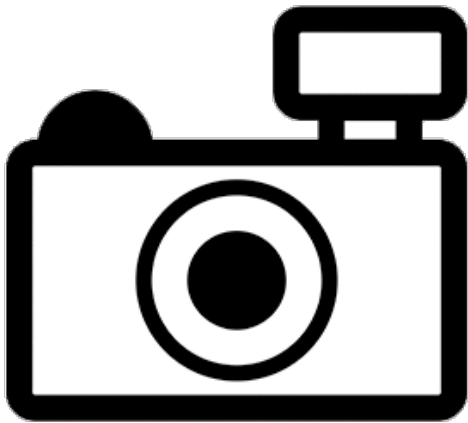


Shortbarbel Pangasius (*Pseudolais micronemus*)

Ecological Risk Screening Summary

U.S. Fish & Wildlife Service, April 2012
Revised, October 2018
Web Version, 2/3/2021

Organism Type: Fish
Overall Risk Assessment Category: Uncertain



No Photo Available

1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2018a):

“Asia: Mekong basin, Hue River, the Malay Peninsula and Indonesia, including Sumatra, Java and Borneo. Particularly widely distributed in Borneo (Kapuas, Mahakam, Rejang and Kinabatangan).”

“[In Cambodia:] Known from the Mekong basin [Kottelat 2001]. May be found in Great Lake and Tonle Sap river [Cambodian National Mekong Committee 1998].”

“[In China:] Known from the lower reaches of the Lancangjiang (=Mekong River) drainage [Huang 1999].”

“[In Malaysia:] Recorded from the lower Segama and Danum Valley [Martin-Smith and Tan 1998] and Rajang Basin in Sarawak, Borneo [Parenti and Lim 2005].”

“[In Thailand:] Found in the Mekong River and its tributaries [Sidthimunka 1970] and Chao Phraya River [Vidthayanon et al. 1997]; also from Bangkok, Nonthaburi, Nakhon Sawan and Ubon Ratchathani [Monkolprasit et al. 1997].”

Status in the United States

No records of *Pseudolais micronemus* in the wild or in trade in the United States were found.

Pseudolais micronemus falls within Group I of New Mexico’s Department of Game and Fish Director’s Species Importation List (New Mexico Department of Game and Fish 2010). Group I species “are designated semi-domesticated animals and do not require an importation permit.”

Means of Introductions in the United States

No records of *Pseudolais micronemus* in the wild in the United States were found.

Remarks

The name change from *Pangasius micronemus* to *Pseudolais micronemus* is recent (Fricke et al 2018) so information searches were conducted using both names.

2 Biology and Ecology

Taxonomic Hierarchy and Taxonomic Standing

According to Fricke et al. (2018), *Pseudolais micronemus* is the valid name for this species. It was originally described as *Pangasius micronemus* and has been previously known as *Pangasius micronema*.

From Froese and Pauly (2018b):

“Animalia (Kingdom) > Chordata (Phylum) > Vertebrata (Subphylum) > Gnathostomata (Superclass) > [...] Actinopterygii (Class) > Siluriformes (Order) > Pangasiidae (Family) > *Pseudolais* (Genus) > *Pseudolais micronemus* (Species)”

Size, Weight, and Age Range

From Froese and Pauly (2018a):

“Max length : 100.0 cm male/unsexed; [Rainboth 1996]”

Environment

From Froese and Pauly (2018a):

“Freshwater; benthopelagic; potamodromous [Riede 2004].”

Climate

From Froese and Pauly (2018a):

“Tropical”

Distribution Outside the United States

Native

From Froese and Pauly (2018a):

“Asia: Mekong basin, Hue River, the Malay Peninsula and Indonesia, including Sumatra, Java and Borneo. Particularly widely distributed in Borneo (Kapuas, Mahakam, Rejang and Kinabatangan).”

“[In Cambodia:] Known from the Mekong basin [Kottelat 2001]. May be found in Great Lake and Tonle Sap river [Cambodian National Mekong Committee 1998].”

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Introduced

No records of introductions of *Pseudolais micronemus* were found.

Means of Introduction Outside the United States

No records of introductions of *Pseudolais micronemus* were found.

Short Description

From Froese and Pauly (2018a):

“Anal soft rays: 28 - 38. Eye large, its diameter 4-5 times in head length (in 18 cm long specimens); dark grey caudal fin; maxillary barbel rarely extends past eye and never past preopercle [Rainboth 1996]. Vomeropalatine teeth in 4 more or less ovoid patches; truncate snout; lower jaw with angular outline rather than rounded; very short humeral process [Kottelat 2001].”

Biology

From Froese and Pauly (2018a):

“Found in large and medium-sized rivers, Omnivorous, feeding on animal and plant matter including detritus.”

