

# 五须岩鳕属 (*Ciliata* Couch, 1822) 的研究及其一新种的描述

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**摘要** 现在鱼类学家公认五须岩鳕属 (*Ciliata*) 仅北大西洋有 2 种。著者研究日本 Matsubara (1955) 记载曾在长崎发现的 *Motella pacifica* 有五须, 认为也应归本属; 并且发现采自山东半岛海域有一标本也属本属且是一新种, 订名为张氏五须岩鳕 (*Ciliata tchangi* Li, sp. nov.); 故可知五须岩鳕属现有 4 种, 西北太平洋中国及日本海域各有一种。

**关键词** 五须岩鳕属; 张氏五须岩鳕; 太平洋五须岩鳕; 三须岩鳕属

**中图分类号** Q959.472

1 当今鱼类学家们公认五须岩鳕属 (*Ciliata* Couch, 1822) 只有 2 种, 即鼬五须岩鳕 (*C. mustela* "Linnaeus, 1758") 和北方五须岩鳕 (*C. septentrionalis* "Collette, 1875"), 均分布于北大西洋海域 (如 СВЕТОВИДОВ, 1948; Cohen et al, 1990; 等)。在太平洋迄今尚未正式记载过有五须岩鳕属鱼类。仅 Temminck et Schlegel (1846) 记载曾在日本长崎采得一尾岩鳕鱼标本命名为 *Motella pacifica* Temminck et Schlegel; Bleeker P. 1872<sup>[3]</sup> 在《中国鱼类志名录》(Memoire sur la Faune Ichthyologique de Chine) 文内也列有此鱼名字而在其后附一疑问符号 (?); 朱元鼎教授 1931 在其《中国鱼类索引》内依 Bleeker (1872)<sup>[3]</sup> 的文献也列有此鱼而改名为太平洋三须岩鳕 *Gaidropsarus pacifica* "Temminck et Schlegel", 分布写为中国; Cora D. Reeves (1933)<sup>[7]</sup> 在其《东北及华中的脊椎动物手册, 鸟类除外》书内也载有此鱼, 名为 *G. pacificus* (Temm. et Schl.), 并有简短描述而无具体分布地名称; СВЕТОВИДОВ (1948)<sup>[9]</sup> 在其《苏联动物志; 鱼类第 9 卷第 4 册, 鳕类志》中, 将此鱼列入鳕科也名为太平洋三须岩鳕, 并依 Collett (1892) 的文献而略有描述; 此鱼学名被引用迄今, 但 Matsubara, K. (1955)<sup>[6]</sup> 在其《鱼类形态及检索》专著内曾将此鱼列入深海鳕科 (Moridae), 并称“有吻须 2 条, 鼻须 2 条及下领须一条”; СВЕТОВИДОВ (1986)<sup>[10]</sup> 在《三须岩鳕属 (*Gaidropsarus* Rafinesque, 1810) 的研究及一新

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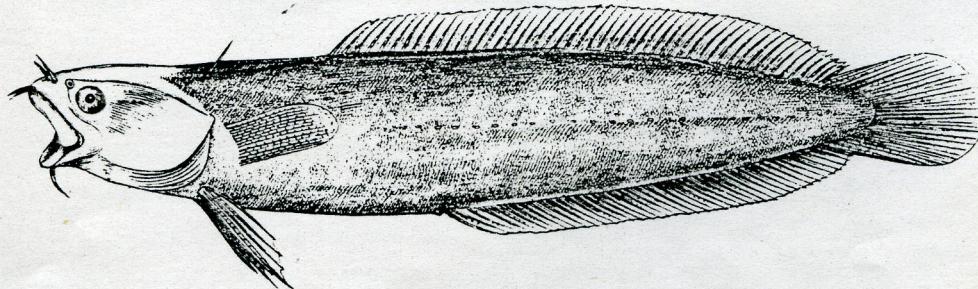
种的描述》文内的种检索表中也列有此鱼名，内容与1948年所记相同；Cohen et al. (1990)<sup>[5]</sup>在《联合国粮组织渔业概要》第125号第10卷全世界的鳕形目鱼类(FAO Fisheries Synopsis No. 125, Vol. 10 Gadiform fishes of the World)中意见与СВЕТОВИДОВ (1948<sup>[9]</sup>, 1986)相同。但依Matsubara, K. (1955)<sup>[6]</sup>的记载，著者认为此种应归五须岩鳕属(*Ciliata* Couch, 1822)，因而可知西北太平洋海域也有五须岩鳕属鱼类。

