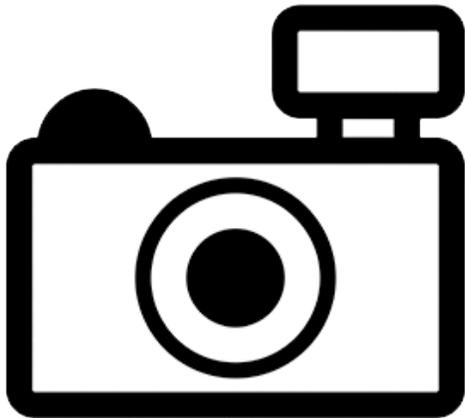


Adonis Pleco (*Acanthicus adonis*)

Ecological Risk Screening Summary

U.S. Fish and Wildlife Service, web version – 03/29/2018



No Photo Available

1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2015):

“South America: Lower Tocantins River basin.”

Status in the United States

No records of *Acanthicus adonis* in the United States were found.

Means of Introductions in the United States

No records of *Acanthicus adonis* in the United States were found.

Remarks

No records found for *Acanthicus adonis* outside its native range.

2 Biology and Ecology

Taxonomic Hierarchy and Taxonomic Standing

From ITIS (2014):

“Kingdom Animalia
Subkingdom Bilateria
Infrakingdom Deuterostomia
Phylum Chordata
Subphylum Vertebrata
Infraphylum Gnathostomata
Superclass Osteichthyes
Class Actinopterygii
Subclass Neopterygii
Infraclass Teleostei
Superorder Ostariophysi
Order Siluriformes
Family Loricariidae
Subfamily Hypostominae
Genus *Acanthicus* Agassiz, 1829
Species *Acanthicus adonis* Isbrücker and Nijssen, 1988”

“Taxonomic Status:
Current Standing: valid”

Size, Weight, and Age Range

From Froese and Pauly (2015):

“Max length: 20.6 cm SL male/unsexed; [Fisch-Muller 2003]”

Environment

From Froese and Pauly (2015):

“Freshwater; demersal; pH range: 6.0 - 7.0; dH range: 5 - 12. [...]; 23°C - 27°C [assumed to be recommended aquarium temperature range] [Baensch and Riehl 1985]”

Climate/Range

From Froese and Pauly (2015):

“Tropical; [...]”

Distribution Outside the United States

Native

From Froese and Pauly (2015):

“South America: Lower Tocantins River basin.”

Introduced

No records of *Acanthicus adonis* introductions were found.

Means of Introduction Outside the United States

No records of *Acanthicus adonis* introductions were found.

Short Description

A short description of *Acanthicus adonis* could not be found.

Biology

Information on the biology of *Acanthicus adonis* could not be found.

Human Uses

From Froese and Pauly (2015):

“Aquarium: commercial”

Diseases

Information on diseases of *Acanthicus adonis* could not be found.

Threat to Humans

From Froese and Pauly (2015):

“Harmless”

3 Impacts of Introductions

No records of *Acanthicus adonis* introductions were found.

