

## ***Labeo indramontri* (a carp, no common name)**

### **Ecological Risk Screening Summary**

U.S. Fish and Wildlife Service, April 2012

Revised, April 2018

Web Version, 5/11/2018



Photo: J. Armbruster. Licensed under CC BY-NC-SA 3.0. Available: <http://www.morphbank.net/?id=819769>. (April 2018).

## **1 Native Range and Status in the United States**

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### **Native Range**

From Froese and Pauly (2018):

“Asia: Chao Phraya basin, Thailand [Doi 1997]. Recorded from the Mekong basin [Taki 1978].”

From Vidthayanon (2012):

“The species is known from the lower Chao Phraya and Mekong basins (Cambodia and the Mekong delta in Viet Nam; Khoa and Huong 1993).”

### **Status in the United States**

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

### **Means of Introductions in the United States**

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

## **2 Biology and Ecology**

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### **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 indramontri* Smith, 1945”

From Eschmeyer et al. (2018):

“Current status: Valid as *Labeo indramontri* Smith 1945. Cyprinidae: Labeoninae.”

### **Size, Weight, and Age Range**

No information available.

### **Environment**

From Froese and Pauly (2018):

“Freshwater; benthopelagic.”

## **Climate/Range**

From Froese and Pauly (2018):

“Tropical”

## **Distribution Outside the United States**

Native

From Froese and Pauly (2018):

“Asia: Chao Phraya basin, Thailand [Doi 1997]. Recorded from the Mekong basin [Taki 1978].”

From Vidthayanon (2012):

“The species is known from the lower Chao Phraya and Mekong basins (Cambodia and the Mekong delta in Viet Nam; Khoa and Huong 1993).”

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 Smith (1945):

“Depth 3.8 in standard length; depth of caudal peduncle 1.4 in its length and 2 of head; head somewhat less than 4 in length, its width over opercles less its depth and 1.7 in length; snout blunt, rounded, 2.4 in head, divided into central and lateral lobes by a deep groove extended upward and forward from postlabial commissure, anterior surface thickly beset with minute pores; free margin of snout with small, indistinct plicae; eye in midlength of head, 4 in head, 1.7 in snout, and 2 in the slightly convex interorbital space; mouth strongly arched, its width equal to eye, its posterior angle in advance of vertical from nostrils; upper lip narrow centrally, wide and thickened laterally, where it is uncovered by the rostral fold, its posterior expanded end, occupying a deep groove, bearing an irregular fringe; lower lip thick, its free margin with a row of widely spaced conical papillae and several inner rows of minute papillae, the lateral parts of the lip covered by the upper lip, the deep postlabial grooves nearly meeting centrally; a pair of minute rostral barbels and a pair of well-developed flat maxillary barbels concealed in the lateral groove; branchial openings extending to a point posterior to eyes, isthmus wider than eye; gill rakers very short, slender, and numerous.”

“Squamation: Tube-bearing scales of lateral line 43; scales in transverse series from origin of dorsal base of ventrals 8.5-1-5; predorsal scales 15; scales around narrowest part of caudal peduncle 20.”

“Fins: Origin of dorsal fin over tenth scale of lateral line, midway between tip of snout and middle of base of anal fin; dorsal margin concave, its rays ii, 11, the first branched ray shorter than head; caudal longer than head, deeply forked, the lobes pointed, central rays one-third length of outer; anal rays iii, 5, the first branched ray 1.5 in head; ventrals and pectorals subequal, 1.4 in head, pectoral rays i, 14.”

“Coloration: Back and top of head light olive; below whitish; obscure narrow dark longitudinal striped on back and sides following rows of scales; anterior margin of dorsal fin with a blackish line from base to tip, dorsal membranes dusky; other fins plain.”

## **Biology**

From Froese and Pauly (2018):

“Occurs mainly in medium to large-sized rivers [Taki 1978].”

