

# 動物分類学

理学部 遠藤広光

御畳瀬魚市場(大手繰り網)  
2007年11月1日

水深 200–300 m



NSMT-P 109034 (formerly BSKU 92994)



Holotype, male, 218 mm SL

*Hoplichthys mimaseanus* Nagano, Endo and Yabe, 2013

ミマセハリゴチ(カサゴ目ハリゴチ科)

*Pterygotrigla cajorarori* Richards and Yato, 2012

ソコホウボウ属の一種(スズキ目ホウボウ科) \* 和名なし



Richards, W. J. and T. Yato. 2012. The tropical species of the subgenus *Pterygotrigla* (Pisces: Triglidae: *Pterygotrigla*) with description of a new species. *Zootaxa*, 3484: 53–64.

山川 武さん

矢頭卓児さん

平松 亘さん



*Pterygotrigla cajorarori*



BSKU 105065

吻棘がかなり太い



BSKU 105065

標準和名募集中!

Richards and Yato (2012)

*Pterygotrigla (Pterygotrigla) cajorarori* sp. nov.

Hyperostotic gumard

Figures 2–6, Tables 1–4

**Diagnosis.** A species of the subgenus *Pterygotrigla* with enlarged hyperostotic bones of the head (first infraorbital, preopercular ridge that includes bones of the infraorbital series, frontal bones in front of orbit, parietals, nuchal spines), cleithral spines, and D<sub>1</sub> fin spines 2, 3, and 4. P<sub>1</sub> rays 12+3. Nape and breast with scales.



FIGURE 2. Lateral view of *Pterygotrigla cajorarori* sp. nov., FAKU 58681, paratype, 268 mm SL.

Carolyn, Josephine, Rachel, Rosemary, and Riley => *cajorarori*

**Etymology.** Noun in apposition based on a combination of the first two letters of the senior author's granddaughters Carolyn, Josephine, Rachel, Rosemary, and Riley.

**Distribution.** Japan, Philippines, Queensland, Australia, and Indonesia.

USNM 135940, Holotype, 198 mm SL



FIGURE 5. Lateral view of *Pterygotrigla cajorarori* sp. nov., USNM 135940, holotype, 198 mm SL.

**Material examined.** Holotype, USNM 135940, 1(198 mm SL), Philippines, vicinity of north of Mindanao, 6.6 mi off Macalaban Point Light, 08°36'26" N, 124° 36' 08" E, R/V Albatross, 413 m., collected 4 April 1909.

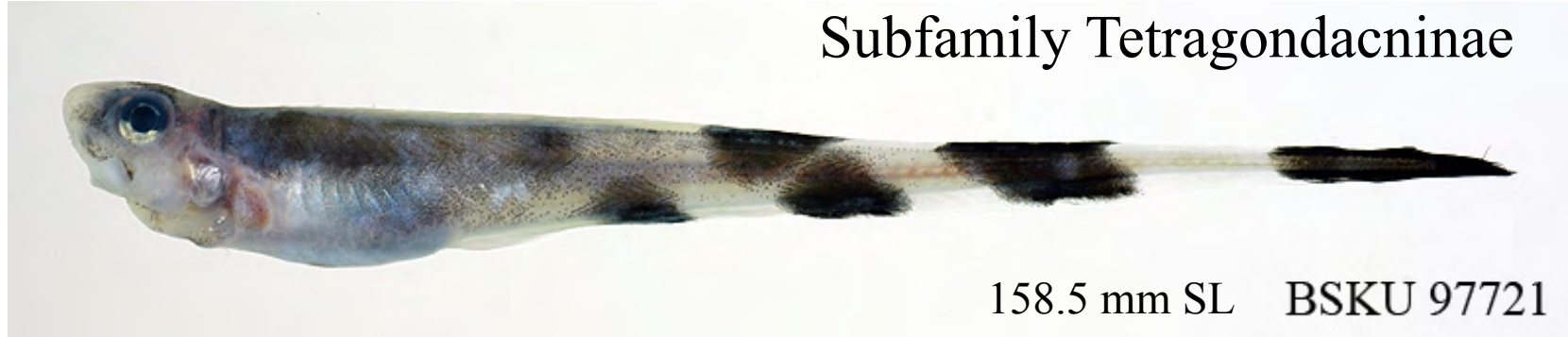
Paratypes: BSKU 39887, 1(197 mm SL), Japan, Kochi Prefecture, off Konnoura, 14:III:1984, 150–200 m.;  
CSIRO H720-13 1(259 mm SL); Queensland, south of Saumarez Reef, 22°53'S, 152°59'E, 1985, 325 m.;  
H720-14 1(234 mm SL) Queensland, south of Saumarez Reef, 22°53'S, 152°59'E, 1985, 325 m.;  
1(131 mm SL), Queensland, Saumarez Reef, 22°53'S, 152°59'E, 1985, 325 m.; CSIRO H2081-01, 1(318 mm SL),  
CSIRO H720-01, 1(330 mm SL). FAKU 58681, 1(268 mm SL), Japan. In addition, 8 specimens were recently  
identified as this species from Indonesia (T. Kawai, pers. comm.). We have not examined them and they are not  
type specimens. The specimens are HUMZ 190260, 190263, 193601, 193602, 193603, 193753, 193915, and  
193970.

BSKU 39887, Paratype, 197 mm SL

2007年にアシロ目カクレウオ科の新亜科新属新種として記載された

*Tetragondacnus spilotus* Anderson and Satria, 2007

Subfamily Tetragondacninae



Two specimens collected at depths of 320–340 m form off Cape Muroto

標準和名募集中!

Yamakawa, T. and Y. Machida: A rare pearlfish *Tetragonfacnus spilotus* (Carapidae) from deep water off Muroto, Kochi Prefecture, Japan

The 42<sup>nd</sup> annual meeting of the Ichthyological Society of Japan

# 高知県海洋深層水研究所



Two intakes of deep seawater are located on the edge of continental shelf at the depths of 320 m and 340 m



*Tetragondacnus spilotus* Anderson and Satria, 2007



Type locality: NW of Smatora, Indonesia, Indian Ocean, 518–528 m, 31 July 2005



オニイトマキエイ *Manta birostris* (Walbaum, 1792)

マンタの学名と和名



日本動物大百科 6 魚類より

# オニイトマキエイは2種に *Manta alfredi* の復活

Marshall et al. (2009)



Zootaxa 2301: 1–28 (2009)  
www.mapress.com/zootaxa/

Copyright © 2009 · Magnolia Press

Article

ISSN 1175-5326 (print edition)

**ZOOTAXA**

ISSN 1175-5334 (online edition)

## Redescription of the genus *Manta* with resurrection of *Manta alfredi* (Krefft, 1868) (Chondrichthyes; Myliobatoidei; Mobulidae)

ANDREA D. MARSHALL<sup>1,2\*</sup>, LEONARD J.V. COMPAGNO<sup>3</sup> & MICHAEL B. BENNETT<sup>1</sup>

<sup>1</sup> School of Biomedical Sciences, Department of Anatomy and Developmental Biology, University of Queensland, St. Lucia, Queensland 4072, Australia.

<sup>2</sup> Foundation for the Protection of Marine Megafauna, Manta Ray & Whale Shark Research Centre, Tofo Beach, Inhambane, Mozambique.

<sup>3</sup> Shark Research Centre, Save Our Seas Shark Centre, Kalk Bay 7975, Western Cape, South Africa.

### Abstract

The taxonomic history of the genus *Manta* has been questionable and convoluted, with *Manta* having one of the most extensive generic and species synonymies of any living genus of cartilaginous fish. Having previously been considered a monotypic genus with a single recognized species, *Manta birostris* (Walbaum 1792), new evidence, in the form of morphological and meristic data, confirm that two visually distinct species occur, both with wide ranging distributions through many of the world's oceans. *Manta birostris* stands as the most widely distributed member of the genus, while *Manta alfredi* (Krefft 1868), resurrected herein, represents a smaller, more tropical species. Separation of the two species is based on morphometric measurements and external characters including colouration, dentition, denticle and spine morphology, as well as size at maturity and maximum disc width. The two species of *Manta* are sympatric in some locations and allopatric in other regions. A visual key was constructed which highlights the conspicuous, diagnostic

# オニイトマキエイは2種に *Manta alfredi* の復活

(Marshall et al., 2009)

Genus *Manta* Bancroft, 1829

- *Manta birostris* (Walbaum, 1792)

オニイトマキエイ

- *Manta alfredi* (Kreffft, 1868)

