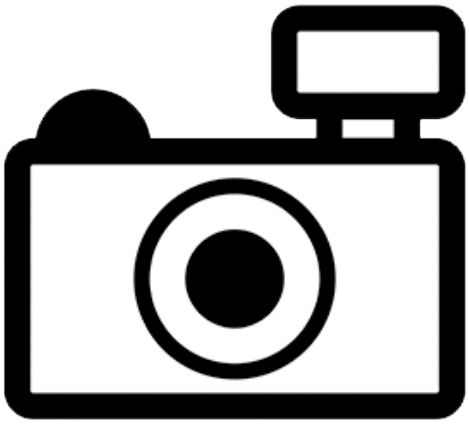
Tariqilabeo macmahoni (a carp, no common name)

Ecological Risk Screening Summary

U.S. Fish and Wildlife Service, April 2012
Revised, April 2018
Web Version, 6/18/2018



1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2018):

"Asia: endemic to Dasht drainage in Baluchistan, Pakistan."

From Zugmayer (1912):

"Thirteen specimens from Dasht River [Pakistan], near Suntsar and Turbat ; this seems the westernmost habitat of the genus in Asia."

Status in the United States

This species has not been reported as introduced or established in the United States. There is no indication that this species is in trade in the United States.

Means of Introductions in the United States

This species has not been reported as introduced or established in the United States.

Remarks

From Mirza and Javed (2015):

"*Tariqilabeo* Mirza & Saboohi 1990, was proposed as a subgenus to accommodate *Labeo macmahoni* Zugmayer which was subsequently raised to genus level by Mirza, 2003. Kullander et al. (1999) treated *Tariqilabeo macmahoni* Zugmayer as the synonym of *Crossocheilus diplochilus* Heckel. It was realized that this genus is similar to the South-East Asian genus *Crossocheilus* and hence was merged into its synonymy (Mirza & Arshad, 2008). Dr. S. O. Kullander, wrote in a letter dated 27-11-1999. "Concerning *Crossocheilus diplochilus* and *Tariqilabeo macmahoni*, my conclusion is different. I believe that *diplochilus* is a *Tariqilabeo*. It looks very different from any Indian or Southeast Asian *Crossocheilus*"."

"In the light of remarks by Dr. Kullander, we are of the opinion that *Tariqilabeo* be recognized as a valid genus. At present only two species, *viz.*, *Tariqilabeo diplochilus* (Heckel) and *Tariqilabeo macmahoni* (Zugmayer) be included in this genus."

2 Biology and Ecology

Taxonomic Hierarchy and Taxonomic Standing

From ITIS (2018):

"Kingdom Animalia
Subkingdom Bilateria
Infrakingdom Deuterostomia
Phylum Chordata
Subphylum Vertebrata
Infraphylum Gnathostomata
Superclass Actinopterygii
Class Teleostei
Superorder Ostariophysi
Order Cypriniformes
Superfamily Cyprinoidea
Family Cyprinidae
Genus *Labeo*
Species *Labeo macmahoni* Zugmayer, 1912"

From Eschmeyer et al. (2018):

"Current status: Valid as *Tariqilabeo macmahoni* (Zugmayer 1912). Cyprinidae: Labeoninae."

From Mirza and Javed (2015):

"SYNONYMS OF *TARIQILABEO MACMAHONI*
(ZUGMAYER 1912)
Labeo macmahoni Zugmayer, 1912.
Labeo (Tariqilabeo) macmahoni Mirza & Saboohi, 1990.
Tariqilabeo macmahoni Mirza, 2003.
Crossocheilus macmahoni Mirza & Arshad, 2008."

Size, Weight, and Age Range

From Froese and Pauly (2018):

"Max length : 25.0 cm TL male/unsexed; [Talwar and Jhingran 1991]"

Environment

From Froese and Pauly (2018):

"Freshwater; benthopelagic."

Climate/Range

From Froese and Pauly (2018):

"Subtropical"

Distribution Outside the United States

Native

From Froese and Pauly (2018):

"Asia: endemic to Dasht drainage in Baluchistan, Pakistan."

From Zugmayer (1912):

"Thirteen specimens from Dasht River [Pakistan], near Suntsar and Turbat ; this seems the westernmost habitat of the genus in Asia."

