

# 東京大学総合研究博物館動物部門所蔵ウミトサカ類標本

## Catalogue of alcyonacean specimens preserved in the Department of Zoology, the University Museum, the University of Tokyo

今原幸光

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### 緒言

本文は、東京大学総合研究博物館動物部門が所蔵する刺胞動物のウミトサカ類標本についてまとめたものである。標本が採集された当時の東京大学動物学教室には、ウミトサカ類の分類学を専門とする研究者がいなかったにも拘らず、刺胞動物門の他の分類群と比較しても比較的多数の標本が収蔵されていた。また、所蔵標本の中には、後述のように、当時ヤギ類の分類学を行っていた木下熊雄が新種記載したコエダ類1種のタイプ標本や、後年になって標本を調べた京都大学の内海富士夫が新種記載したウミトサカ類2種のタイプ標本が含まれていた。本文では、総合研究博物館所蔵のウミトサカ類標本の概要と、日本におけるウミトサカ類分類学の研究史について述べた後に、全標本のリストとラベル情報を最新の分類体系に沿って示す。

### コレクションの概要

東京大学総合研究博物館動物部門所蔵の無脊椎動物標本は、おもに明治時代から大正時代にかけて採集された標本を中心としていて、国内に現存する最古の動物学標本とされている(上島, 2006)。ちょうどこの時期は、当時の東京大学動物学教室に在籍していた木下熊雄<sup>\*1</sup>や大久保忠春が、日本人研究者として始めて日本産ウミトサカ類の分類学的研究を開始した時期であったことから、彼らの研究標本が総合研究博物館に保存されていること

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<sup>\*1</sup> 木下熊雄は、熊本県出身で東京大学動物学教室在学中から主に深海性ヤギ類の分類学を始め、学位取得後も大学に残って研究を続け、八放サンゴ分類学では世界的な研究業績を挙げた。しかし、若くして病に侵され、また夫人が早世したことも重なり、彼の研究生活はわずか10年で途絶えて、彼自身も早世した(大島, 1965)。

が期待された。また、京都大学の内海富士夫\*<sup>2</sup>も東京大動物学教室に保存されていた標本を報告していることから (Utinomi, 1951, 1952, 1960)、それらの標本の存在も期待された。実際に標本を調べてみると、ウミトサカ類の標本は、エタノールまたはホルマリンの液漬標本として保存されていることが確認され、標本瓶の数は 112 本 (ロット) であった。112 ロットの標本のうち、20 ロットは 16 種に同定されていて、これ以外に属まで同定された標本が 4 種 5 ロット、科まで同定された標本が 3 種 3 ロット含まれていたが、残り 83 ロットは未同定であった。

ほとんど全ての標本に産地情報等を記載した標本ラベルが入れられていて、それらの中には、一部の文字が判読不能のケースもあったが、大部分のラベルは比較的良い状態で保存されていた。標本ラベルは、いくつかの異なる様式の紙ラベルのほかに、毛筆で記入された綿布が使われていることもあり、また一つの瓶に複数枚のラベルが入れられていた場合もあった。これらのラベルの中には、米水産局調査船アルバトロス号\*<sup>3</sup>が用いていた標本ラベルと、米スミソニアン自然史博物館の標本ラベルも含まれていた。これらのうち、アルバトロス号のラベルについては、採集者名と産地情報からアルバトロス号の採集した標本とは考えにくいことと、同号が 1906 年に来日した際に乗組員と東京大学の研究者が交流を行っていたことから、その際入手したラベルだけが流用されたものと考えられる。また、スミソニアン自然史博物館のラベルについては、同博物館の八放サンゴ類研究者であったペイヤー\*<sup>4</sup>のサインが記入されていたことから、彼が 1953 年に来日した際に直接調べた標本であることが確認された。

今回の調査では、保存液の種類を確かめて、ホルマリンが使われていた場合はエタノールに置き換えた。また、一つの瓶の中に明らかに複数種の標本が混在している場合は、それらを種類ごとの瓶に取り分けた。ウミトサカ類は、軟珊瑚類と呼ばれるように、群体が柔軟なうえに伸縮活動を行う種が多くて、これらの種では固定時の状況により標本の外部形態が著しく変化する。そのため本動物群は、外部形態の特徴と共に、群体内に散在する微小骨片の形や大きさ等を重要な分類形質として、種分類学が行われている。今回の調査においては、種までの同定が行われていた標本については、その同定結果の検証を行っ