リーフオニイトマキエイ

ナンヨウマンタ

# *Manta* 3種の分布

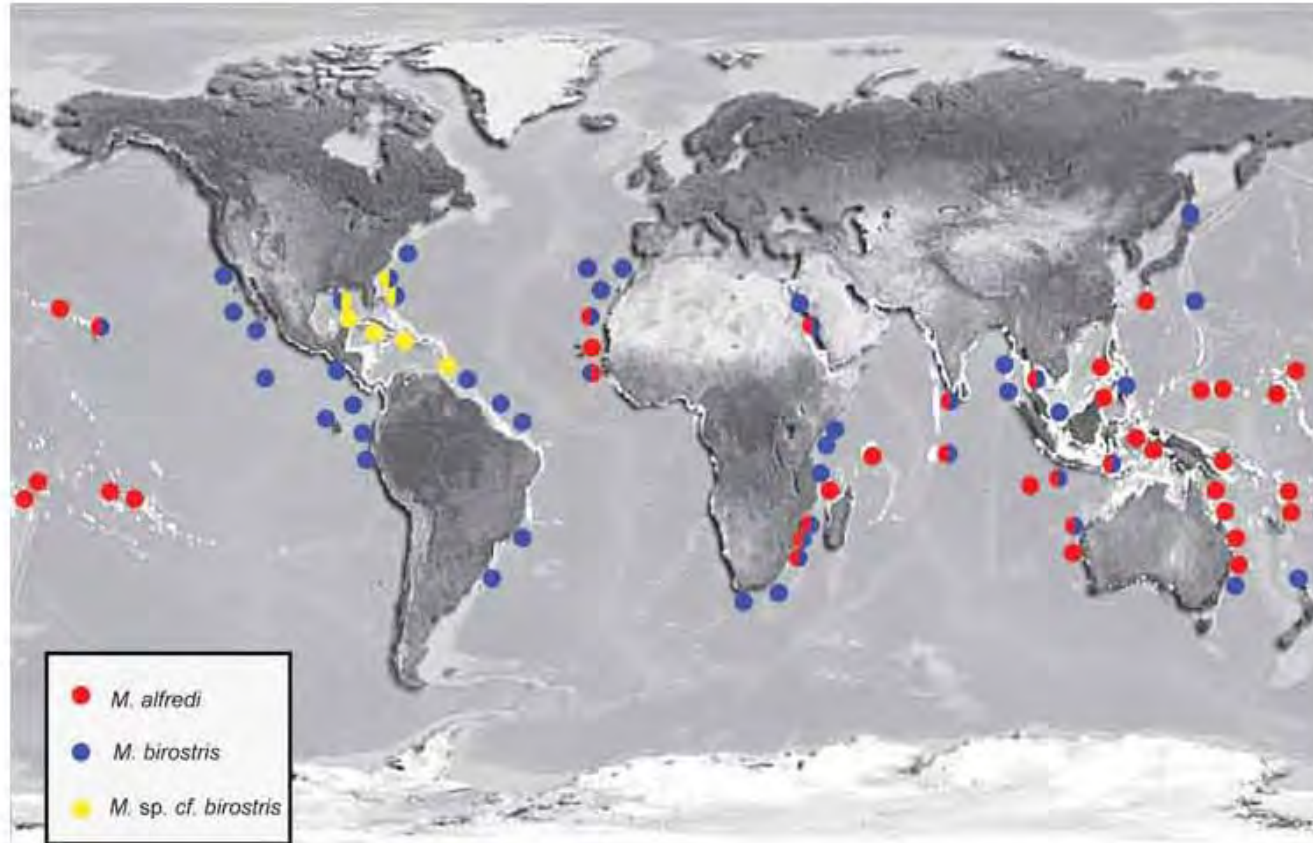


FIGURE 8. Worldwide distribution of *Manta* from preliminary analysis (n= 2231 images from over 100 aggregation sites and sighting records).

- *M. birostris*
- *M. alfredi*
- *M. sp. cf. birostris*

Marshall et al. (2009) より

# *M. birostris* と *M. alfredi*

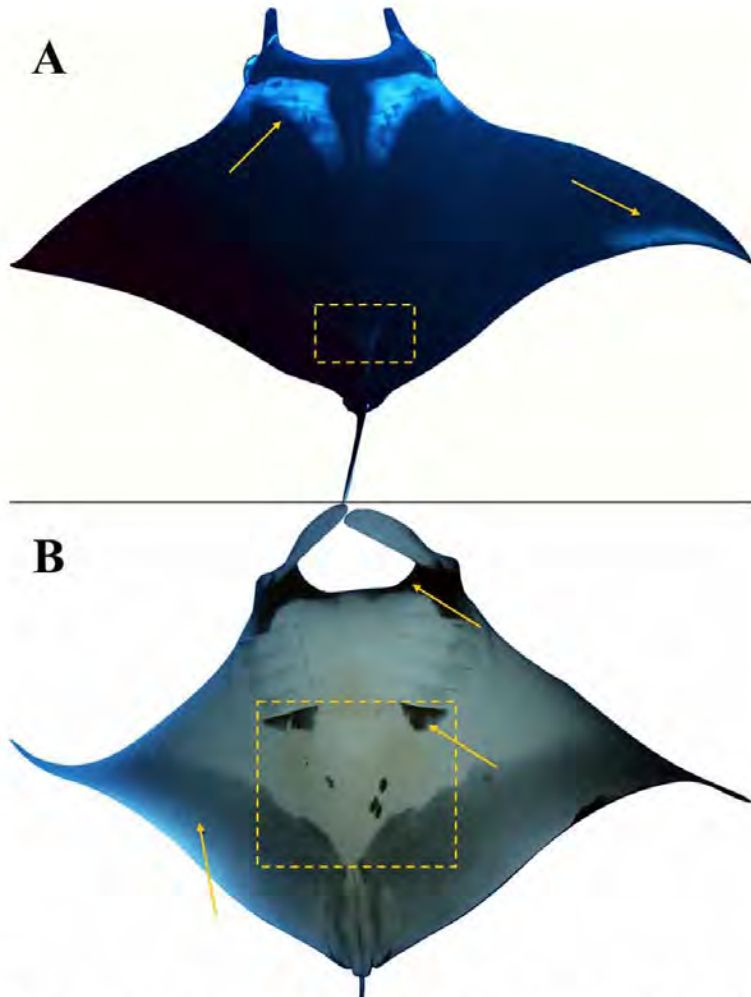


FIGURE 1. Natural colouration patterns in *Manta birostris*: (a) dorsal surface, arrows pointing to the shape and colouration of the shoulder patches and the colouration on the pectoral fins, box showing chevron shaped marking anterior to dorsal fin; (b) ventral surface, box showing region of highest spot density and distribution, arrows showing size of spot anterior to the 5<sup>th</sup> gill slit, colouration of mouth region, and colouration of the pectoral fin margin.

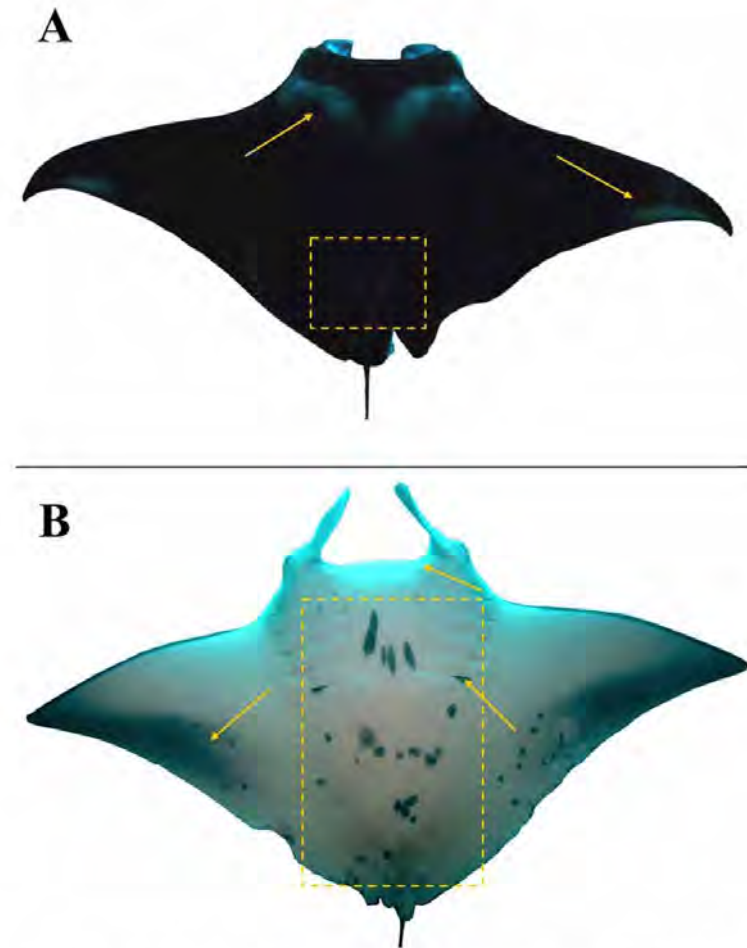


FIGURE 9. General characteristics and natural colouration patterns in *Manta alfredi*: (a) dorsal surface, arrows pointing to the shape and colouration of the shoulder patches and the colouration on the pectoral fins, box showing chevron shaped marking anterior to dorsal fin; (b) ventral surface, box showing region of highest spot density and distribution, arrows showing size of spot anterior to the 5<sup>th</sup> gill slit, colouration of mouth region, and colouration of the pectoral fin margin.