“It may be migratory as local people report it to be caught at particular times of the year [Martin-Smith and Tan 1998].”

Human Uses

From Froese and Pauly (2018a):

“Marketed fresh [Rainboth 1996].”

“Fisheries: commercial; aquaculture: commercial”

Diseases

No records of OIE-reportable diseases (OIE 2021) were found for *Pseudolais micronemus*.

Pariselle et al. (2006) list *Thaparocleidus brevicochleus*, *T. sinespinae*, *T. tacitus*, *T. summagracilis*, *T. portentosus*, *T. rukyanii*, *T. durandi*, *T. lebrunae* as parasites of *Pseudolais micronemus* (under the name *Pangasius micronema*).

Poelen et al. (2014) list *Orientodiscus jumnai* as a parasite of *P. micronemus*.

Threat to Humans

From Froese and Pauly (2018a):

“Harmless”

3 Impacts of Introductions

No records of introductions of *Pseudolais micronemus* were found; therefore, there is no information on impacts of introductions.

4 History of Invasiveness

No records of introductions of *Pseudolais micronemu* were found, therefore the history of invasiveness is classified as “no known nonnative population.”

5 Global Distribution

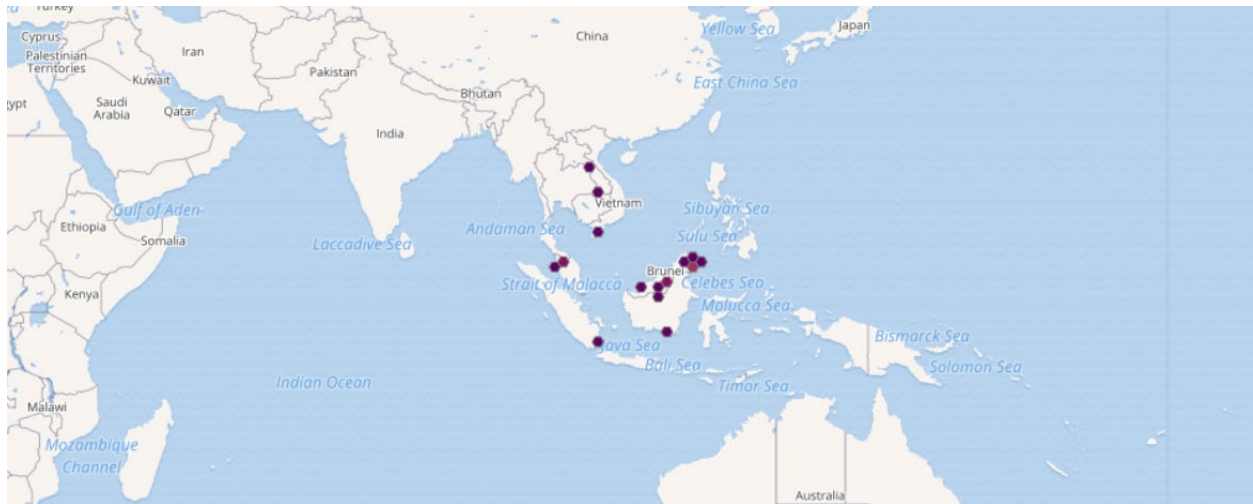


Figure 1. Known global distribution of *Pseudolais micronemus*. Locations are in Laos, Vietnam, Malaysia, Indonesia, and Thailand. Map from GBIF Secretariat (2018). The location on the southern end of the island of Sumatra was not used to select source points in the climate match. The record information indicates that the specimen was purchased from fishermen (GBIF Secretariat 2018) and the location may not be representative of where the specimen was caught.

An additional location on the southern tip of the Malay Peninsula was provided by Froese and Pauly (2018a).

6 Distribution Within the United States

No records of *Pseudolais micronemus* in the wild in the United States were found.

7 Climate Matching

Summary of Climate Matching Analysis

The climate match for *Pseudolais micronemus* is primarily low across the contiguous United States. There is a small area of medium match in southwestern Florida. The Climate 6 score (Sanders et al. 2018; 16 climate variables; Euclidean distance) for contiguous United States was 0.000, low (scores between 0.000 and 0.005, inclusive, are classified as low). All States had low individual climate scores.