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\*<sup>2</sup> 内海富士夫 (旧姓 弘富士夫, Hiro Fujio) は、日本が統治していたパラオ諸島に、昭和 9 年から 18 年まで設置されたパラオ熱帯生物研究所へ第一次研究員として派遣された際に、同研究所の眼前の海におびただしく分布していたウミトサカ類に興味を持ち、八放サンゴ類の分類学を始めた (私信)。

\*<sup>3</sup> アルバトロス号 (U. S. Fisheries Steamer “Albatross”) は、1881 年に建造され、1921 年に退役するまでの間に主に北半球の海洋生物調査を行い、日本へは 1896 年 (明治 29 年)、1906 年、1910 年の 3 度にわたって来日した。特に 1906 年の調査航海では、アラスカから噴火湾に到着した後、本州の日本海沿岸を南下して九州南端に至り、次いで豊後水道と瀬戸内海を経て本州太平洋沿岸を北上し、津軽海峡を抜けて北海道を時計回りに一周した。その後伊豆半島沿岸まで南下した後に、相模湾を調査してサンフランシスコへの帰路についた。当時の三崎臨海実験所長の箕作佳吉が相模湾と駿河湾の調査に乗船するなど、日本人研究者数名も調査に加わった (磯野, 1988)。

\*<sup>4</sup> ペイヤー (Frederic Merkle Bayer) は、マイアミ大学教授とスミソニアン自然史博物館研究員を在任中に、170 種以上の新種記載を行うとともにウミエラ類を除く八放サンゴ亜綱全属の検索表を作成するなど、八放サンゴ類の分類学に多大な貢献をした。

た。しかし、多数を占める未同定標本については、外部形態と、ポリプ外周を骨片が覆う種についてはそれらの骨片の配列様式から判断できる範囲で同定を行うに留めた。その結果、最終的に種名の特定を行なうことのできなかつた 32 種を含めて、種類数は 77 種、標本瓶の数は 125 本 (ロット) であった。

標本の採集年代は、1892 年 (明治 25 年) から 1923 年 (大正 12 年) にかけての 32 年間にわたっていた。採集地域は、東京大学三崎臨海実験所周辺の相模湾が最も多いが、外房沖から琉球諸島 (尖閣列島を含む) 及び小笠原諸島に及んでいた。これらの中には、高知沖、鹿児島沖等の珊瑚漁場が含まれていた。また、海外の標本も含まれていて、フィリッピン、ポナペ、パラオ、及びナボリの標本が見出された (Fig. 1)。採集者の中には、東京大学動物学教室第 3 代教授の箕作佳吉 (三崎臨海実験所初代所長)、第 4 代教授の飯島魁 (同臨海実験所第 2 代所長) 臨海実験所の名物採集人青木熊及びイギリス人標本商アラン・オーストンらの名前がたびたび出てきていて、これらの標本の多くが三崎臨海実験所を中心に収集されたことが確認された。相模湾産以外の標本は、箕作・飯島両教授のほか、宮嶋幹之助、木下熊雄、池田岩治らのその当時の学生が行った調査活動に伴う標本であった。このうちの木下熊雄は、ウミトサカ類に関する論文は少ないが、ヤギ類の研究で大きな業績を上げた人物である。

種まで同定済みの標本の中には、紛れもなく木下熊雄と内海富士夫のタイプ標本が含まれていた。今回発見されたタイプ標本は、下記の通りである。

*Carotalcyon sagamianum* Utinomi, 1952 (UMUTZ-Cnid-A -81, Holotype)

*Chromonephtea hirotai* (Utinomi, 1951) (UMUTZ-Cnid-A -104, Holotype)

*Telesto tubulosa* Kinoshita, 1909 (UMUTZ-Cnid-A -103, Holotype)

なお、飯島 (1918) が、動物学提要の中で「海鶏頭一種 *Alcyonium* sp. 相模海産」として図示した種は、上記の *Carotalcyon sagamianum* Utinomi と同一種であると考えられる。本種は、多数の枝をつけた樹木状を呈する種であるが、群体の退縮時には、枝分かれした群体の上部全体が、トランクと呼ばれる柄部中に完全に収まってしまおうという、著しい伸縮性を示す種である。タイプ標本は、内海が新種記載で図示したように、群体の大部分が収縮した状態であるが、飯島の図は群体が比較的伸張した状態であって、そのような状態の標本は今回の調査では発見できなかった。また、タイプ標本の存在が期待されいながら、今回の調査では発見できなかった標本は下記の 2 種である。これらのタイプ標本は紛失したと考えられ、状況によってはネオタイプの指定が必要になるかも知れない。

*Paratelesto rosea* (Kinoshita), (Holotype), one colony, Miyake Island, south of Izu Province, 10 August 1893, collected by S. Hirota.