# *M. birostris* と *M. alfredi*

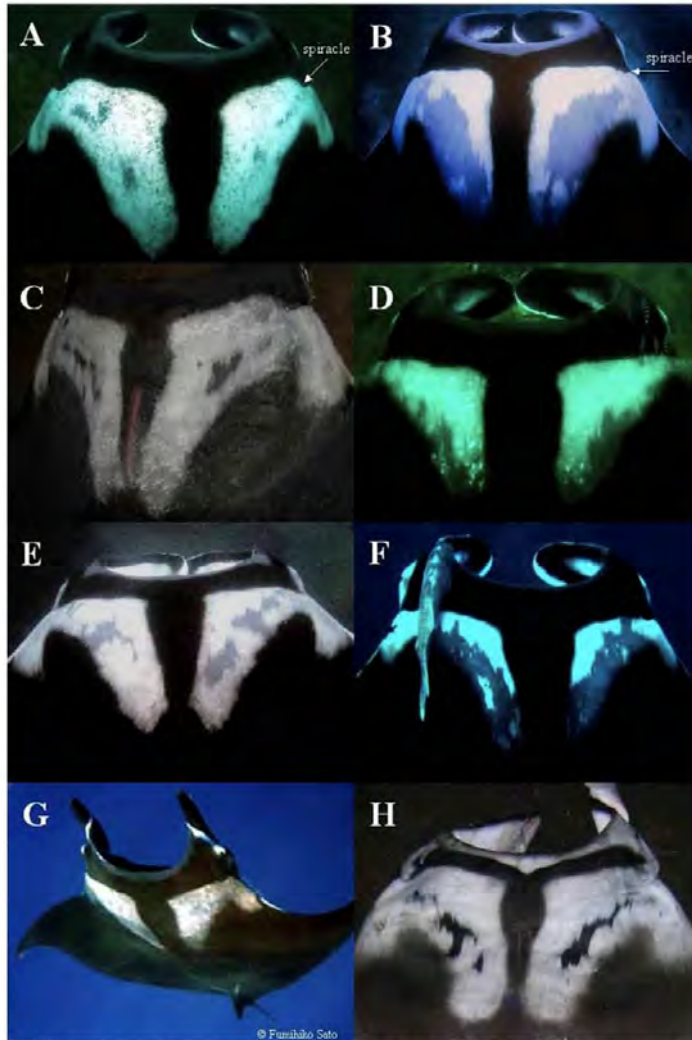


FIGURE 2. Variation in dorsal supra-branchial shoulder patch markings on *Manta birostris* shown on individuals from: (a) Inhambane, Mozambique; (b) Inhambane, Mozambique; (c) Lombok, Indonesia; (d) Inhambane, Mozambique; (e) Brothers Islands, Red Sea; (f) Revillagigedo Archipelago, Mexico; (g) Ogasawara Islands, Japan; (h) Lombok, Indonesia.

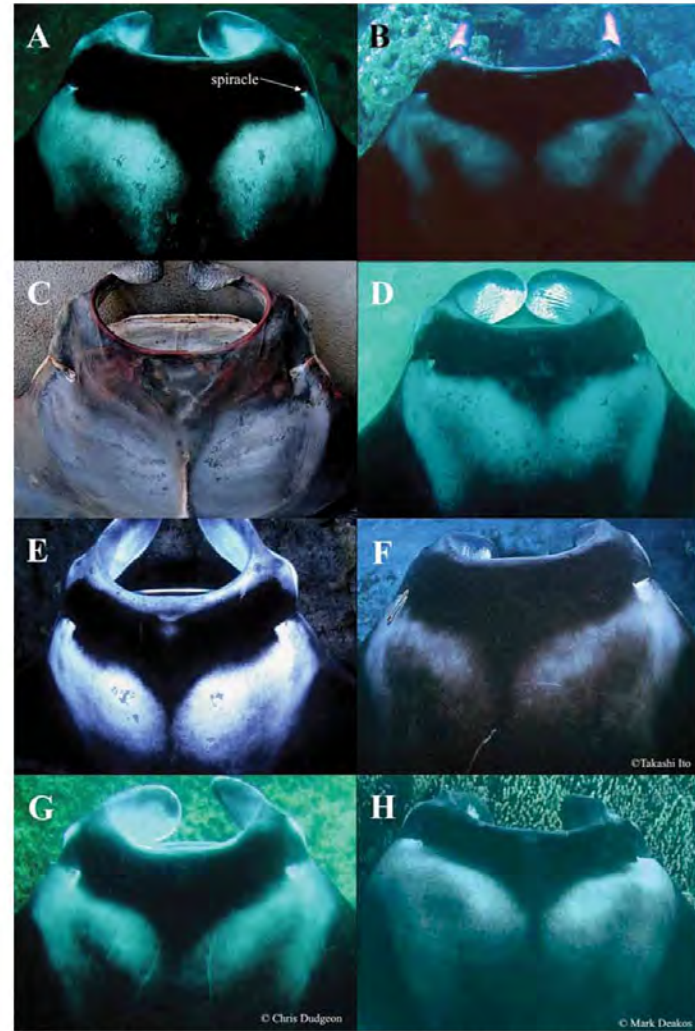


FIGURE 10. Variation in dorsal supra-branchial shoulder patch markings on *Manta alfredi* shown on individuals from: (a) Inhambane, Mozambique; (b) Yap, Micronesia; (c) Durban, South Africa; (d) the Maldives; (e) Inhambane, Mozambique; (f) Yaeyama Islands, Japan; (g) Stradbroke Island, Australia; (h) Hawaii, USA

# *M. birostris* と *M. alfredi*

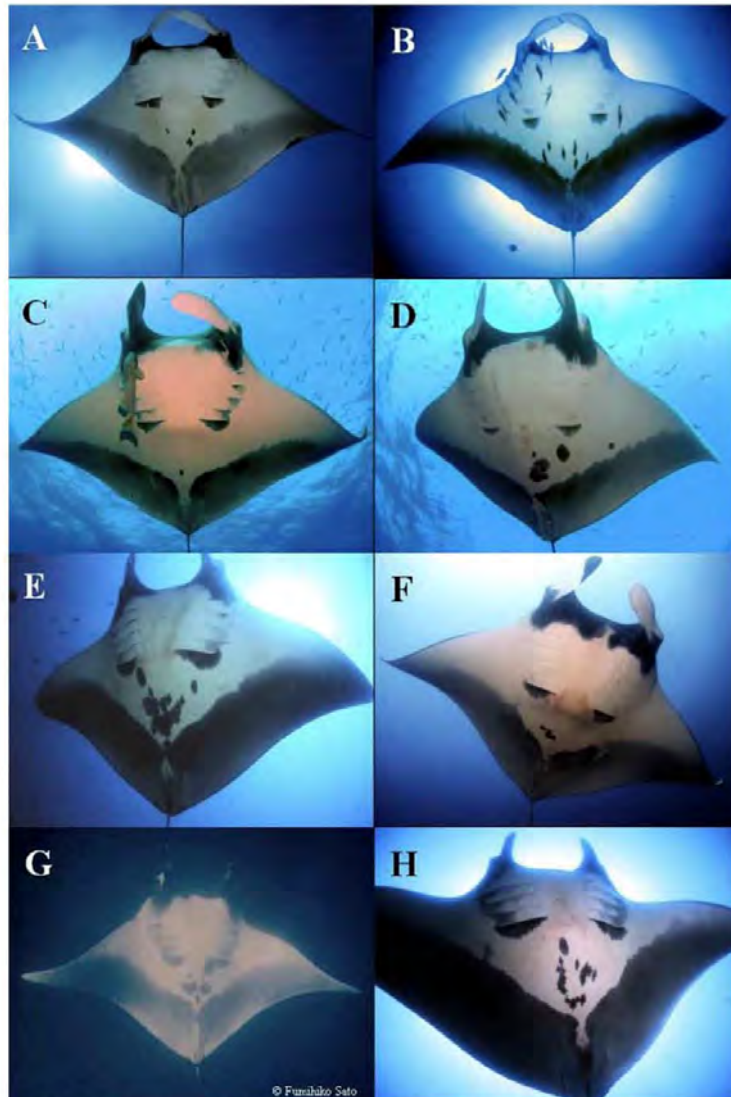


FIGURE 3. Variation in ventral markings on *Manta birostris* from: (a) Inhambane, Mozambique; (b) Inhambane, Mozambique; (c) Revillagigedo Archipelago, Mexico; (d) Revillagigedo Archipelago, Mexico; (e) Inhambane, Mozambique; (f) Inhambane, Mozambique; (g) Ogasawara Islands, Japan; (h) Inhambane, Mozambique.