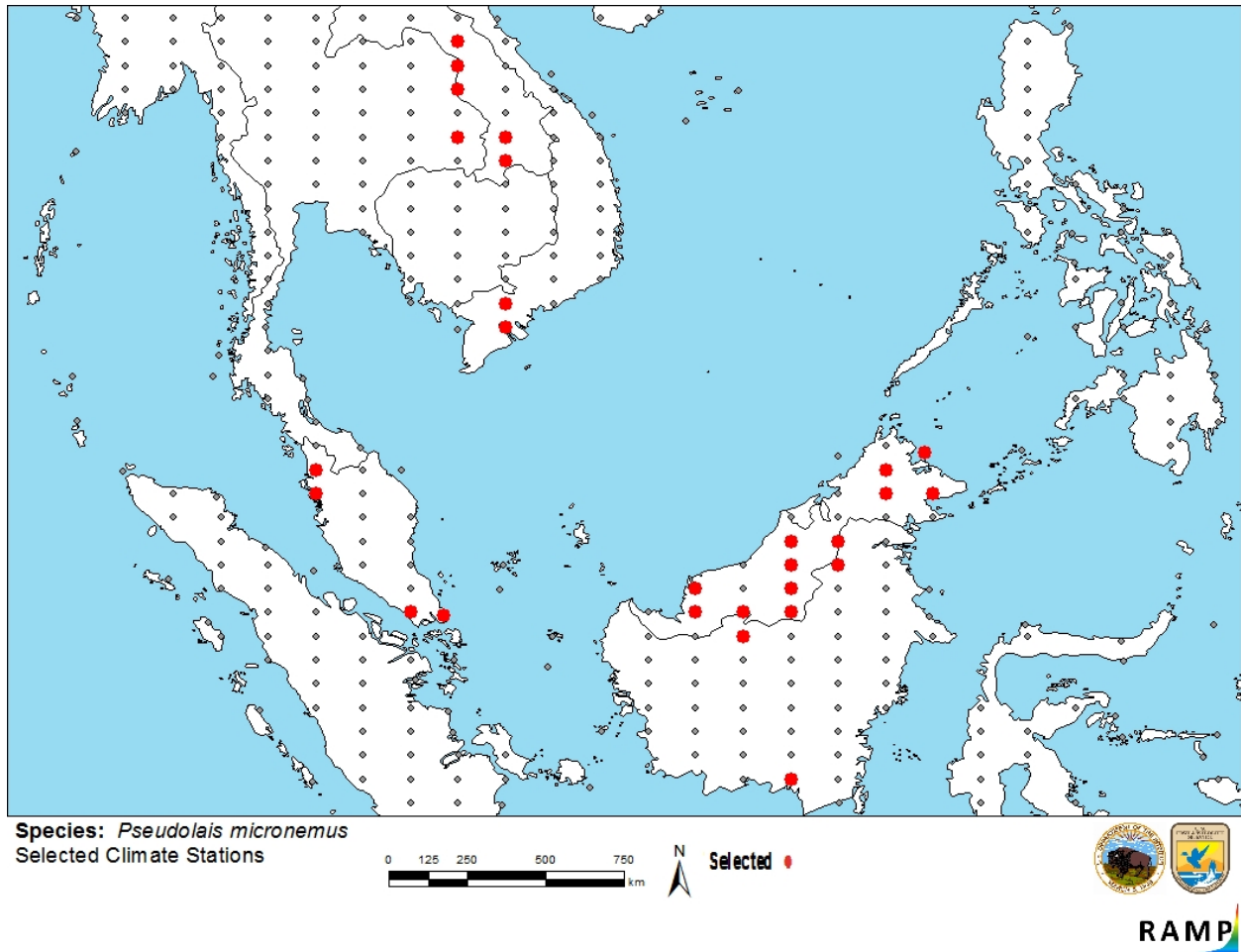


Figure 2. RAMP (Sanders et al. 2018) source map showing weather stations in southeast Asia selected as source locations (red; Laos, Thailand, Vietnam, Malaysia, Indonesia) and non-source locations (gray) for *Pseudolais micronemus* climate matching. Source locations from Froese and Pauly (2018a) and GBIF Secretariat (2018). Selected source locations are within 100 km of one or more species occurrences, and do not necessarily represent the locations of occurrences themselves.