*Telesto sagamina* Kinoshita, (Syntypes), two fragments probably belonging to one colony, Doketsuba, Sagami Bay, 60 fathoms (i.e., ca. 110 m), October, 1908, collected by the author himself.

その一方、以下の4種は、これまでの日本産リスト (Imahara, 1996) に含まれておらず、日本新記録となる。

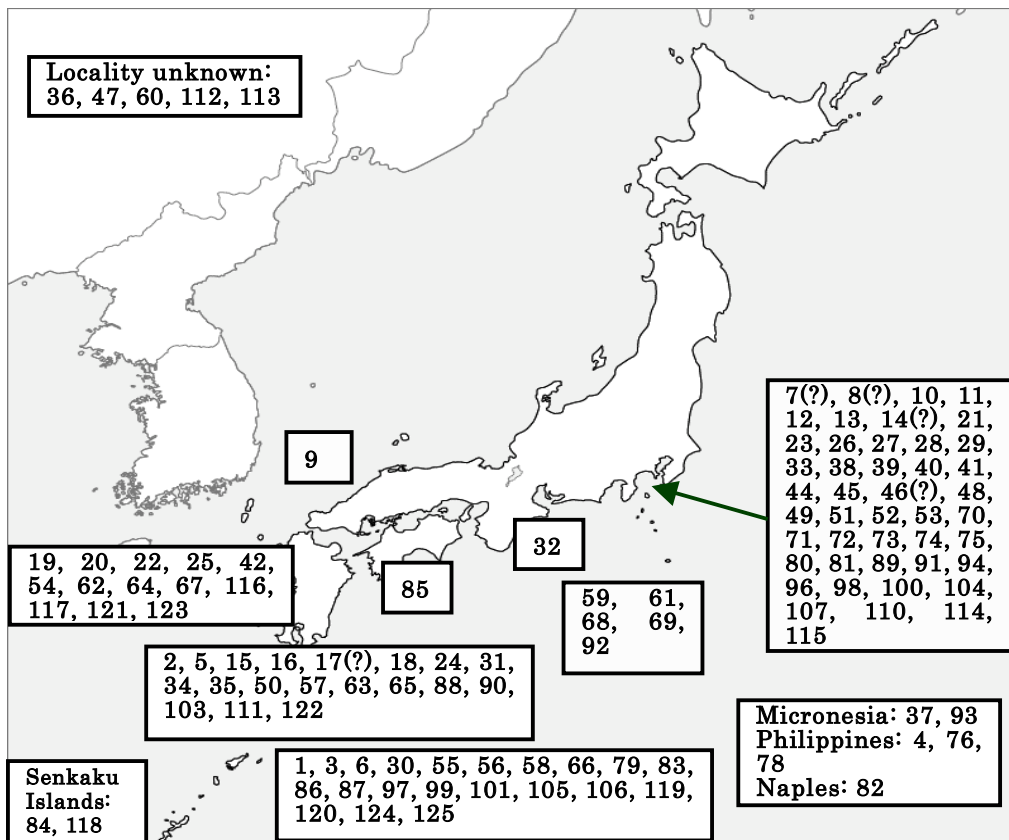
*Chromonephthea* cf. *imaharai* Ofwegen

*Dendronephthya* (*Morchellana*) cf. *filigrana* Kükenthal

*Nephthea* cf. *junipera* Thomson et Dean

*Stereonephthya* cf. *papyracea* Kükenthal

下記の標本目録は、原則としてカリフォルニアアカデミーの G. C. Williams とスミソニアン自然史博物館の S. D. Cairns が WEB で公開している最新の分類体系 <<http://research.calacademy.org/research/izg/OCTOCLASS.htm>>に基づいて配列した。標本情報は、次の順に要約して記述したが、該当事項のない場合あるいは不明な場合は項目自体を省略した。①標本番号、②標本の数量、③Type status: タイプ標本である場合はその種別、④Locality: 一枚あるいは複数枚のラベルから読み取った産地、⑤Date: 採集日、⑥Collector(s): 採集者名、⑦Label data: 元ラベルの記載内容、⑧Reference(s): 論文発表に使われた場合はその文献情報、⑨Remarks: その他の情報。産地については、ラベルに記載されていた地名だけでは具体的な場所 (海域) を特定しにくい場合もあったので、県名または海域名を最初に記述したが、その中には筆者の責任において判断を下した場合も含まれる。採集者名についても、同様に筆者の推測も含めてできる限りフルネームを記述した。⑦の元ラベルの記載内容は、ラベル中には文字の消えかけているラベルも散見されたことから、ラベル情報の保全を目的とすると共に、筆者の推定した産地名等に誤りがある場合に備えて記載した。



**Fig. 1. Map showing locations of specimens collected.**

Numbers in boxes are registration numbers of UMUTZ-Cnid-A