From Vidthayanon (2012):

“Inhabits lower reaches of the rivers.”

## **Human Uses**

From Vidthayanon (2012):

“Not of fisheries interest.”

## **Diseases**

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

## **Threat to Humans**

From Froese and Pauly (2018):

“Harmless”

## **3 Impacts of Introductions**

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

## 4 Global Distribution

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**Figure 1.** Known global distribution of *Labeo indramontri*, reported from the Mekong basin on the border of Thailand and Laos. Map does not include georeferenced occurrences for Vietnam or Cambodia, where the species is also reported to be established (see Distribution Outside the United States, above). Map from GBIF Secretariat (2018).

## 5 Distribution Within the United States

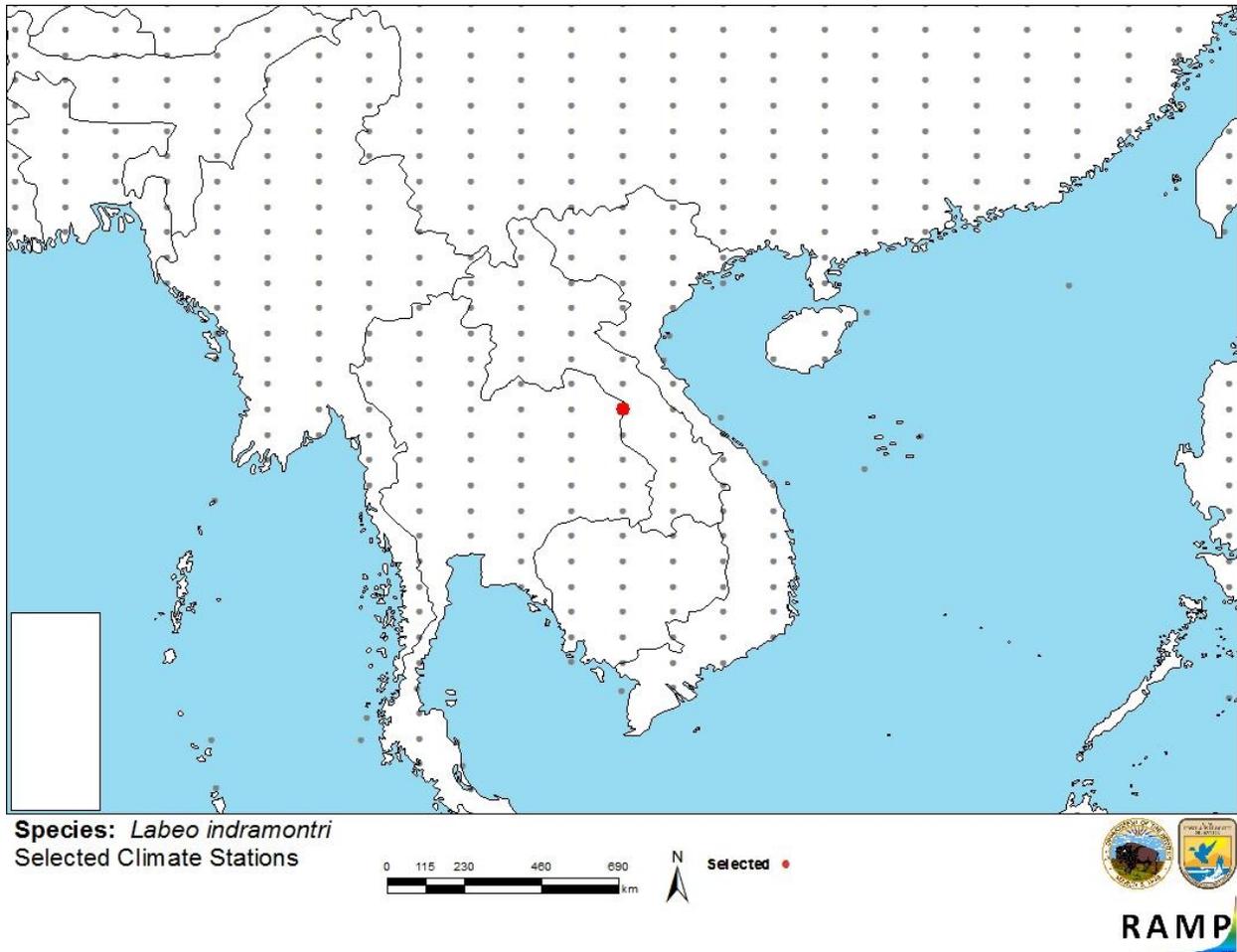
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This species has not been reported as introduced or established in the U.S.