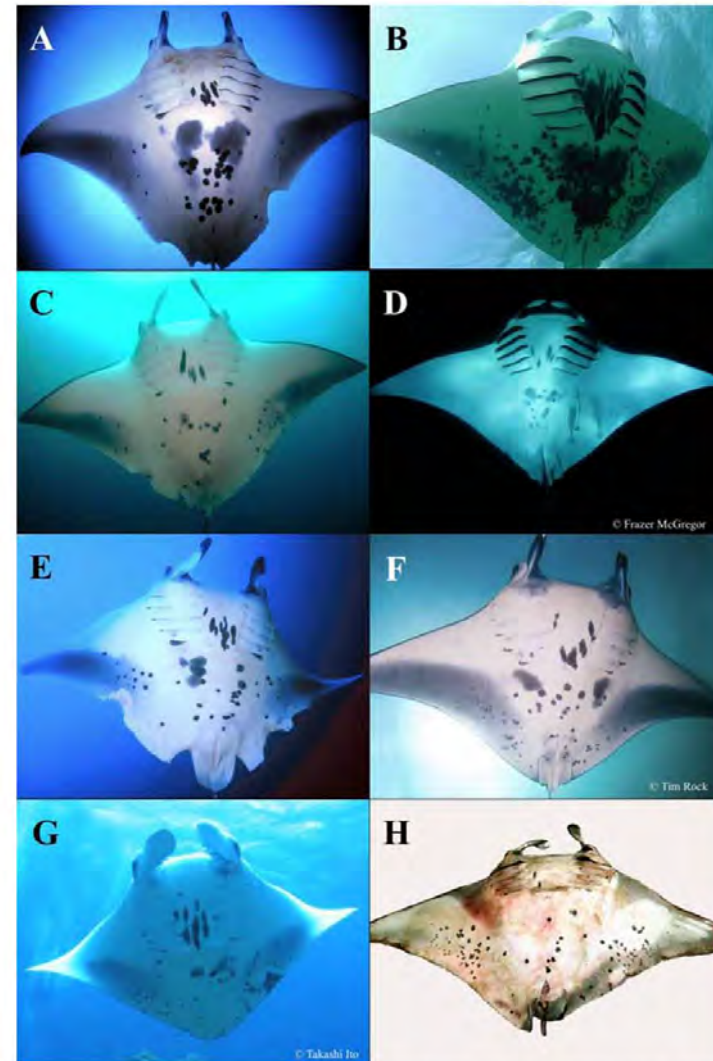


FIGURE 11. Variation in ventral markings on *Manta alfredi* from: (a) Inhambane, Mozambique; (b) the Maldives; (c) Inhambane, Mozambique; (d) Exmouth, Australia; (e) Inhambane, Mozambique; (f) Yap, Micronesia; (g) Yaeyama Islands, Japan; (h) Durban, South Africa.

# *M. birostris* と *M. alfredi*

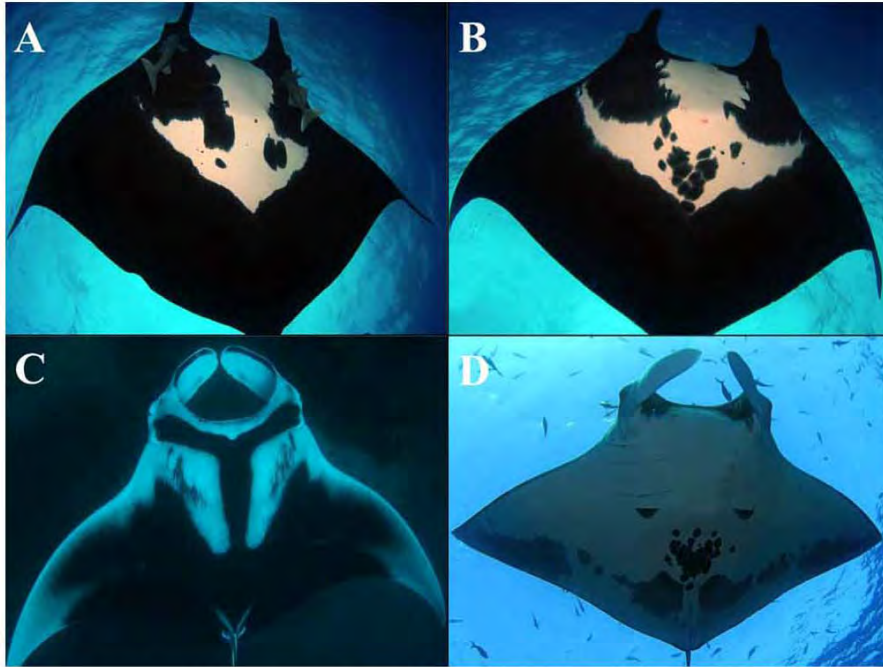


FIGURE 4. (a-b) Examples of the melanistic form of *Manta birostris* from the Revillagigedo Archipelago, Mexico and (c-d) examples of the white, or leucistic, colour morph of *Manta birostris* from southern Mozambique and the Revillagigedo Archipelago, Mexico.

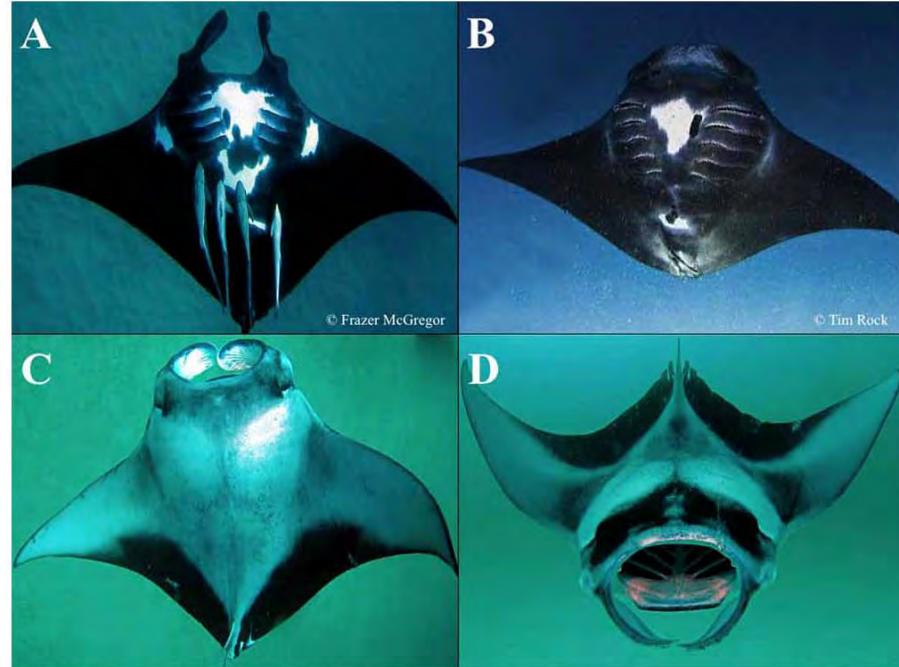


FIGURE 12. (a-b) Examples of the melanistic form of *Manta alfredi* from western Australia and Micronesia and (c-d) examples of the white, or leucistic, colour morph of *Manta alfredi* from the Maldives.

Marshall et al. (2009) より



# *M. birostris* と *M. alfredi*

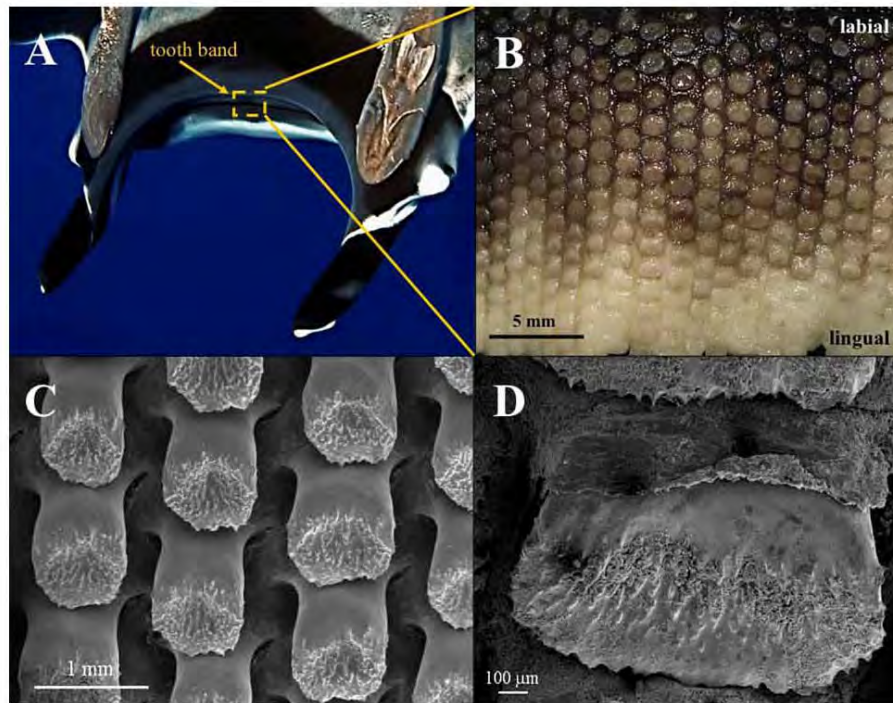


FIGURE 5. Dentition and tooth morphology in *Manta birostris*: (a) lower jaw with elongated tooth band; (b) section of teeth mid-band; (c) embedded teeth of male ray; (d) view of single embedded female tooth.