## 日本産ウミトサカ類の分類学的研究略史

日本産ウミトサカ類 (刺胞動物門・花虫綱・八放サンゴ亜綱) の分類学的研究は、これまでの文献調査の結果からは、L.アガシーの助手であり米国の北太平洋探検航海でナチュラルリストを務めたスティンプソンが、鹿児島湾から採集したウミキノコ属 *Sarcophyton* の一種を自ら新種記載したことに始まった (Stimpson, 1855)。次いで、ドイツ人動物学者のデーデルライン\*<sup>5</sup>がヨーロッパに送った標本の中から、ベルン大学 (スイス) のスツダー\*<sup>6</sup>が4新種を含むトゲトサカ属 *Dendronephthya* 6種を発表した (Studer, 1888)。その後も、英ダブリン大学のライト (Edward Perceval Wright) と前述のスツダーが共著で英国世界周航探検船チャレンジャー号のコレクション\*<sup>7</sup>の中から、20新種を含む28種のウミトサカ類を報告したり (Wright & Studer, 1889)、デーデルラインの弟子の1人であるドフライン\*<sup>8</sup>の収集標本から20新種を含む33種を発表したキュケンタール\*<sup>9</sup>らの外国人による研究が続いた (Kükenthal, 1906)。1906年には、米水産局の調査船アルバトロス号が日本周海調査航海を行い、膨大な数量の海産生物を採集したが、ウミトサカ類についてはアイオワ大学のナッチング (Charles C. Nutting) が35新種を含む102種を報告した (Nutting, 1912)。1909年 (明治42年) になり、東京大学動物学教室を卒業していた木下熊雄が、日本人として始めてサガミコエダ *Telesto sagamina*、クダコエダ *T. tubulosa*、ベニコエダ *Paratelesto rosea* の3新種を含むコエダ類4種の記載を行い (Kinoshita, 1909)、日本人による研究が始まった\*<sup>10</sup>。その後、木下の後輩の大久保忠春がアミゴケ *Sarcodictyon gotoi* を新種記載したが (Okubo, 1929)、大久保の研究はこの論文以外には見当たらない。1937年 (昭和12年) になり、パラオ熱帯生物研究所滞在中に八放サンゴの多様性に興味をもつようになった京都大学の内

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\*<sup>5</sup> デーデルライン (Ludwig H. P. Döderlein) は、東京医学校 (東京大学医学部の前身) 第3代目博物学教師として来日していたドイツ人海洋動物学者で、棘皮動物の分類学が専門であった。来日中には、相模湾産の深海動物を中心に、さまざまな分類群の動物標本を本国の専門家に送り、日本産海洋動物相の解明に大きく寄与した。

\*<sup>6</sup> スツダー (Théophil Studer) は、1874年から3年間をかけてドイツが行ったガゼーラ号による世界探検航海に乗船したベルン大学教授で、ウミトサカ類のほか甲殻類や棘皮動物についての論文も残している。

\*<sup>7</sup> チャレンジャー号のコレクションは、英国海軍哨戒艦チャレンジャー8世号が、1873年から3年半をかけて行った世界周航探検航海の採集標本である。1875年には横浜港に入港していて、その前後に房総半島沖から紀伊半島沖及び瀬戸内海で調査を行った。