4 Global Distribution

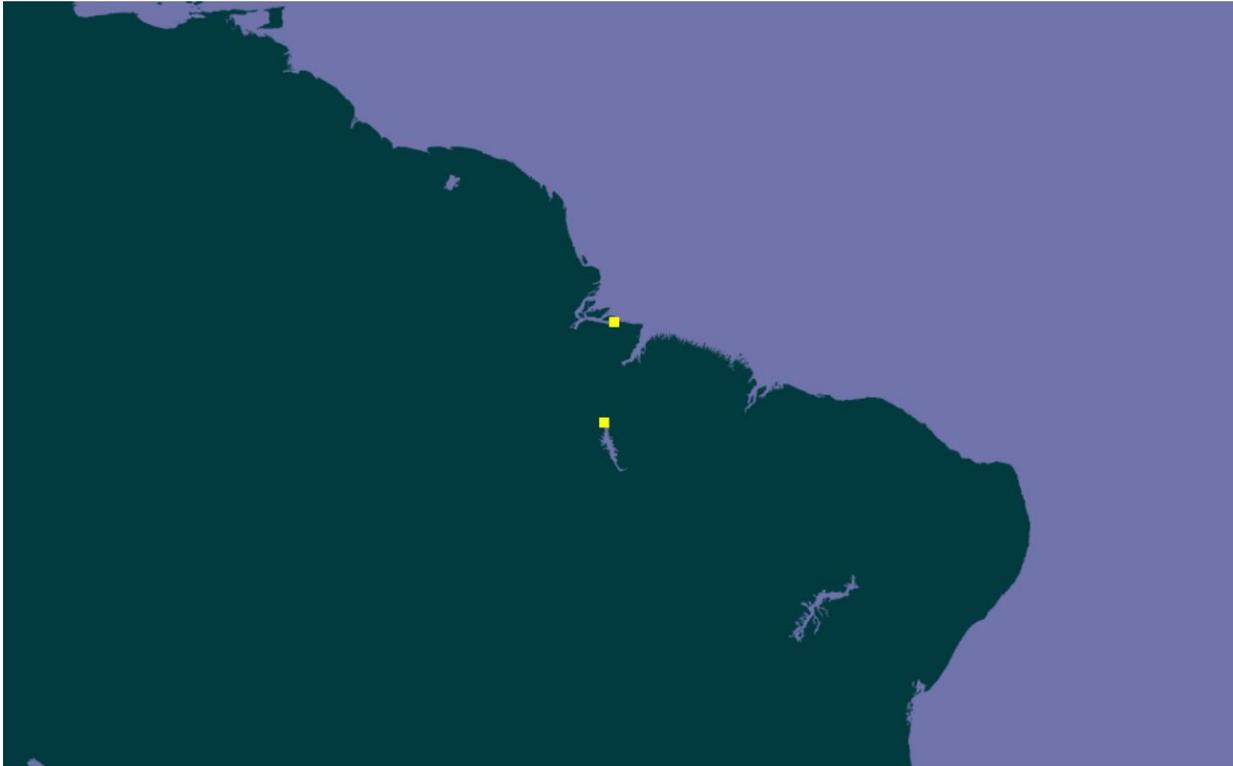


Figure 1. Known global distribution of *Acanthicus adonis*. Locations are in northeastern Brazil. Map from GBIF Secretariat (2015).

5 Distribution Within the United States

No records of *Acanthicus adonis* in the United States were found.

6 Climate Matching

Summary of Climate Matching Analysis

The climate match for *Acanthicus adonis* was categorically low across the continental United States. The Climate 6 score (Sanders et al. 2014; 16 climate variables; Euclidean distance) for the Continental U.S. was 0.000, low, and high in no states.