Introduced

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

Means of Introduction Outside the United States

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

Short Description
From Zugmayer (1912):

"Length of head $5\frac{1}{2}$, depth of body $4\frac{1}{2}$ in total length. Diameter of orbit 4 in head, $2\frac{1}{2}$ in interorbital space, and $1\frac{2}{5}$ in snout. Mouth very soft and flabby, with pronounced lateral lobes. Jaws closely enveloped by lips ; a median transverse fold to lower lip, two external folds. Lower jaw with a hard and sharp horny margin. Barbels four: two rostral, shorter than the eye, two very small ones in the corners of the mouth. Dorsal arises midway between tip of snout and end of base of anal fin, considerably before the origin of ventrals ; pectoral reaches $\frac{2}{3}$ towards ventral, the latter $\frac{3}{4}$ towards anal."

"Slate-blue on back, golden and silvery on sides and abdomen ; no marks ; fins pale, unspotted."

Biology
No information available.

Human Uses
From Froese and Pauly (2018):

"Fisheries: of no interest"

Diseases
No information available. No OIE-reportable diseases have been documented for this species.

Threat to Humans
From Froese and Pauly (2018):

"Harmless"

3 Impacts of Introductions
This species has not been reported as introduced or established outside of its native range.

4 Global Distribution

No georeferenced occurrences are available (GBIF Secretariat 2017).

Figure 1. Map of Pakistan, showing the location of the Dasht River in the Balochistan Province, southwest Pakistan. The Dasht River drainage is the known distribution of *Tariqilabeo macmahoni* as reported by Froese and Pauly (2018) and Zugmeyer (1912). Map from Nomi887. Licensed under CC BY-SA 3.0. Available: https://commons.wikimedia.org/wiki/File:Pakistan_Rivers.PNG. (April 2018).

5 Distribution Within the United States

This species has not been reported as introduced or established in the U.S.

6 Climate Matching

Summary of Climate Matching Analysis

The Climate 6 score (Sanders et al. 2014; 16 climate variables; Euclidean distance) for the contiguous United States was 0.021, which is a medium climate match score. The range for a medium climate match is between 0.005 and 0.103. There was an area of high climate match in southern California and Arizona, with a medium match in the surrounding areas from southern Texas to inland California. Overall, Arizona and California had a high climate match, Nevada and Texas had a medium match, and all other states in the contiguous United States had a low match. Georeferenced locations were not available for this species, so the climate match was based on the general description of this species' range.