\*<sup>8</sup> ドフライン (Franz Doflein) は、ドイツ領下であったシュトラスプール (現フランス領) でデーデルラインに学び、その後ミュンヘン動物学博物館勤務中に標本収集のために来日した。ミュンヘン動物学博物館の後プレスラウ大学 (現ポーランドのプロツワフ) に移り、附属動物学博物館では、次のキュケンタールの後任館長を勤めた。

\*<sup>9</sup> キュケンタール (Willy Georg Kükenthal) は、反復説を唱えたヘッケルから動物学を学んだ後、それまでに報告されていたウミトサカ類、ヤギ類、ウミエラ類の全種について再検討を行い、八放サンゴの近代分類学の礎を築いた。イエーナ大学とプレスラウ大学で動物学教授を務めるとともに、プレスラウ大学動物学博物館とフンボルト大学自然史博物館 (ベルリン自然史博物館) で館長を務めた。

\*<sup>10</sup> 八放サンゴ亜綱全体については、1902年にダメサンゴ *Paracorallium inutile* を新種記載した岸上鎌吉の論文が日本人で最初の研究であった (Kishinouye, 1902)。

海富士夫が、チガイウミアザミ *Heteroxenia elisabethae* についての論文を発表したのを皮切りに (Hiro, 1937)、1977 年までに延べ 50 篇に及ぶ日本産八放サンゴに関する論文を発表した。これらの中で内海は、既知種の整理を進めると共に 42 新種を記載し、日本産ウミトサカ類の分類学を大きく進めた。この時代には、北海道大学の山田真弓と内田亨がベニウミシヨウロ属 *Metalcyonium* 2 新種の論文を発表し (Yamada, 1950; Uchida, 1969)、横浜国立大学の鈴木博もハナゴケ属 *Cornularia* に関する論文を発表しているが (Suzuki, 1971)、何れもその後の継続は見られなかった。1973 年より今原の研究が始まり (Utinomi & Imahara, 1973; Imahara, 1977, 1991, 2006 等)、現在に至っている。

なお、ライデンにあるオランダ国立自然史博物館には、シーボルトが日本から持ち帰ったタマノウトサカ *Cladiella sphaerophora* の標本が保管されている (今原, 1999)。また、イェール大学ピーボディ自然史博物館にはモースの持ち帰った八放サンゴ類標本が保管されているが (今原, 2007)、これらの標本の存在はごく最近まで知られていなかった。

## 謝辞

東京大学大学院理学系研究科の上島励准教授には、今回の標本調査を行う上で多大な便宜を図っていただいた。また、(財) 黒潮生物研究所の岩瀬文人所長と国立科学博物館の並川洋主任研究官には、難解なラベル解読についてアドバイスをいただいた。山田真弓北海道大学名誉教授には、日本人研究者情報について貴重なご助言をいただいた。滋賀県立琵琶湖博物館のマーク・グライガー総括学芸員には英文原稿の校閲をしていただいた。記してお礼申し上げる。