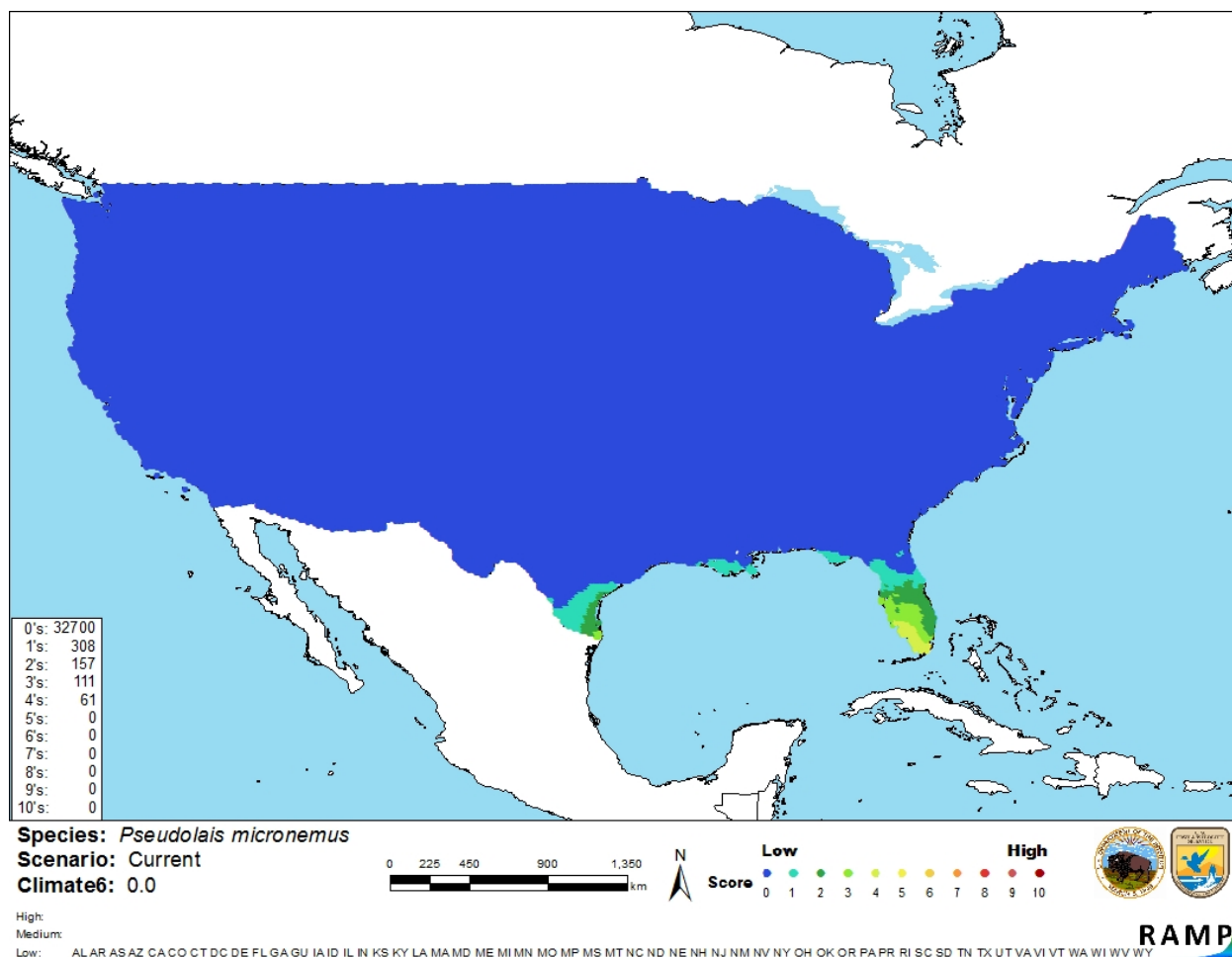


Figure 3. Map of RAMP (Sanders et al. 2018) climate matches for *Pseudolais micronemus* in the contiguous United States based on source locations reported by Froese and Pauly (2018a) and GBIF Secretariat (2018). Counts of climate match scores are tabulated on the left. 0/Blue = Lowest match, 10/Red = Highest match.

The High, Medium, and Low Climate match Categories are based on the following table:

Climate 6: (Count of target points with climate scores 6-10)/ (Count of all target points)	Overall Climate Match Category
$0.000 \leq X \leq 0.005$	Low
$0.005 < X < 0.103$	Medium
≥ 0.103	High

8 Certainty of Assessment

The certainty of assessment for *Pseudolais micronemus* is low. There is minimal information available for *P. micronemus*. No records of introduction were found and therefore there is no information on impacts of introductions to evaluate.

9 Risk Assessment

Summary of Risk to the Contiguous United States

Shortbarbel Pangasius (*Pseudolais micronemus*) is a species of catfish native to river drainages in Southeast Asia. This species is used commercially as a food source by local populations. The history of invasiveness is classified as “no known nonnative populations.” No records of introductions were found. The climate match is low. There was only one area of medium match which was in southwestern Florida. The certainty of assessment is low. The overall risk assessment category is uncertain.

Assessment Elements

- **History of Invasiveness (Sec. 4): No Known Nonnative Population**
- **Overall Climate Match Category (Sec. 7): Low**
- **Certainty of Assessment (Sec. 8): Low**
- **Remarks/Important additional information: No additional information**
- **Overall Risk Assessment Category: Uncertain**

10 Literature Cited

Note: The following references were accessed for this ERSS. References cited within quoted text but not accessed are included below in Section 11.

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Poelen JH, Simons JD, Mungall CJ. 2014. Global Biotic Interactions: an open infrastructure to share and analyze species-interaction datasets. Ecological Informatics 24:148–159.

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11 Literature Cited in Quoted Material

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.

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