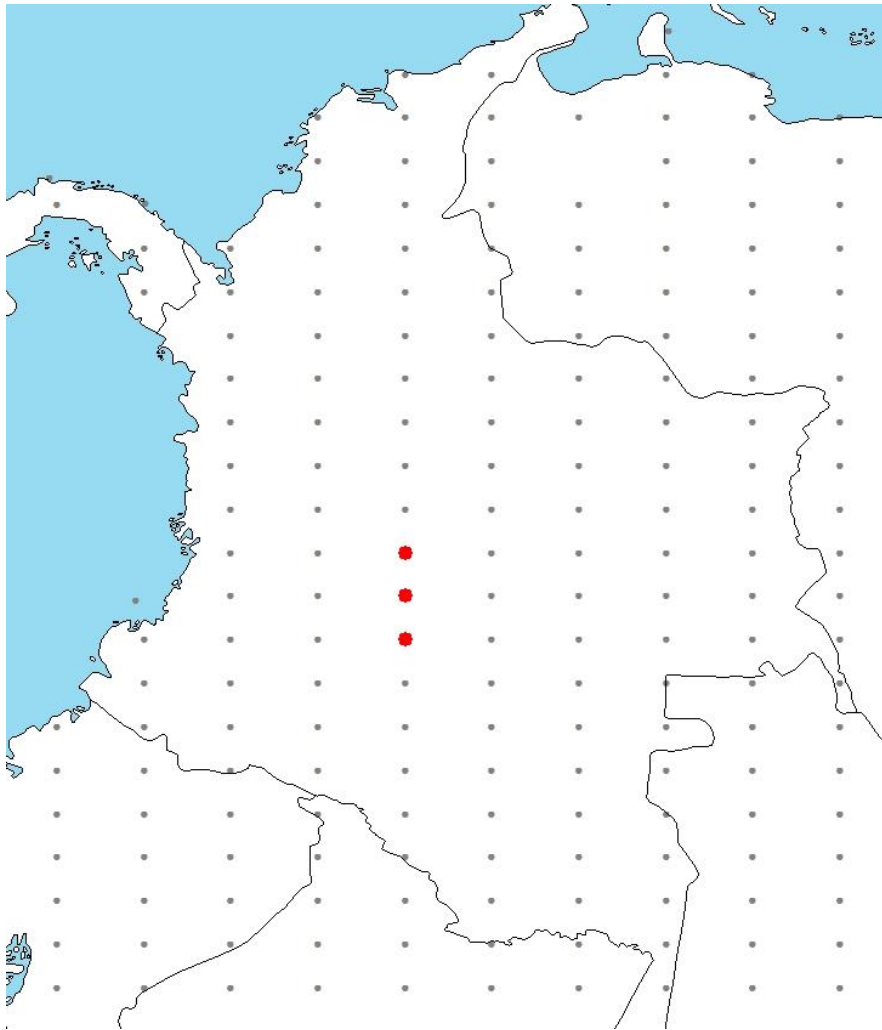


Figure 2. RAMP (Sanders et al. 2014) source map showing weather stations selected as source locations (red) and non-source locations (gray) for *Ituglanis guayaberensis* climate matching. Source locations based on distribution described by Froese and Pauly (2016; see Distribution Outside the United States).