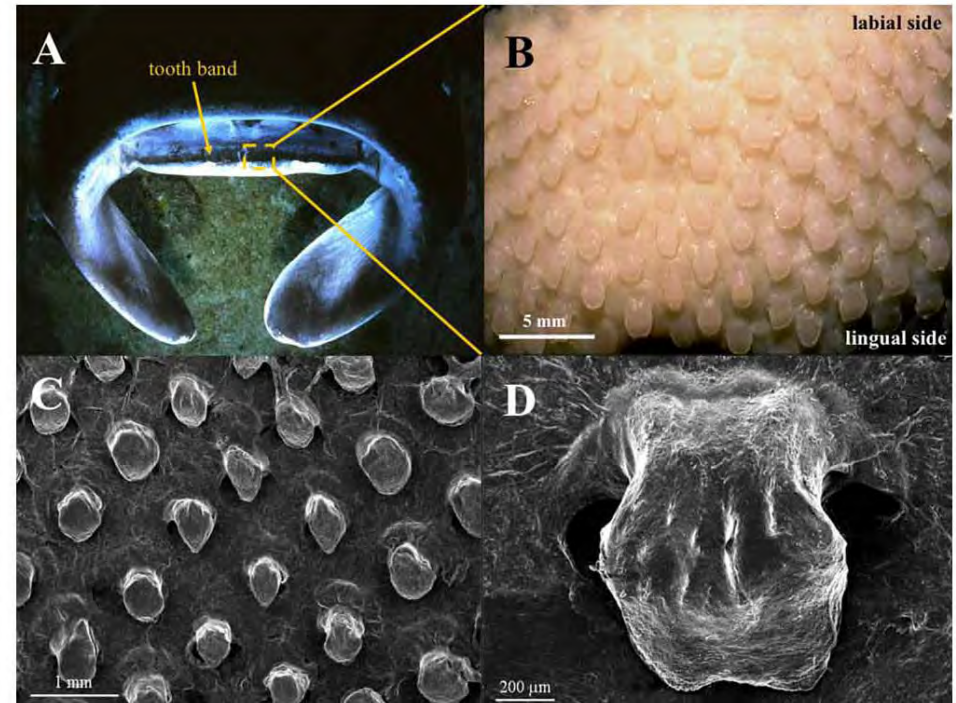
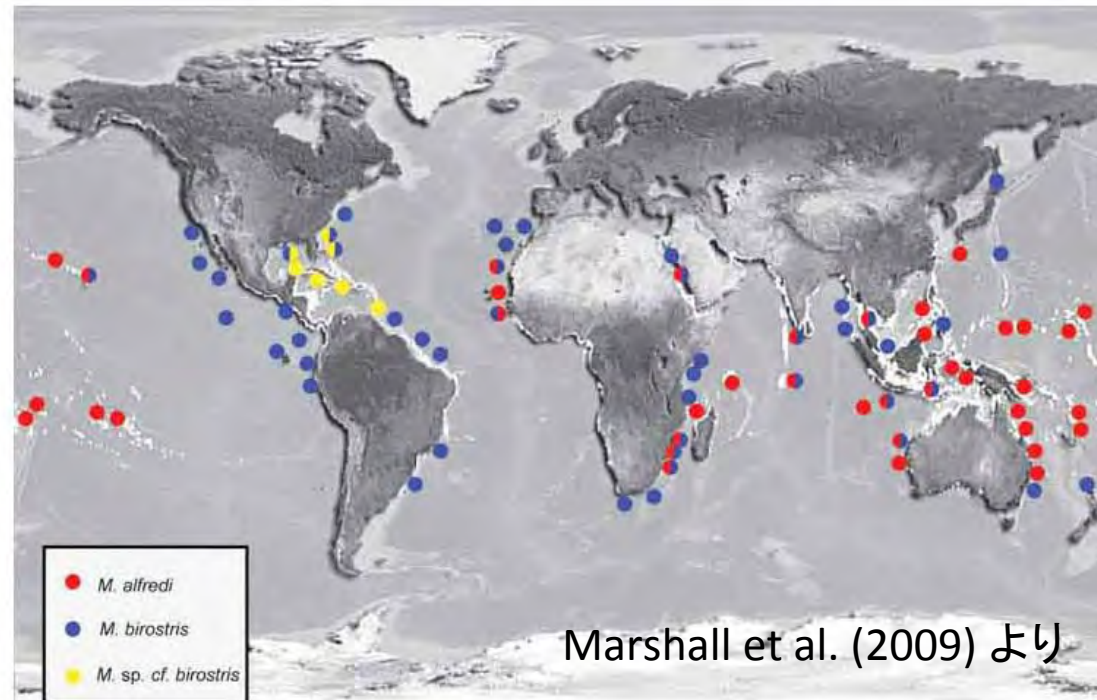


FIGURE 13. Dentition and tooth morphology in *Manta alfredi*: (a) lower jaw with elongated tooth band; (b) section of teeth mid-band; (c) embedded teeth of male ray; (d) view of single embedded female tooth.

Marshall et al. (2009) より

## *Manta alfredi* の標準和名は？

- *Manta birostris* (Walbaum, 1972) 小笠原  
オニイトマキエイ
- *Manta alfredi* (Krefft, 1868) おもに沖縄  
リーフオニイトマキエイ(伊藤・柏木, 2010)  
ナンヨウマンタ(佐藤ほか, 2010)



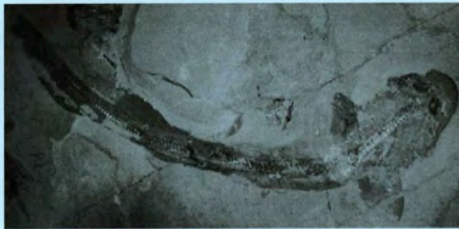
# 板鰐類研究会報 No. 46 (2010年9月)

板鰐類研究会報

第 46 号

Report of Japanese Society for  
Elasmobranch Studies

No. 46



後期白亜紀・レバノンから産出されたトラザメ属の1種  
*Scyliorhinus* sp.

日本板鰐類研究会 2010年9月 September 2010

Japanese Society for Elasmobranch Studies



日本産オニイトマキエイ *Manta birostris* とリーフオニイトマキエイ (新称)  
*M. alfredi*: 形態と遺伝的同一性の報告と新標準和名の提唱  
Morphological and genetic identification of two species of manta ray occurring in  
Japanese waters: *Manta birostris* and *M. alfredi*

伊藤 隆 (マリンサービス異島)・柏木 努 (University of Queensland)  
Takashi Ito (Marine Service Ito, Kohama, Okinawa)  
Tom Kashiwagi (University of Queensland, Australia)

#### Abstract

The genus *Manta* has been restudied and *M. alfredi* was resurrected based on the external morphology and DNA profiles. The two recognized species in the genus are *Manta birostris* and *M. alfredi*. We report the confirmation of the occurrence of both species in Japanese waters based on the identification methods accepted worldwide. We propose the new Japanese standard name, "Riifu oniitomakiei" for *M. alfredi*, which represents their habitat preference and is in accordance with the English common name, Reef manta ray.