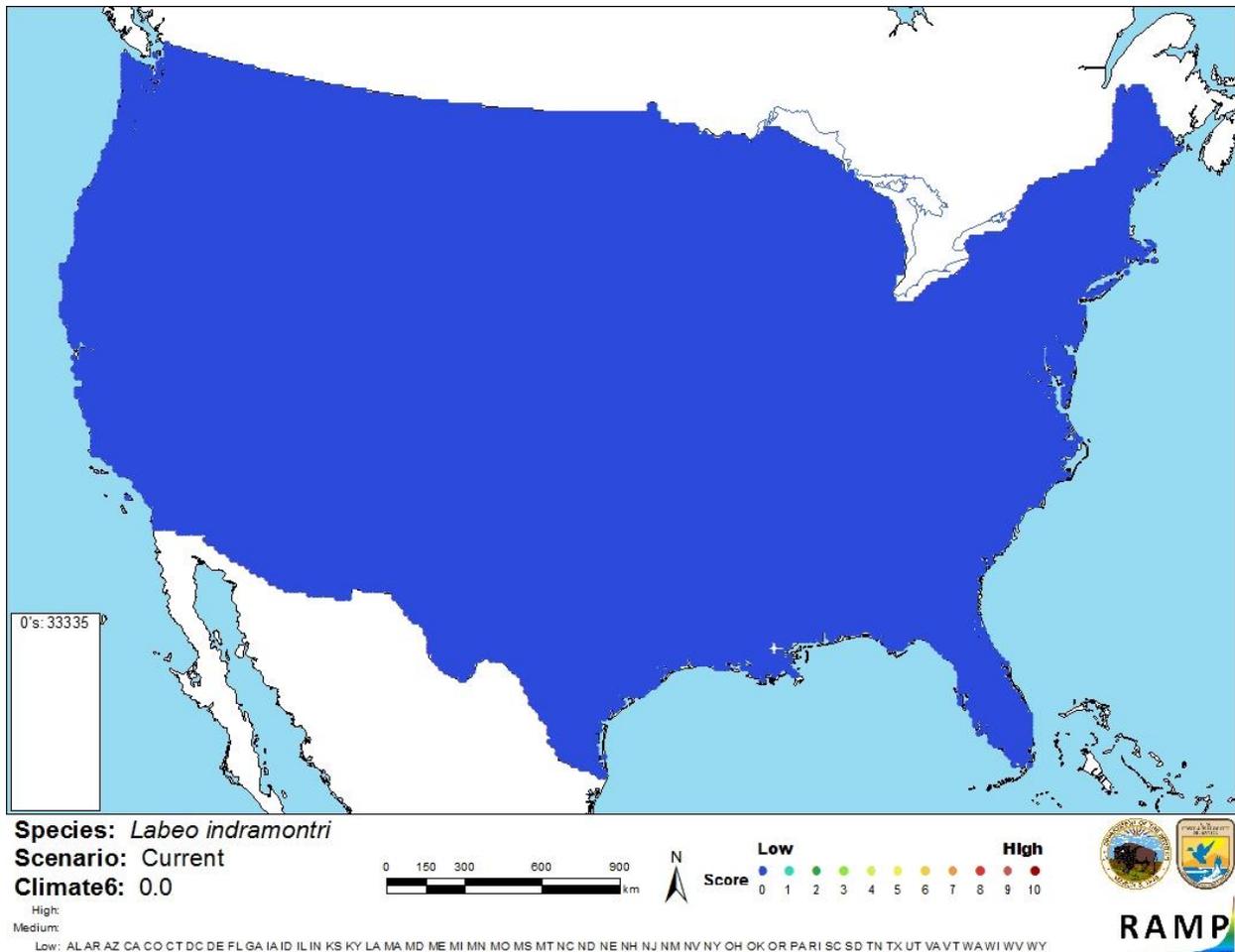
## 6 Climate Matching

### Summary of Climate Matching Analysis

The Climate 6 score (Sanders et al. 2014; 16 climate variables; Euclidean distance) for the contiguous U.S. was 0.0, which is a low climate match. The entire contiguous U.S. had a climate match score of 0, the lowest possible score. The map used as the basis for the climate match includes only one source location, compared to the literature that describes a broader established range. Without more georeferenced occurrences to inform the source locations, the calculated climate match to the contiguous U.S. is likely an underestimate of the true climate match.



**Figure 2.** RAMP (Sanders et al. 2014) source map showing weather stations in Southeast Asia selected as source locations (red; border of Thailand and Laos) and non-source locations (gray) for *Labeo indramontri* climate matching. Source locations from GBIF Secretariat (2018).



**Figure 3.** Map of RAMP (Sanders et al. 2014) climate matches for *Labeo indramontri* in the contiguous United States based on source locations reported by GBIF Secretariat (2018). 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
$0.000 < X < 0.005$	Low
$0.005 < X < 0.103$	Medium
$\geq 0.103$	High

## 7 Certainty of Assessment

There is almost no information available on *Labeo indramontri*. There is little information available on its biology. Further information is necessary to adequately assess the risk this species poses. Certainty of this assessment is low.

## 8 Risk Assessment

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### Summary of Risk to the Contiguous United States

