1 Native Range, and Status in the United States

Native Range
From Froese and Pauly (2018):

“East Asia: Russian Far East from Amur to Peter the Great Gulf, Korean Peninsula, Bohai Sea, Yellow Sea and East China Sea of China, and Hokkaido to Kyushu of Japan.”

Status in the United States
This species has not been reported 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 in the United States.
Remarks
Froese and Pauly (2018) list *Aboma lactipes* (Hilgendorf, 1879) and *Gobius lactipes* (Hilgendorf, 1879) as synonyms of *Acanthogobius lactipes*.

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 Osteichthyes
   Class Actinopterygii
   Subclass Neopterygii
   Infraclass Teleostei
   Superorde Acanthopterygii
   Order Perciformes
   Suborder Gobioidei
   Family Gobiidae
   Genus Acanthogobius
   Species *Acanthogobius lactipes*”

“Taxonomic Status: valid”

**Size, Weight, and Age Range**
From Froese and Pauly (2018):

“Max length : 9.4 cm TL male/unsexed; [Berg 1965]”

**Environment**
From Froese and Pauly (2018):

“Marine; freshwater; brackish; demersal; amphidromous [McDowall 1997].”

**Climate/Range**
From Froese and Pauly (2018):

“Temperate; 53°N - 34°N, 116°E - 143°E”
Distribution Outside the United States
Native
From Froese and Pauly (2018):

“East Asia: Russian Far East from Amur to Peter the Great Gulf, Korean Peninsula, Bohai Sea, Yellow Sea and East China Sea of China, and Hokkaido to Kyushu of Japan.”

Introduced
No introductions of this species have been reported.

Means of Introduction Outside the United States
No introductions of this species have been reported.

Short Description
No information available for this species.

Biology
From Froese and Pauly (2018):


Human Uses
From Froese and Pauly (2018):

“Fisheries: commercial”

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
No introductions of this species have been reported.
4 Global Distribution

![Map of known global distribution of *Acanthogobius lactipes* in Japan, Russia, South Korea, and the East China Sea. Map from GBIF Secretariat (2017). Marine occurrences were not used for the climate matching analysis because the analysis is based on data from terrestrial climate stations only.](image)

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

6 Climate Matching

**Summary of Climate Matching Analysis**
The climate match (Sanders et al. 2014; 16 climate variables; Euclidean distance) was medium throughout most of the east. The highest matches occurred in the upper Great Lakes, northeastern New England, and along the coast of North Carolina. The western United States was a low climate match. The Climate 6 score indicated that the contiguous U.S. has a high climate match.
The range for a high climate match is 0.103 and greater; the Climate 6 score of *Acanthogobius lactipes* is 0.123.

**Figure 2.** RAMP (Sanders et al. 2014) source map showing weather stations in Japan and surrounding countries selected as source locations (red; Japan, Russia) and non-source locations (gray) for *Acanthogobius lactipes* climate matching. Source locations from GBIF Secretariat (2017).
Figure 3. Map of RAMP (Sanders et al. 2014) climate matches for *Acanthogobius lactipes* in the contiguous United States based on source locations reported by GBIF Secretariat (2017). 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:

<table>
<thead>
<tr>
<th>Climate 6: Proportion of (Sum of Climate Scores 6-10) / (Sum of total Climate Scores)</th>
<th>Climate Match Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.000&lt;X&lt;0.005</td>
<td>Low</td>
</tr>
<tr>
<td>0.005&lt;X&lt;0.103</td>
<td>Medium</td>
</tr>
<tr>
<td>&gt;0.103</td>
<td>High</td>
</tr>
</tbody>
</table>

7 Certainty of Assessment

Information on *Acanthogobius lactipes* is not widely available and scientific information on the impacts of introductions is lacking. Absence of this research makes the certainty of this assessment low.
8 Risk Assessment

Summary of Risk to the Contiguous United States

*Acanthogobius lactipes* is a demersal fish native to East Asia. *A. lactipes* is commercially harvested. No introductions have been reported for the species. Therefore, there is no information on impacts of introductions on which to base an assessment of invasiveness. Absence of this information makes the certainty of this assessment low. Climate match with the contiguous United States is high. Overall risk posed by this species is uncertain.

Assessment Elements

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


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.