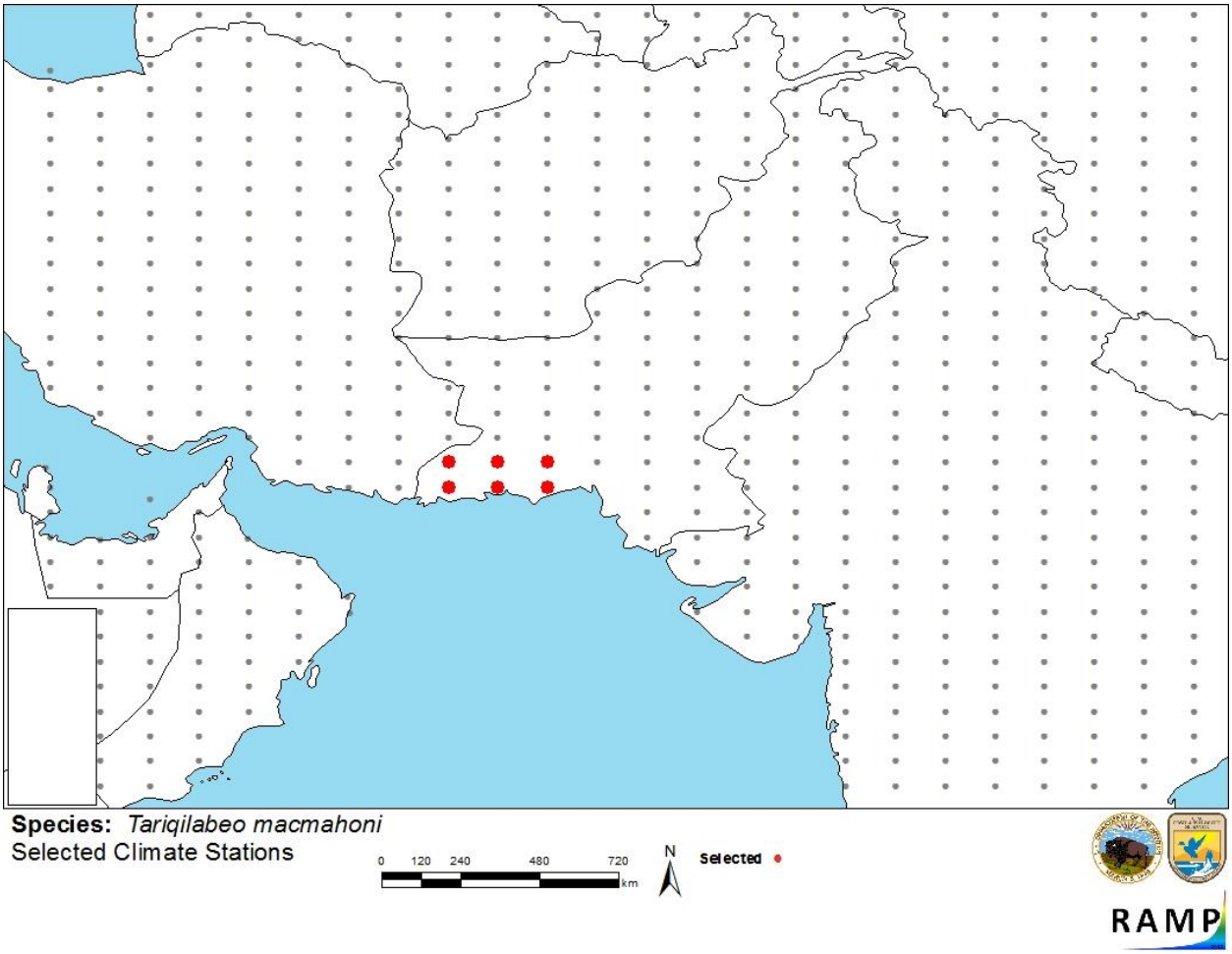


Figure 2. RAMP (Sanders et al. 2014) source map of Pakistan and surrounding countries showing weather stations selected as source locations (red) and non-source locations (gray) for *Tariqilabeo macmahoni* climate matching. Source locations from Froese and Pauly (2018) and Zugmeyer (1912).