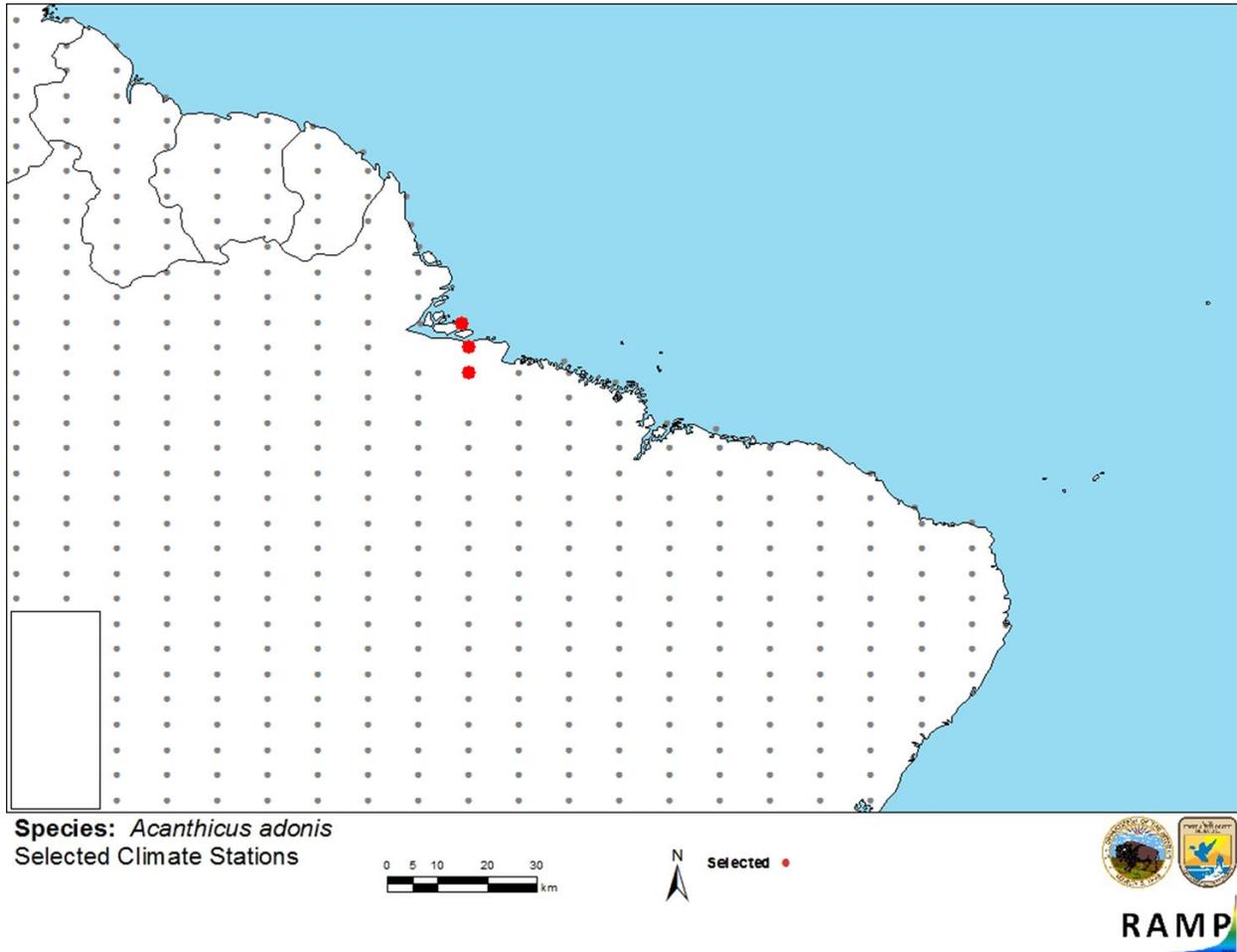


Figure 2. RAMP (Sanders et al. 2014) source map showing weather stations in northeastern Brazil selected as source locations (red) and non-source locations (grey) for *Acanthicus adonis* climate matching. Source locations from GBIF Secretariat (2015).