**Table 1. List of scientists studied on the taxonomy of Japanese Alcyonacea**

研究者名・発表年	採集者名・採集年	記載種	産地 (標本所蔵機関)
Stimpson, W., 1855	U. S. Surveying Expedition to North Pacific, 1855	<i>Sarcophyton agaricum</i> , 1 n. sp.	鹿児島湾 (MCZ)
Studer, Th., 1888	Döderlein, H. P. L., 1879-81	<i>Dendronephthya (M.) pumilio</i> , etc., 6 n. spp.	相模湾 (ZMB, NHMB)
Wright, E. P. & Th. Studer, 1889	Challenger Exped., 1875	<i>Siphonogorgia dipsacea</i> , 20 n. spp.	太平洋岸 (BM, NHMB)
Holm, O., 1894	Capt. Suenson, H. E., around 1890	<i>Dendronephthya (R.) suensoni</i> , etc. 9 n. spp.	九州西岸 (UUZM)
Brundin, J. A. Z., 1896	Capt. Suenson, H. E., around 1890	<i>Eleutherobia rubra</i> , etc., 4 n. spp.	九州西岸 (UUZM)
May, W., 1900	Hilgendorf, M. F., 1873-76	<i>Dendronephthya (M.) stolonifera</i> , 1 n. sp.	相模湾 (ZMB)
Pütter, A., 1900	?	<i>Bellonella rigida</i> , 1 n. sp.	長崎 (ZMW <sub>r</sub> )
Kükenthal, W., 1906	Doflein, F., 1904	<i>Bellonella rigida</i> , etc., 20 n. spp.	相模灘 (NHMW, ZMB, ZMH, ZMW <sub>r</sub> , ZSM)
飯島魁, 1918	東京大学動物学教室	<i>Alcyonium</i> sp. (= <i>Carotalcyon sagamianum</i> Utinomi)	相模湾 (UMUT)
大久保忠春, 1929	?	<i>Sarcodictyon gotoi</i> , 1 n. sp.	相模湾 (?)
内海富士夫, 1937-1977 (弘富士夫, 1937 を含む)	多数	<i>Cornularia komaii</i> , etc., 42 n. spp.	太平洋岸 (SMBL, NSMT, UMUT)
山田真弓, 1950	山田真弓	<i>Metalcyonium pacificum</i> , 2 n. spp.	北海道 (SAP)
Tixier-Durivault & Prevorsek, 1958, 1960, 1962	Mortensen, Suenson, Christiansen, etc.	<i>Dendronephthya (D.) mortenseni</i> , etc., 7 n. spp.	主に相模湾、九州西岸 (ZMUC)
鈴木博, 1971	?	<i>Cornularia</i> spp.	相模湾 (?)
内海富士夫 & 今原幸光, 1976	昭和天皇, 今原	<i>Minabea robusta</i> , 1 n. sp.	相模湾、駿河湾 (NSMT, MSMT)
今原幸光, 1977-	今原ら	<i>Dendronephthya (R.) surugaensis</i> , 1 n. sp., etc.	全国 (MSMT, WMNH)
Williams, C. G., 1997	Bolland, R., 1995	<i>Pacifiphyton bollandi</i> , 1 n. sp.	沖縄 (CAS)
Benayahu, Y., 2002	田中淳一 (琉大)	<i>Simularia tanakai</i> , 2 n. sp.	沖縄 (ZMTU)
Ofwegen, L. P., 2005	多数	<i>Chromonephthya imaharai</i> , 2 n. spp.	全国 (RMNH, USMN, UMUT, etc.)

**BM:** Natural History Museum, London; **CAS:** California Academy of Sciences; **MCZ:** Museum of Comparative Zoology, Harvard University; **MSMT:** Marine Science Museum, Tokai University; **NHMB:** Naturhistorisches Museum der Burggemeinde Bern; **NHMW:** Naturhistorisches Museum Wien; **NSMT:** National Museum of Nature and Science; **RMNH:** Leiden Nationaal Natuurhistorische Museum; **SAP:** Hokkaido University Museum; **SMBL:** Seto Marine Biological Laboratory, Kyoto University; **UMUT:** The University Museum, the University of Tokyo; **USMN:** National Museum of Natural History, Smithsonian Institution; **UUZM:** Uppsala Universitets Zoologiska Museum; **WMNH:** Wakayama Prefectural Museum of Natural History; **ZMB:** Museum für Naturkunde der Humboldt-Universität zu Berlin; **ZMH:** Zoologisches Museum der Universität Hamburg; **ZMUC:** Universitets København, Zoologisk Museum; **ZMTU:** Zoological Museum Tel-Aviv University; **ZMW<sub>r</sub>:** Muzeum Przyrodnicze Uniwersytetu Wrocławskiego; **ZSM:** Zoologische Staatssammlung, München.



**List of the alcyonacean collection deposited in the Department of Zoology,  
the University Museum, the University of Tokyo**

(Database available online at <http://umdb2.um.u-tokyo.ac.jp/DDoubutu/invertebrate/alcyonacea/index.html>)

Phylum Cnidaria 刺胞動物門  
Class Anthozoa 花虫綱  
Subclass Octocorallia 八放サンゴ亜綱  
Order Alcyonacea ウミトサカ目  
Suborder Stolonifera ウミヅタ亜目  
Family Cornulariidae ハナゴケ科  
***Cornularia* sp.** ハナゴケ属の一種

UMUTZ-Cnid-A-96; one colony.

Locality: Sagami Bay south of the Miura Peninsula, Kanagawa Prefecture, 500 fathoms (i.e., ca. 900 m).

Label data: “巖戸掛の外, 500 尋, together with *Rhabdocalyptus victor* (no. 404)”.