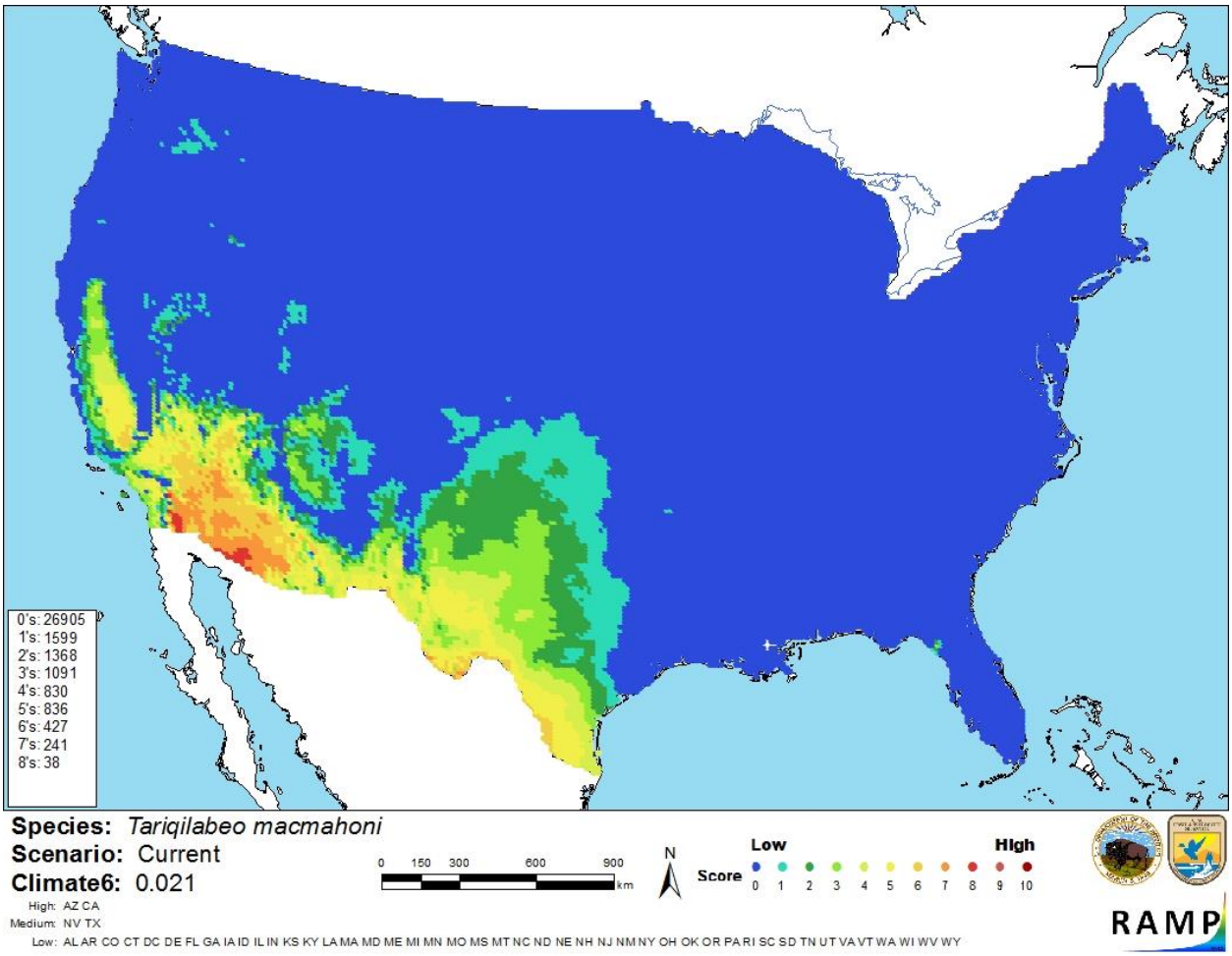


Figure 3. Map of RAMP (Sanders et al. 2014) climate matches for *Tariqilabeo macmahoni* in the contiguous United States based on source locations reported by Froese and Pauly (2018) and Zugmeyer (1912). 0= Lowest match, 10=Highest match.

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 is very little information available about *Tariqilabeo macmahoni*. No species distribution map with occurrence points is available for this species. The distribution information is based on the general description of this species' range. No introductions of this species have been reported, so impacts of introduction are unknown. Further information is needed to adequately assess the risk this species poses. Certainty of this assessment is low.

8 Risk Assessment

Summary of Risk to the Contiguous United States

Tariqilabeo macmahoni is a cyprinid fish native to the Dasht River drainage in southwest Pakistan. This species has a medium climate match with the contiguous United States. The area of highest match was in the Southwest. *T. macmahoni* has not been reported outside its native range, therefore there is no documented history of invasiveness. Because of a lack of information on which to base a risk assessment, the certainty of this assessment is low. The overall risk assessment category is Uncertain.

Assessment Elements

- **History of Invasiveness (Sec. 3): Uncertain**
- **Climate Match (Sec. 6): Medium**
- **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.

Eschmeyer, W. N., R. Fricke, and R. van der Laan, editors. 2018. Catalog of fishes: genera, species, references. Available: http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatmain.asp. (April 2018).

Froese, R., and D. Pauly, editors. 2018. *Labeo macmahoni* (Zugmayer, 1912). FishBase. Available: http://www.fishbase.se/summary/Labeo-macmahoni.html. (April 2018).

GBIF Secretariat. 2017. GBIF backbone taxonomy: *Tariqilabeo macmahoni* (Zugmayer, 1912). Global Biodiversity Information Facility, Copenhagen. Available: https://www.gbif.org/species/2361749. (June 2018).

ITIS (Integrated Taxonomic Information System). 2018. *Labeo macmahoni* (Zugmayer, 1912). Integrated Taxonomic Information System, Reston, Virginia. Available: https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=689311#null. (April 2018).

Mirza, M. R., and M. N. Javed. 2015. A note on the status of *Tariqilabeo* (Pisces: Cyprinidae). Biologia (Pakistan) 61(2):343.

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

Zugmayer, E. 1912. Eight new fishes from Baluchistan. The Annals and Magazine of Natural History; Zoology, Botany, and Geology 10(60):595-599.

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.

Talwar, P. K., and A. G. Jhingran. 1991. Inland fishes of India and adjacent countries, Volume 1. A. A. Balkema, Rotterdam, The Netherlands.