南日本におけるオニイトマキエイ属(Genus *Manta*) 2種の記録と分類、  
同定および標準和名の提唱

Records of manta rays (Myliobatidae) from southern Japanese waters and their  
taxonomy, field identifications and suggested Japanese names

佐藤圭一<sup>1,3</sup>, 内田詮三<sup>1</sup>, 西田清徳<sup>2</sup>, 戸田実<sup>3</sup>, 小畑洋<sup>2</sup>,  
松本葉介<sup>1,3</sup>, 北谷佳万<sup>2</sup>, 三浦晴彦<sup>4</sup>

(1: 沖縄美ら海水族館; 2: 大阪海遊館; 3: 海洋博総合研究センター; 4: エ  
プソン品川アクアスタジアム)

Keiichi Sato<sup>1,3</sup>, Senzo Uchida<sup>3</sup>, Kiyonori Nishida<sup>2</sup>, Minoru Toda<sup>2</sup>, Hiroshi Obata<sup>2</sup>,  
Yosuke Matsumoto<sup>1,3</sup>, Yoshikazu Kitadani<sup>2</sup> and Haruhiko Miura<sup>4</sup>

(1: Okinawa Churaumi Aquarium, 2: Osaka Aquarium Kaiyukan, 3: Ocean  
Expo Research Center, 4: Epson Shinagawa Aqua Studium)

オニイトマキエイ属魚類 (Genus *Manta*) は、世界の熱帯・亜熱帯海域を中心に分布し、  
世界最大のエイとして知られている。本種は1978年、沖縄記念公園水族館にて初めて飼育  
が開始され、現在国内では3園館(沖縄・大阪海遊館・エプソン品川)にて飼育が行われて

南日本におけるオニイトマキエイ属(*Genus Manta*) 2種の記録と分類,  
同定および標準和名の提唱

Records of manta rays (*Myliobatidae*) from southern Japanese waters and their  
taxonomy, field identifications and suggested Japanese names

佐藤圭一<sup>1,3</sup>, 内田詮三<sup>1</sup>, 西田清徳<sup>2</sup>, 戸田実<sup>3</sup>, 小畑洋<sup>2</sup>,  
松本葉介<sup>1,3</sup>, 北谷佳万<sup>2</sup>, 三浦晴彦<sup>4</sup>

(1: 沖縄美ら海水族館; 2: 大阪海遊館; 3: 海洋博総合研究センター; 4: エ  
プソン品川アクアスタジアム)

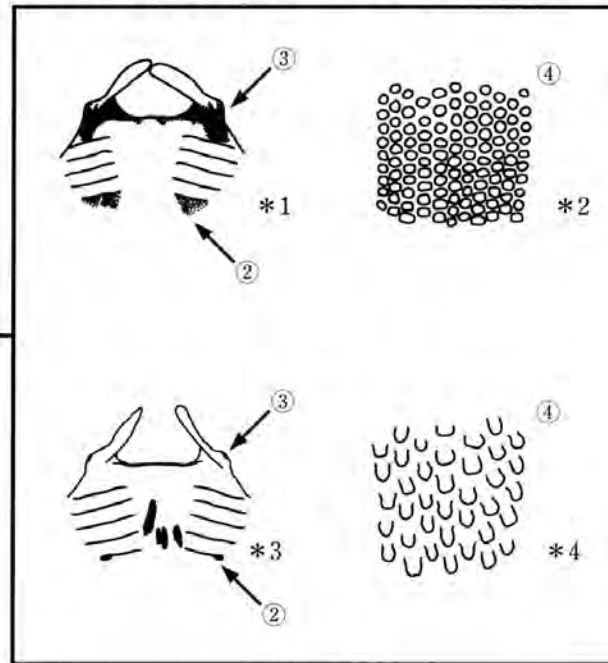
Keiichi Sato<sup>1,3</sup>, Senzo Uchida<sup>3</sup>, Kiyonori Nishida<sup>2</sup>, Minoru Toda<sup>2</sup>, Hiroshi Obata<sup>2</sup>,  
Yosuke Matsumoto<sup>1,3</sup>, Yoshikazu Kitadani<sup>2</sup> and Haruhiko Miura<sup>4</sup>

(1: Okinawa Churaumi Aquarium, 2: Osaka Aquarium Kaiyukan, 3: Ocean  
Expo Research Center, 4: Epson Shinagawa Aqua Studium)

オニイトマキエイ属魚類 (*Genus Manta*) は、世界の熱帯・亜熱帯海域を中心に分布し、世界最大のエイとして知られている。本種は 1978 年、沖縄記念公園水族館にて初めて飼育が開始され、現在国内では 3 園館 (沖縄・大阪海遊館・エプソン品川) にて飼育が行われている。本属魚類については、過去 *Manta birostris* の学名で世界から 1 種のみが知られていたが、Marshall et al. (2009) は本属を再記載し、*M. alfredi* (Krefft, 1868) を有効種として復活させ、*M. birostris* とともに本属が 2 種からなることを提唱した。そこで、沖縄美ら海水族館および大阪海遊館の採集記録 35 個体を再調査した結果、体盤背腹面の斑紋パターン、口裂周囲の色彩、歯列、楯鱗の形態と配列などの識別形質により、上述 2 種が同定された。従って、南日本沿岸には 2 種のオニイトマキエイが分布しており、それぞれの種に対しオニイトマキエイ (*M. birostris*)、およびナンヨウマンタ (新称、*M. alfredi*) の和名を提唱する。

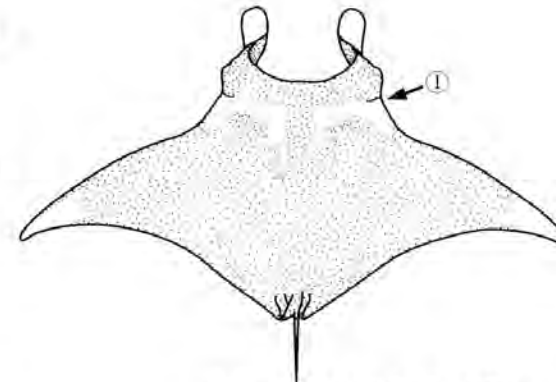
# 中坊, 編(2013)日本産魚類検索全種の同定 第三版

- ①体盤背面の白色斑の前縁が、口裂に沿って直線的、且つ平行する
- ②第5鰓孔の黒斑は鰓裂全域にかかり大きな三日月型
- ③上顎、下顎とも口裂周辺が一樣に黒色(～濃灰色)
- ④歯は幅広く、配列は互いに接する程度

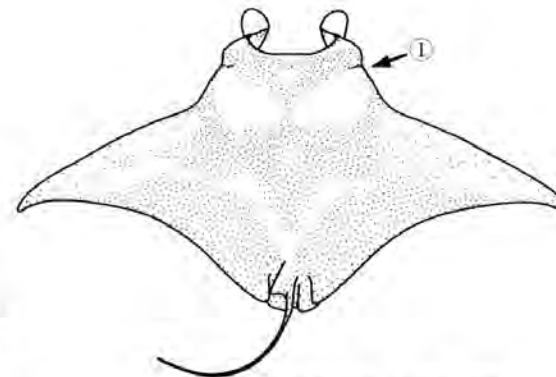


A  
3B  
より

- ①体盤背面の白色斑の前縁は体盤正中線にかけて後方へ傾き、口裂に平行しない
- ②第5鰓孔の黒斑は鰓裂全域にかからない程度のごく小さい三日月型
- ③上顎、下顎とも口裂周辺が一樣に白色(～薄灰色)
- ④歯は細く、配列はまばら



オニトマキエイ (7m DW)



ナンヨウマンタ (5.5m DW)



## 中坊, 編(2013)日本産魚類検索全種の同定 第三版

オニイトマキエイ<sup>8)</sup> (オニイトマキエイ属)

*Manta birostris* (Walbaum, 1792)

ナンヨウマンタよりも外洋性。小笠原諸島, 青森県蓬田(陸奥湾), 静岡県富戸, 駿河湾, 和歌山県太地, 高知県以布利, 沖縄島, 与那国島; 台湾, インド-西太平洋(紅海を含み, ニュージーランドまで), ハワイ諸島, 東太平洋・大西洋の熱帯~温帯域。

ナンヨウマンタ<sup>8)</sup> (オニイトマキエイ属)

*Manta alfredi* (Krefft, 1868)

オニイトマキエイよりも沿岸性。高知県以布利, 奄美大島, 沖永良部島, 沖縄諸島, 八重山諸島; インド-太平洋(紅海を含む), 東大西洋(モロッコ~ギニアの沿岸)。

\*1~4. Marshall et al.(2009)より略写

伊藤・柏木(2010)は, 過去の研究者が *M. birostris* オニイトマキエイとした標本に触れておらず, “リーフオニイトマキエイ”和名をタクソンではなく学名に対して与えており, 根拠となった証拠標本についても言及していない

*Manta alfredi* の標準和名は「ナンヨウマンタ」

# 動物の英名標準化に向けた動き

- 英語による通称 **common name**

国によって同じ種の呼び名が異なる

例えば...