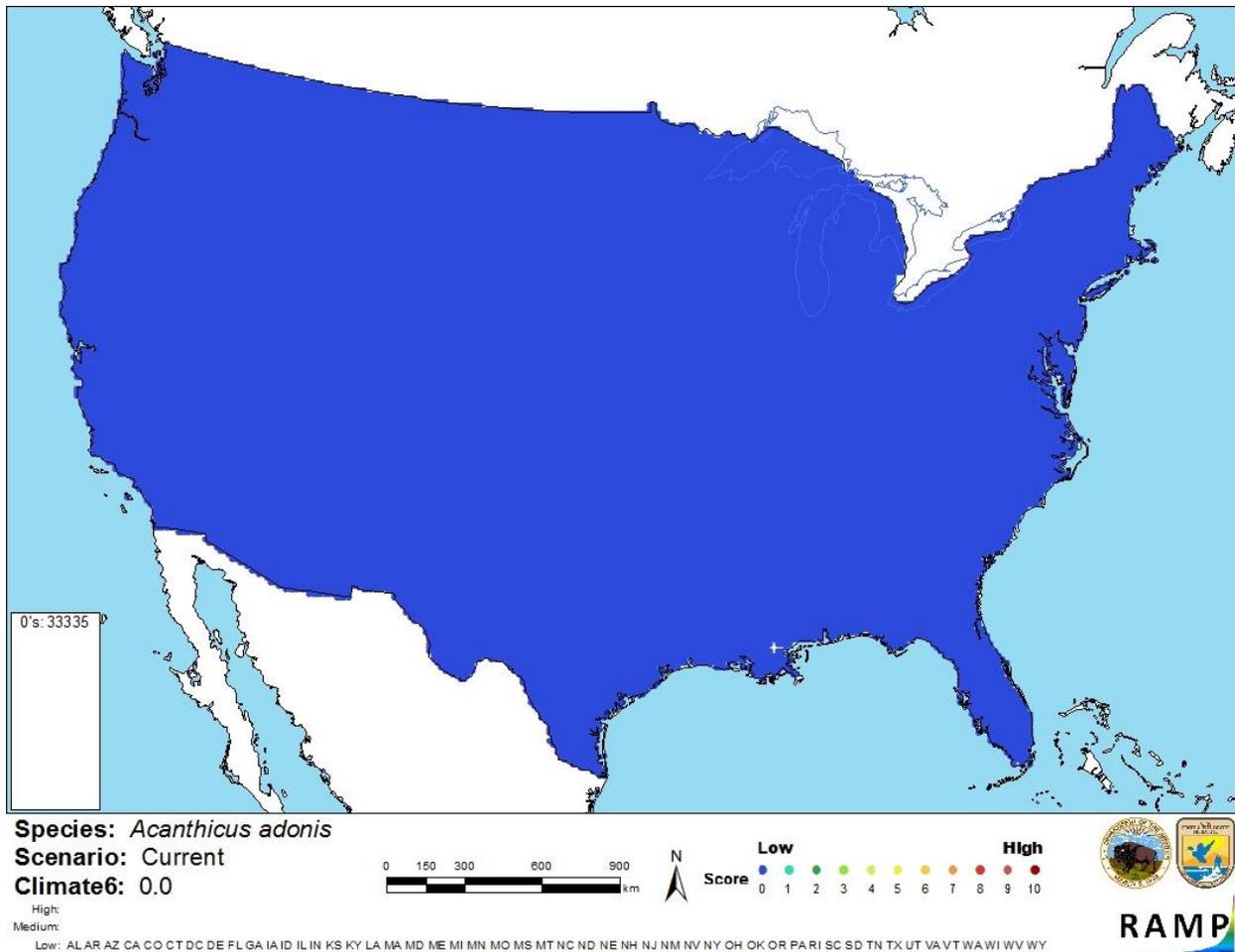


Figure 3. Map of RAMP (Sanders et al. 2014) climate matches for *Acanthicus adonis* in the contiguous United States based on source locations reported by GBIF Secretariat (2015). 0 = Lowest match, 10 = Highest match. Counts of climate match scores are tabulated on the left.

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 certainty of assessment is low. Very limited information is available for this species; it was first described scientifically 25 years ago and only a few point locations were found.

8 Risk Assessment

Summary of Risk to the Contiguous United States

The history of invasiveness is uncertain. There were no records of introduction found for *Acanthicus adonis*. The climate match is 0.000, low. The climate requirements for this species are entirely tropical and would prevent it from establishing populations in the continental United States. The overall risk to the continental United States is uncertain.

Assessment Elements

- **History of Invasiveness (Sec. 3): Uncertain**
- **Climate Match (Sec. 6): Low**
- **Certainty of Assessment (Sec. 7): Low**
- **Remarks/Important additional information** No additional remarks.
- **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.

Froese, R. and D. Pauly, editors. 2015. *Acanthicus adonis* Isbrücker & Nijssen, 1988. FishBase. Available: <http://www.fishbase.org/summary/Acanthicus-adonis.html>. (December 2015).

GBIF Secretariat. 2015. GBIF backbone taxonomy: *Acanthicus adonis* Isbrücker & Nijssen, 1988. Global Biodiversity Information Facility, Copenhagen. Available: <https://www.gbif.org/species/5202069>. (December 2015).

ITIS (Integrated Taxonomic Information System). 2014. *Acanthicus adonis* Isbrücker & Nijssen, 1988. Integrated Taxonomic Information System, Reston, Virginia. Available: http://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=640228. (March 2014).

Sanders, S., C. Castiglione, and M. 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.

Baensch, H. A., and R. Riehl. 1985. Aquarien atlas. Band 2. Mergus, Verlag für Natur-und Heimtierkunde GmbH, Melle, Germany.

Burgess, W. E. 1989. An atlas of freshwater and marine catfishes. A preliminary survey of the Siluriformes. T.F.H. Publications, Neptune City, New Jersey.

Fisch-Muller, S. 2003. Loricariidae-Ancistrinae (Armored catfishes). Pages 373–400 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.

Romero, P. 2002. An etymological dictionary of taxonomy. Unpublished, Madrid.