Remarks: The meaning of “巖戸掛の外” is “outside of the Iwado-line” which is a fishermen’s expression used to pinpoint a fishing ground. The “Iwado-line” is a line extending from Fujiyama Mountain (a rather low but certain landmark located south of Yokosuka city, Kanagawa Prefecture, with the older name of Togeyama Mountain) in the direction of Iwadoyama Mountain, the southern part of Miura city in the same prefecture. *Rhabdocalyptus victor* is a sponge, called “Tsurigane-kaimen” in Japanese.

Family Clavulariidae ウミヅタ科  
***Clavularia inflata*** Schenk ツツウミヅタ

UMUTZ-Cnid-A-93; one colony.

Locality: Federated States of Micronesia, Pohnpei Island.

Label data: “*Clavularia inflata* Schenk, Ponape, date unknown, (H. Utinomi det.)”.

Reference: Utinomi, 1956: 223.

UMUTZ-Cnid-A-106; many fragments probably belonging to one colony.

Locality: Naha city, Okinawa Prefecture.

Date: 8 May 1900.

Collector: Mikinosuke Miyajima.

Label data: “産地 那覇 (琉球), 明治 33 年 5 月 8 日 採集 宮嶋”.

***Clavularia mikado*** Utinomi  
ウミヅタ属の一種 (和名未定種)

UMUTZ-Cnid-A-94; one colony.

Locality: Sagami Bay, Misaki, Miura city, Kanagawa Prefecture.

Label data: “Misaki”.

***Pachyclavularia violacea*** (Quoy et Gaimard) ムラサキハナヅタ

UMUTZ-Cnid-A-92; three fragments.

Locality: Bonin Islands, Chichijima Island.

Date: March, 1894.

Collectors: Sadamori Hirota and Ryotaro Sekiguchi.

Label data: “*Pachyclavularia erecta* Roule, Ogasawara Is., III 1894 (H. Utinomi det.)”.

Reference: Utinomi, 1956: 223.

Remarks: Precise information concerning the locality, date, and collector’s name are cited from the reference, even though the month of collection differs from that on the original label. *P. erecta* Roule is a junior synonym of *Pachyclavularia violacea* according to Utinomi (1956).

These specimens had been stored in formalin.  
UMUTZ-Cnid-A-97; three fragments.  
Locality: Okinawa Prefecture, Kyan-misaki Cape, Itoman city.  
Date: 12 April 1901.  
Collectors: Prof. Kakichi Mitsukuri and Iwaji Ikeda.  
Label data: “沖繩糸満キャム岬, 明治 34 年 4 月 12 日, 箕作, 池田 モグリ”.

Family Tubiporidae クダサンゴ科  
*Tubipora musica* Linnaeus クダサンゴ

UMUTZ-Cnid-A-83; one fragment.  
Locality: Okinawa Prefecture, coral reef of Ohmine, Naha city.  
Date: 9 April 1901.  
Collectors: Prof. Kakichi Mitsukuri and Iwaji Ikeda.  
Label data: “産地 沖繩大峰 coral reef, 明治 34 年 4 月 9 日 採集 箕作, 池田”.  
Remarks: The locality name Ohmine (大峰) is probably written in Japanese as 大嶺 now.

UMUTZ-Cnid-A-84; two fragments.  
Locality: Okinawa Prefecture, Kubajima Island in Senkaku Islands.  
Date: 16 May 1900.  
Collector: Mikinosuke Miyajima.  
Label data: “産地 黄尾嶋, 明治 33 年 5 月 16 日採集 宮嶋”.  
Remarks: Koubijima Island (黄尾嶋) is called Kubajima Island (久場島) now.

Family Telestidae  
*Paratelesto rosea* (Kinoshita) ベニコエダ

UMUTZ-Cnid-A-85; five fragments.  
Locality: Kochi Prefecture, coral ground off Kashiwajima Island, 80 fathoms (i.e., ca. 150 m).  
Date: June, 1909.  
Collector: Kumao Kinoshita.  
Label data: “柏島”; “Coral ground off Kashiwajima, 80 fath, June 1909, coll. Kinoshita, det. Kinoshita”; “*Telesto rosea* Kinoshita, Coral ground, off Kashiwajima, 80 faths, Juni 1909 coll. Kinoshita”.  
Reference: Utinomi, 1958: 93-95.