*Labeo indramontri* is a freshwater cyprinid native to Thailand, Cambodia, and Vietnam. This species has a low climate match with the contiguous U.S. Because of the lack of georeferenced occurrences on which to base the climate matching source locations, the climate match may be underestimated. There is little information available about this species, and there have been no documented introductions of this species outside of its native range. Further information is needed to adequately assess the risk this species poses to the contiguous U.S., so 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): Low**
- **Certainty of Assessment (Sec. 7): Low**
- **Overall Risk Assessment Category: Uncertain**

## 9 References

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**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).

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ITIS (Integrated Taxonomic Information System). 2018. *Labeo indramontri* (Smith, 1945). Integrated Taxonomic Information System, Reston, Virginia. Available: [https://www.itis.gov/servlet/SingleRpt/SingleRpt?search\\_topic=TSN&search\\_value=689300#null](https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=689300#null). (April 2018).

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

Smith, H. M. 1945. The fresh-water fishes of Siam, or Thailand. Bulletin of the United States National Museum 188. Smithsonian Institution Press, Washington, D.C.

Vidthayanon, C. 2012. *Labeo indramontri*. The IUCN Red List of Threatened Species 2012: e.T180995A1686528. Available: <http://www.iucnredlist.org/details/summary/180995/0>. (April 2018).

## 10 References Quoted But Not Accessed

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**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.**

Doi, A. 1997. A review of taxonomic studies of cypriniform fishes in Southeast Asia. *Japanese Journal of Ichthyology* 44(1):1-33.

Khoa, T. T., and T. T. T. Huong. 1993. *Dinh Loai Cá Nước Ngọt Vùng Đông Bang Sông Cửu Long*.

Taki, Y. 1978. An analytical study of the fish fauna of the Mekong basin as a biological production system in nature. Research Institute of Evolutionary Biology Special Publications 1. Tokyo, Japan.