## 2 山东半岛海区发现有五岩鳕属的经过

著者1951年整理前北平研究院动物研究所自山东半岛海区采得的鱼类标本时，在一大瓶鱼标本内发现一尾岩鳕标本，很似鼬五须岩鳕而具明显的差异，因嫌只有一尾标本故未写入《黄渤海鱼类调查报告》。1954年春夏去广西及海南岛调查采集南海鱼类标本时，曾将此事告诉随我们采集备教课用鱼类标本的上海水产学院林新濯先生（林当时是王以康教授的助教），因而王教授在其《鱼类分类学》教课书内认为中国科学院曾在山东所采的鱼类中发现五须岩鳕(*Ciliata mustela* "Linne")；实际上此标本迄今仍未被正式发表。约1980年美国鱼类学家Daniel M. Cohen等来华访问时，见此标本甚感兴趣，看后曾称此鱼可能就是在日本长崎曾发现的太平洋岩鳕；故后来著者等在《中国鱼类系统检索》中也称为太平洋五须岩鳕(*Ciliata pacifica*)。近年在撰写中国动物志鱼类第9卷上册的中国鳕形目鱼类志中再三核查考虑，认为此标本与前三种已命名的五须岩鳕属鱼类均有显著不同，实是一新种，现特订名为张氏五须岩鳕，以纪念业师张春霖博士(Dr. T.-L. Tchang, 1897~1963)对研究中国鱼类的卓越贡献。

## 3 张氏五须岩鳕、新种 *Ciliata tchangi* Li, sp. nov.

全模标本号28595，体长78.5 mm，全体长89.6 mm，约1930年代中期前北平研究院动物研究所采自山东半岛烟台到青岛海区。标本情况良好，现保藏于中国科学院动物研究所鱼类标本馆。



附图 张氏五须岩鳕，新种 *Ciliata tchangi* Li, sp. nov.

(标本体长 79.5 mm)

背鳍1—34, 51；臀鳍44；胸鳍17；腹鳍7；尾鳍vi+22+vi 鳃膜骨条7；鳃耙外行  
2+7，内行1+8；椎骨约14+27—28(依X光照片)。

体长为体高 5.6 倍，为头长 5.1 倍，为头躯长 2.2 倍。头长为吻长 4.2 倍，为眼径 7.8 倍，为眼间隔 3.1 倍，为最长背鳍条 2.1 倍，为最长臀鳍条 2.6 倍，为胸鳍长 1.5 倍；为腹鳍长 1.4 倍，为尾鳍长 1.5 倍。

体长形；稍侧扁，体高为体宽 1.28 倍。头后端近圆柱形。吻钝圆，微突出；前端中央稍后左右各有一吻须；每侧前鼻孔后有一须，较吻须略长可伸达眼中部。鼻孔每侧 2 个，位眼下缘正前方，后鼻孔位前鼻孔到眼的正中间。眼位头前半部侧中线上方。眼间隔微圆凸。口近前位；上颌前端较下颌稍长、后端略不达眼后缘。下领中央有一须，稍长于眼径。上下颌与犁骨有小齿。鳃孔上端达侧线附近，下端达主鳃盖骨前缘下方。鳃膜互连，游离。鳃耙突起状，末端有小刺。肛门邻臀鳍前方附近。

头体有微小圆鳞。侧线中断为上下 2 条，均近直线形；上侧线位躯干部侧中线上方，由 12 个小孔组成；下侧线沿体侧中线，始于肛门稍前上方和上侧线后端的下方，约由 28 个短管状小孔组成。头部感觉管在眶上枝有一小孔，眶下枝有 7 小孔，前鳃盖骨到下领枝有 11 小孔。

背鳍 2 个，分离；前背鳍始于鳃孔上端的头背侧一纵凹沟内；第一鳍条正常且略突出呈丝状；其余鳍条很细短且密，鳍条长约为第一鳍条长的 1/4 到 1/3。后背鳍正常，始于鳃孔到臀鳍始点上方的正中间，第 36 鳍条最长，后端鳍条至少基部半段连尾鳍前上缘。臀鳍始于后背鳍第 9—10 鳍条基的下方，形似后背鳍，最后鳍条连尾鳍。胸鳍长圆形，侧中位，略达后背鳍下方。腹鳍始于鳃孔后端下方，左右鳍远离，第 2 鳍条略突出呈丝状，约伸达胸鳍后端下方而远不达肛门。尾鳍圆形，中央 4 鳍条为真正的尾鳍条由尾端骨支持，其余背侧鳍条由间髓棘支持，而腹侧鳍条由间脉棘支持。

酒精浸存标本背侧呈肉色，微紫；头部及腹部腹侧淡白色。各鳍近白色。

此鱼与鼬五须岩鳕 (*Ciliata mustela*) 最相近，但后者侧线不中断，尾鳍不连背、臀鳍等；差异明显。现将此新鱼与其它三种可列表区别如下：

比较项目	鼬五须岩鳕 <i>Ciliata mustela</i>	北方五须岩鳕 <i>C. septentrionalis</i>	太平洋五须岩鳕 <i>C. pacifica</i>	张氏五须岩鳕 <i>C. tchangi</i> sp. nov.
前背鳍	1-36	1-17	1-49	1-34
后背鳍	50—55	45—53	45	51
臀鳍	40—51	41—43	38	44
胸鳍	17	15—16	14	12—15
腹鳍	7	7	5	7
尾鳍	vii+18+vii	ii+8+ii	27	vi+22+vi
椎骨	42		52	14+27—28
胸鳍略伸	不到后背鳍下方	过后背鳍始点		过后背鳍始点
尾鳍	略不连背、臀鳍	略不连背、臀鳍		连背、臀鳍
侧线	完整、不中断	完整、不中断		在肛门前上方 中断为上下 2 条
分布区	里斯本到挪威及冰岛海域 英吉利海峡到挪威及 格陵兰岛南端海域	日本长崎海域	中国山东半岛海区	