イギリスやアメリカで タラ は **cod** であるが、  
オーストラリアでは スズキ目ハタ科のユカタハタ  
を **Coral Rockcod** とよぶ



# ユカタハタ（スズキ目スズキ亜目ハタ科）

*Cephalopholis miniata* (Forsskål, 1775)

Randall and Heemstra (1991) では英名 "Coral Hind"

ハタの仲間を Hind という

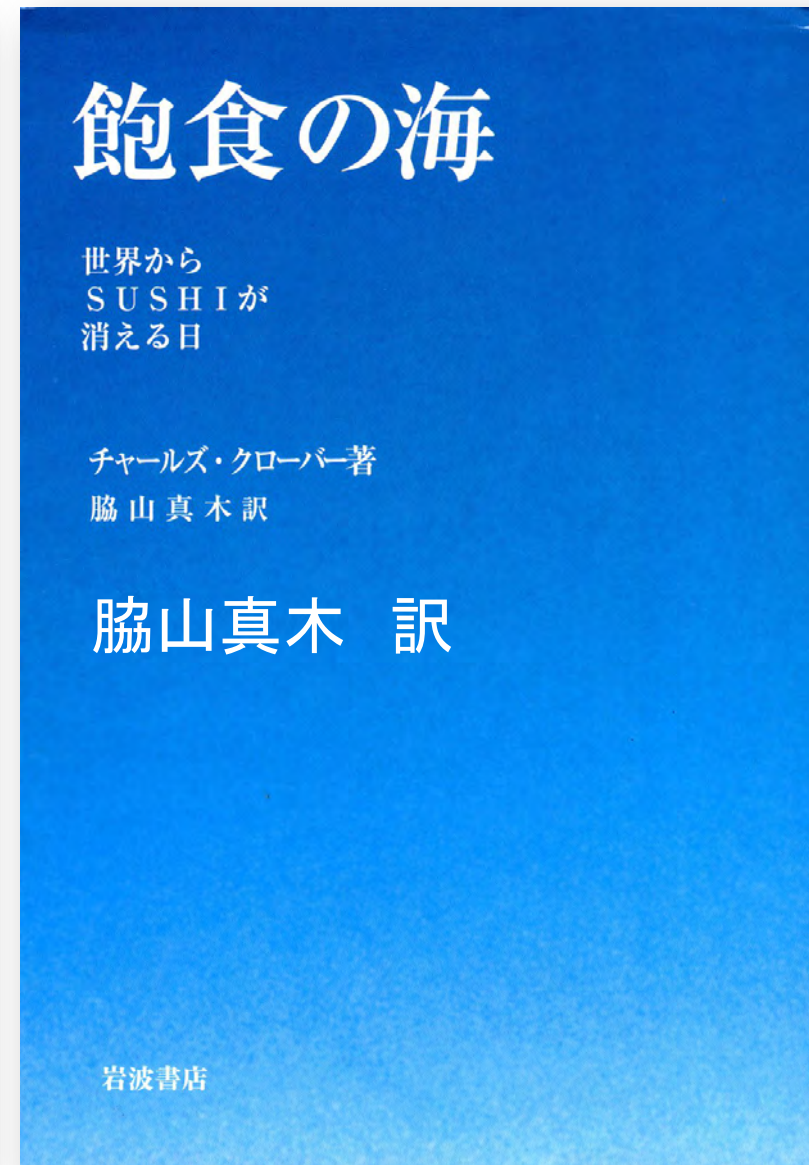
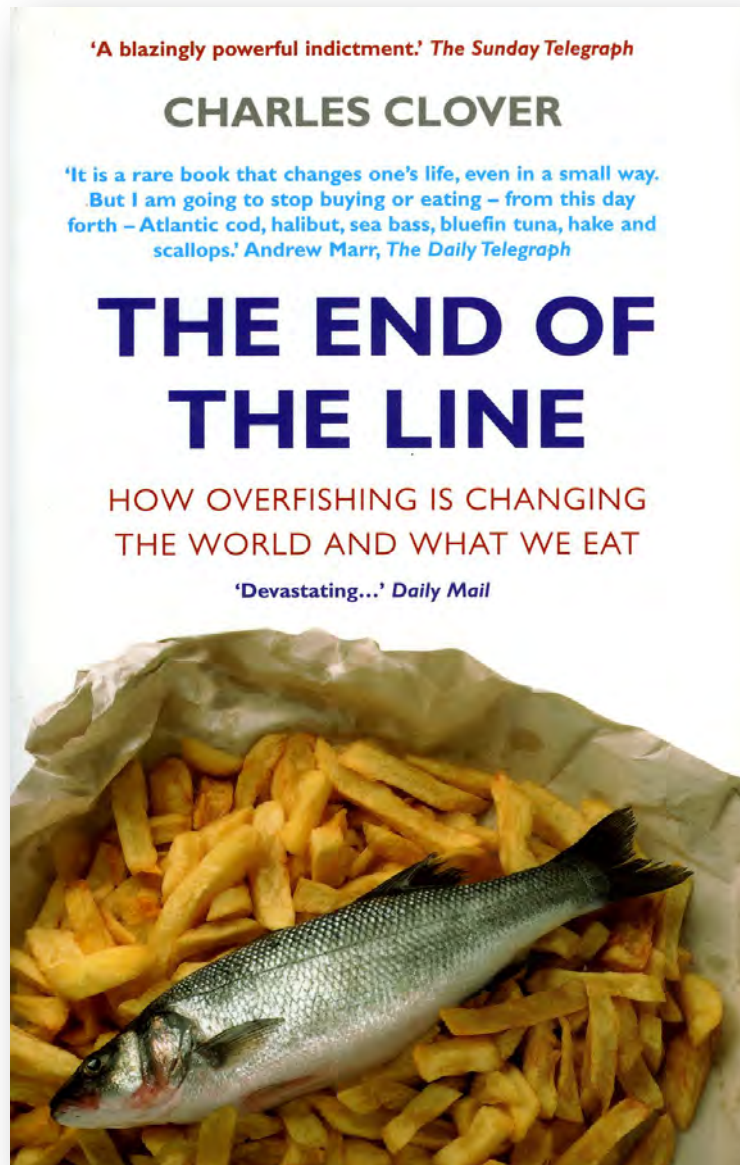
Photo by H. ENDO



# Marbled Rockcod は？

2005年出版

2006年出版



*Epinephelus maculatus* (Bloch, 1790)  
シロブチハタ

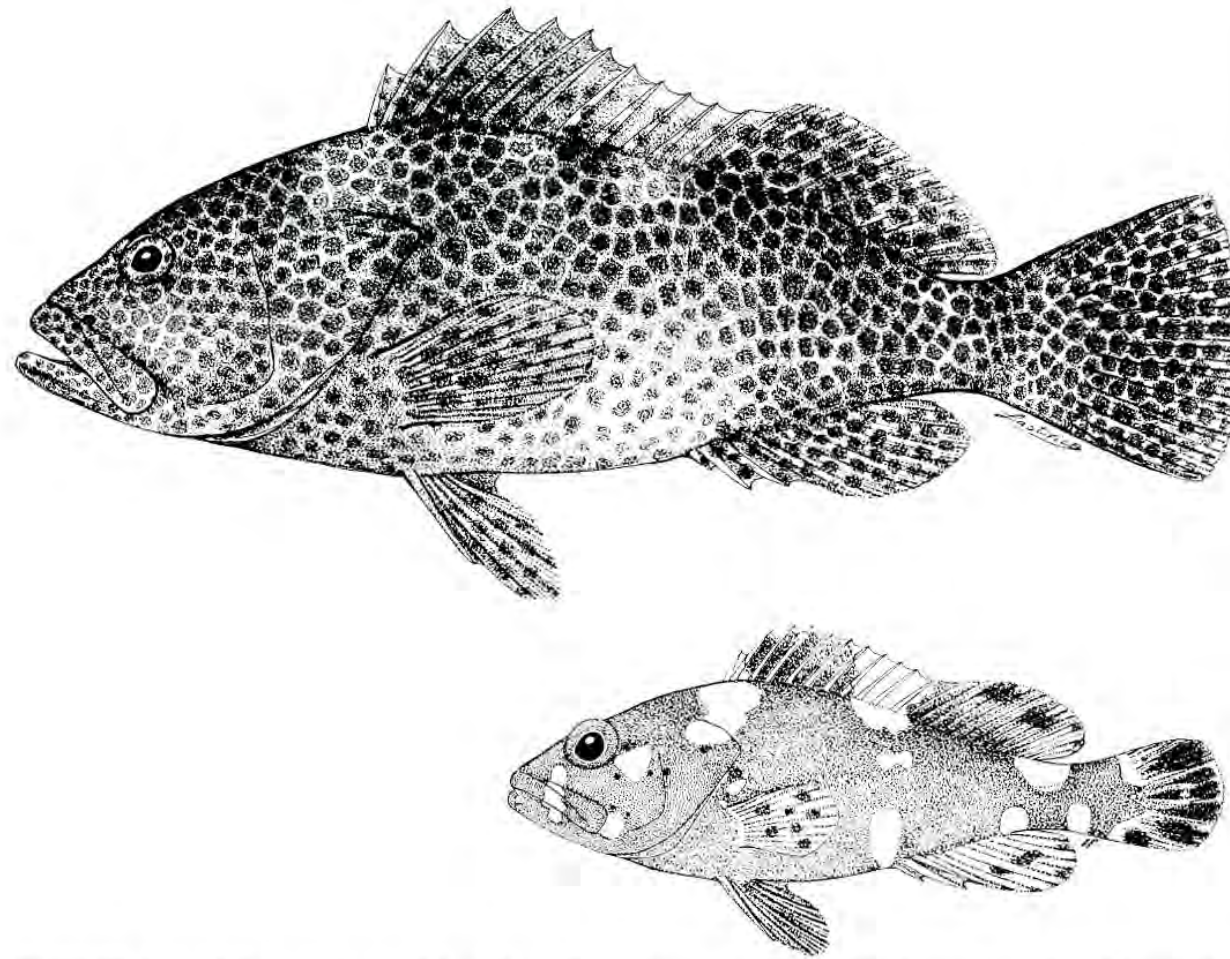


FIGURE 95. *Epinephelus maculatus*, adult (400 mm SL) and juvenile (80 mm SL) Japan (drawn from Masuda et al., 1984).