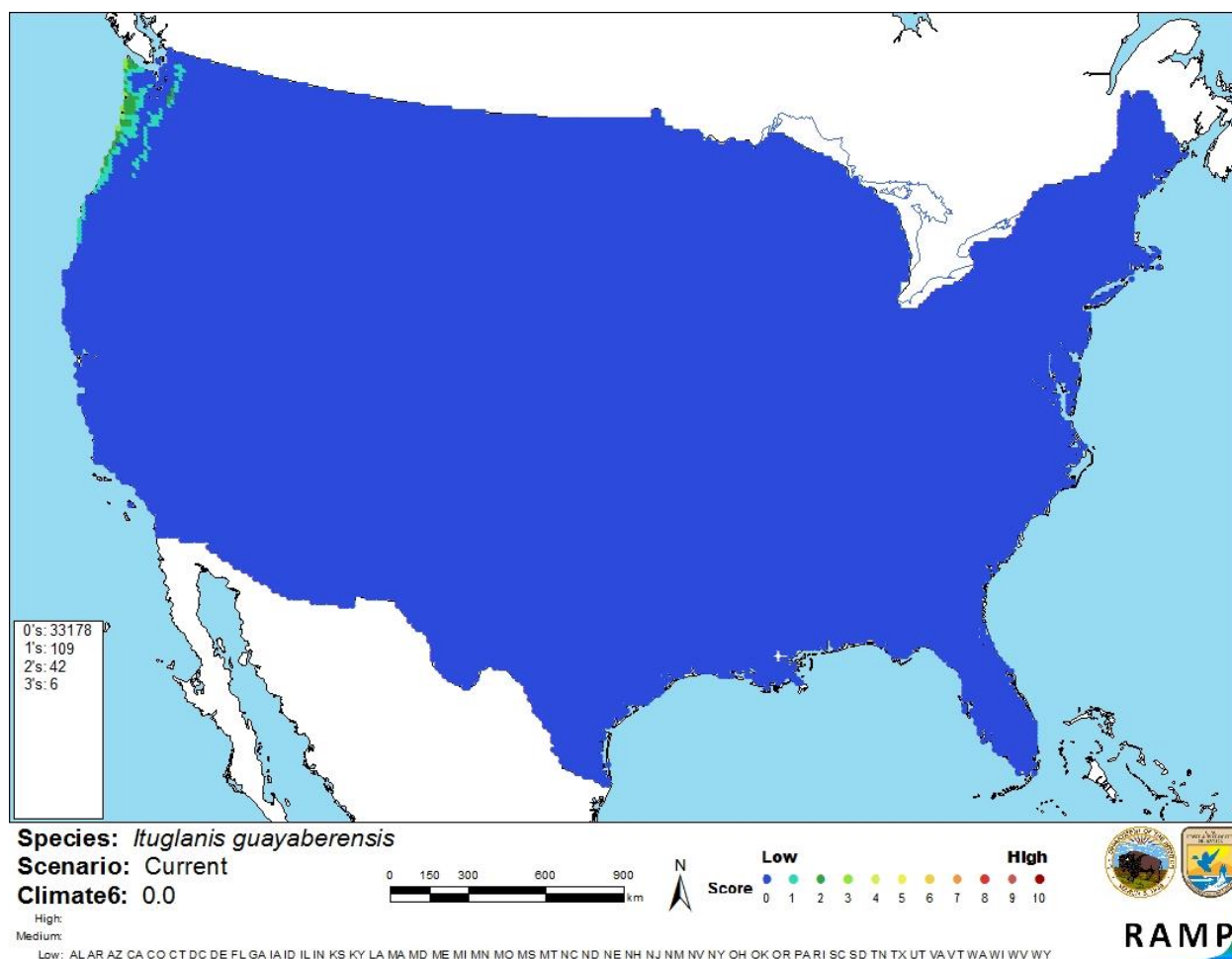


Figure 3. Map of RAMP (Sanders et al. 2014) climate matches for *Ituglanis guayaberensis* in the contiguous United States based on source locations describing the distribution stated by Froese and Pauly (2016; see Distribution Outside the United States). 0= Lowest match, 10=Highest match. Counts of climate 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

There was limited information available on the species *Ituglanis guayaberensis*. This species has not been reported outside of its native range so impacts of introduction are unknown. With such little information available, the certainty of this assessment is low.

8 Risk Assessment

Summary of Risk to the Contiguous United States

Ituglanis guayaberensis is a trichomycterid catfish found in the Guayabero River basin of Colombia. There have been no reports of this fish outside of its native range. Like other trichomycterids, *I. guayaberensis* is on the state of Florida's prohibited species list. Due to its low climate match and absence of introduction history, 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.

- Datovo, A., and M. C. C. de Pinna. 2014. A new species of *Ituglanis* representing the southernmost record of the genus, with comments on phylogenetic relationships (Teleostei: Siluriformes: Trichomycteridae). *Journal of Fish Biology* 84:314-327.
- 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/#nogo>. (December 2016).
- Froese, R., and D. Pauly, editors. 2016. *Ituglanis guayaberensis* (Dahl, 1960). FishBase. Available: <http://www.fishbase.org/summary/Ituglanis-guayaberensis.html>. (December 2016).
- ITIS (Integrated Taxonomic Information System). 2016. *Ituglanis guayaberensis* (Dahl, 1960). Integrated Taxonomic Information System, Reston, Virginia. Available: https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=682121#null. (December 2016).
- Sanders, S., C. Castiglione, and M. Hoff. 2014. Risk Assessment Mapping Program: RAMP. U.S. Fish and Wildlife Service.
- Wosiacki, W. B., G. M. Dutra, and M. B. Mendonça. 2012. Description of a new species of *Ituglanis* (Siluriformes: Trichomycteridae) from Serra dos Carajás, rio Tocantins basin. *Neotropical Ichthyology* 10(3):547-554.

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.

Bichuette, M. E., and E. Trajano. 2004. Three new subterranean species of *Ituglanis* from Central Brazil (Siluriformes: Trichomycteridae). *Ichthyological Explorations of Freshwaters* 15:243-356.

Bichuette, M. E., and E. Trajano. 2008. *Ituglanis mambai*, a new subterranean catfish from a karst área of Central Brazil, rio Tocantins basin (Siluriformes: Trichomycteridae). *Neotropical Ichthyology* 6:9-15.

de Pinna, 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.