4 本文改正了太平洋三须岩鳕 (*Gaidropsarus pacificus*) 的学名, 应为太平洋五须岩鳕 (*Ciliata pacifica*); 另增加五须岩鳕属一新种即张氏五须岩鳕 (*Ciliata tchangi* Li. sp. nov.); 因而扩大了五须岩鳕属的分布区, 现知除北大西洋欧洲海区到格陵兰南端海区有2种外, 在西北太平洋黄海(山东半岛)及东海(日本长崎)海域也各有一种。

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## A Review of the Fish Genus *Ciliata* Couch, 1822, and Description of a new Species from Shandong Coast, China (Gadiformes: Gadidae)

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**Abstract** 1. Up today Ichthyologists agree that there are only 2 species belonging to *Ciliata* Couch, 1822, in the world and both of them are living in the N. Atlantic seas (СВЕТОВИДОВ, 1948; Cohen et al., 1990; ...). In 1846 Temminck & Schlegel described a rockling named *Motella pacifica*, collected from Nagasaki, Japan; Matsubara (1955) noted this fish with 2 snout barbels, 2 nasal and one chin barbels; hence I think it should be named as *Ciliata pacifica*, 2. More than 40 years ago, I found a rockling specimen in a big glass bottle in which conserved many other fish specimens collected by the former Inst. Zool., Academy of Beiping from the Shandong peninsular coast in the middle period of 1930. It was very similar to *Ciliata mustela*, but with some striking differences; I complained of only one specimen, so I did not write it in my papers until 1987. During about 1980, I told it to Dr. Cohen when he visited our museum; he was very interested in it and said that maybe it was the right fish (*Gaidropsarus pacificus*), collected from

Japan. We, then wrote it in the book "Systematic Synopsis of Chinese fishes" (1987) as the *Ciliata pacifica*. However, under a long period of consideration and many times of careful examination, it seems to me that this is really a new species, I decide to rename it as *Ciliata tchangi* sp. nov. to honour my teacher Dr. T. -L. Tchang (1897—1963) memorializing his outstanding achievements in studies of Chinese fishes. 3. *Ciliata tchangi* sp. nov. Holotype No. 28595, standard body length 79.5 mm, total body length 89.6 mm; data as given in above. Specimen conditions very well, deposited in the Fish Museum of the Institute of Zoology, Academia Sinica. Dl. 1—34, D2. 51; A. 44; P. 17; V. 7; C. vi+22+vi. Branchiostegals 7. Gill-rakers: 2+7 (outer row), 1+8 (inner r.). Vertebrae 14+27—28 (radiograph). Body depth 5.6 in the standard body length, head length 5.1, length from anterior end of snout to anus 2.2. Snout length 4.2 in head length, eyediameter 7.8, interorbital 3.1, longest D. fin ray 2.1, longest A. fin ray 2.6, P. fin 1.5, V. fin 1.4, C. fin 1.5. Body elongate, body width 1.28 in body depth. The hind end of head subcylindrical. Snout roundly blunt; with 2 short barbels near the anterior end of snout, 2 nasal barbels (each behind the anterior nostril) and a chin barbel below the symphysis of mandible. Mouth terminal, with small teeth on jaws and vomer. Gill-membranes united and free from isthmus. Anus near the origin of A. fin. Head and body covered with minute cycloid scales. Lateral line interrupted into 2 parts above between origins of D2 and A. fins, the anterior part higher with 12 small pores, the hind part with 28 pores. Dorsals 2, separated; Dl. originated above the upper angle of gill-opening, its first fin ray is normal and produced, the following rays are very thin and short in a shallow longitudinal depressed groove; D2. originated above the hind end of P. fin, its 36th ray longest and its last ray at least connected with the upper margin of C. fin at its basal part. A. fin is rather similar to D2 fin and its last ray entirely connected with C. fin. P. fin is round. V. fin originated below the hind end of gill-opening, its 2nd ray produced, reaching below the hind end of P. fin, far from the anus. The C. fin is round in form. Submerged in alcohol, dorsal side is flesh brown and slightly purpurish in color; ventral side and trunk whitish. Fins also whitish in colour. This new fish is very similar to *Ciliata mustela*, but the latter with its P. fin ending before origin of its D2 fin, C. fin separated from its D2 & A. fins, and its lateral line uninterrupted. The new fish is definitely different from *C. pacifica*, although both of them living in the northwestern Pacific seas, for the *C. pacifica* with Dl. 50; D2. 45; A. 38; P. 14; V. 5; C. 27 and vertebrae 52.

**Key words** *Ciliata* Couch; *C. pacifica*; *C. tchangi* sp. nov.; *Gaidropsarus* Rafinesque