# *Epinephelus maculatus* (Bloch, 1790)

## シロブチハタ



シロブチハタ 40cm。[慶良間諸島, 8 m, 小林]



シロブチハタ 10cm。[慶良間諸島, 6 m, 小林]



シロブチハタ 7cm。[高知県大月町, 20m, 岡田]

山と溪谷社「日本の海水魚」より

# *Notothenia rossii* Richardson, 1844

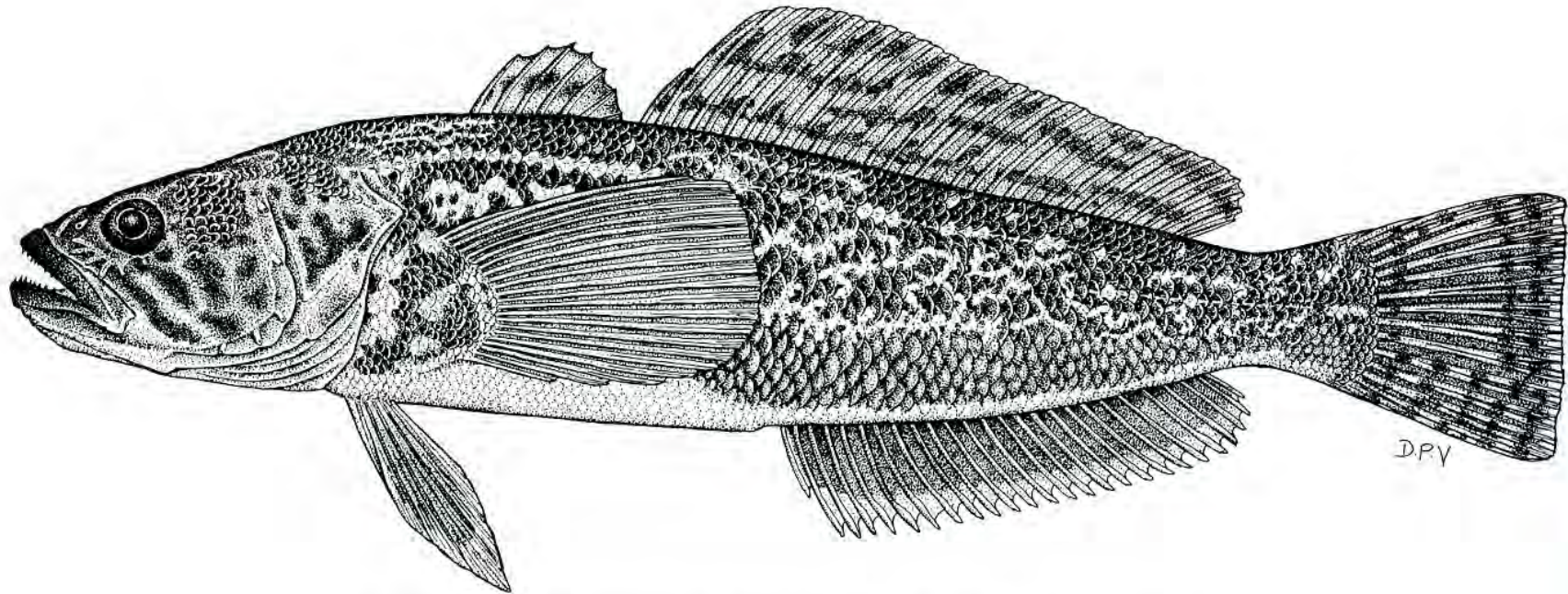


Fig. 30. *Notothenia rossii* RUSI 17826, 28 cm SL, Marion Island

スズキ目ノテナア亜目ノテナア科

Fishes of Southern Ocean より

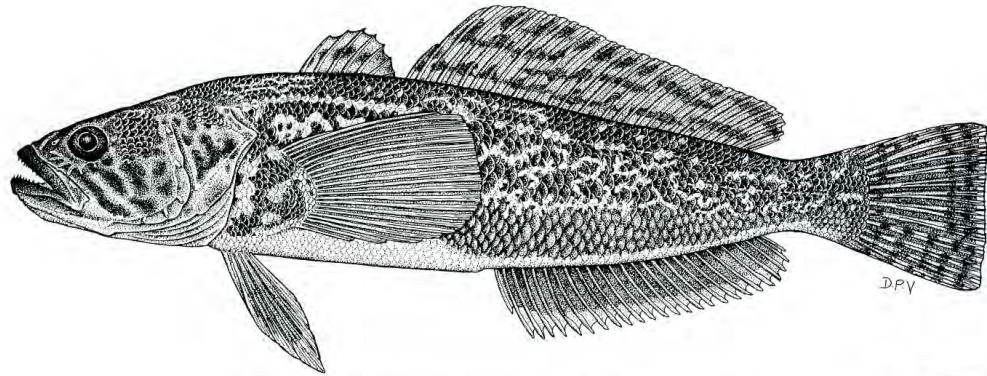
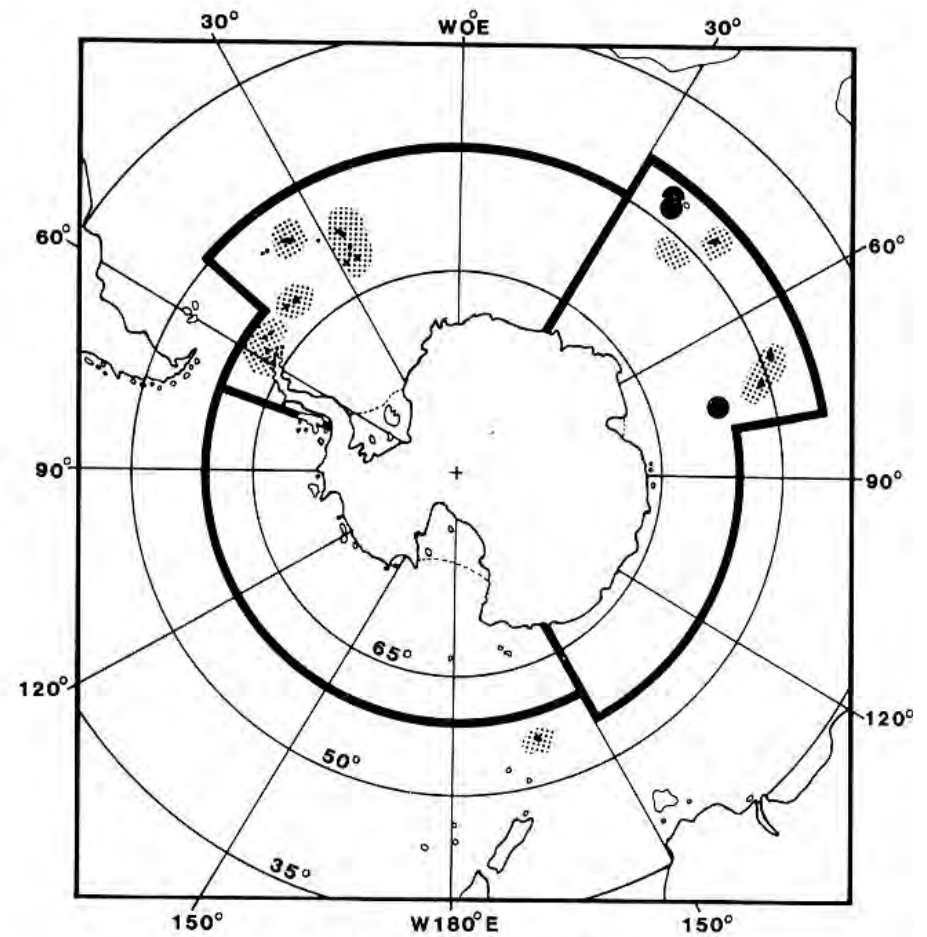


Fig. 30. *Notothenia rossii* RUSI 17826, 28 cm SL, Marion Island

ノテナア類は南半球高緯度に分布



Distribution of *N. rossii*