*Telesto tubulosa* Kinoshita クダコエダ

UMUTZ-Cnid-A-86; one colony.  
Locality: North of Okinawa Island, 28°10'N, 126°2'E to 28°20'N, 126°11'E, 64 fathoms (i.e., ca. 120 m).  
Date: June, 1913.  
Collector: Naokatsu Yanagi.  
Label data: “*Telesto tubulosa* Kinoshita, 28°10'N, 126°2'E to 28°20'N, 126°11'E, 64 fath., 1910 [last digit illegible] VI, Yanaghi coll. (H. Utinomi det.)”; “VI 1913 by N. Yanagi, det. F. M. Bayer”.  
Reference: Utinomi, 1958: 91-93.

UMUTZ-Cnid-A-103; three colonies connecting with a stolon.  
Type status: **Holotype**.  
Locality: Kagoshima Prefecture, Kamise, off Yamakawa fishery port, Ibusuki city, 70 fathoms (i.e., ca. 130 m).  
Date: 8 April 1896.  
Collectors: Prof. Kakichi Mitsukuri and Juta Hara.  
Label data: “Telestidae, Type sp. *Telesto tubulosa* Kinoshita, Kagoshima Bay, 70 fathoms, off

Yamakawa, coll. Mitsukuri and Hara, 8. Apr. 1896, with Nobenawa wire”; “産地 山川沖延縄(神瀬), 明治 29 年 4 月 8 日 採集 箕作, 原”.

References: Kinoshita, 1909: 114-117; Utinomi, 1958: 91-93.

Remarks: It seems that Kinoshita (1909) figured the largest colony.

Family Pseudocladochonidae ハナノエダ科

*Pseudocladochonus hicksoni* Versluys ハナノエダ

UMUTZ-Cnid-A-87; 12 fragments.

Locality: North of Okinawa Island, 28°10'N, 126°2'E to 28°20'N, 126°11'E, 64 fathoms (i.e., ca. 120 m).

Date: June, 1913.

Collector: Naokatsu Yanagi.

Label data: “28°10'N, 126°2'E to 28°20'N, 126°11'E, 64 fath, 1913 VI, Yanaghi coll. (H. Utinomi det.), *Pseudocladochonus hicksoni* Versluy”; “*Pseudocladochonus* sp. det. F. M. Bayer”.

Reference: Utinomi, 1964: 243.

UMUTZ-Cnid-A-88; one colony.

Locality: Probably Kagoshima Prefecture, coral ground off Tsukurase Island, west of Nomaike.

Date: August, 1899.

Collector: Mikinosuke Miyajima.

Label data: “Telestidae, *Pseudocladochonus hicksoni* Versluys, Station Coral ground off Chikura, Date, Aug. 1899, coll. Miyajima”.

Reference: Kinoshita, 1909: 121-122.

Remarks: Both Chikura, the locality name on the label, and Chikura Island, the locality name in the reference, seem to be an error for Tsukurase Island, because one of the coral grounds of Kagoshima Prefecture is located off Tsukurase Island according to Kitahara (1904). Furthermore *Siphonogorgia* sp. (UMUTZ-Cnid-A-50) was collected from near Tsukurase Island (津倉瀬島) by the same collector on 13 July 1899. This label is an official label of the Albatross Expedition.

UMUTZ-Cnid-A-89; seven fragments.

Locality: Sagami Bay, off Niijima Island.

Date: 10 August 1893.

Collector: Sadamori Hirota.

Label data: “PSEUDOCLADOCHONUS HICKSONI Versluys, Alcyonacea, Alcyonaria, off Niijima, 10 VIII, 1893”.

References: Kinoshita, 1909: 121-122; Utinomi, 1964: 243.

Remarks: The collector's name was cited by Kinoshita (1909).

UMUTZ-Cnid-A-90; over 20 fragments.

Locality: Kagoshima Prefecture, coral ground off Uji Islands, 80 to 90 fathoms (i.e., 146 to 165 m).

Date: June, 1908.

Collector: Kumao Kinoshita.

Label data: “宇治島, 珊瑚場, 80 尋, 明治 41 年 6 月, 木下”; “Telestidae, *Pseudocladochonus hicksoni* Versluys, Station, coral ground off Ujishima, depth, 80-90 fathoms, Date, June 1908, coll. Kinoshita”.

References: Kinoshita, 1909: 121-122; Utinomi, 1964: 243.

Remarks: The second label is an original label of the Albatross Expedition.

***Pseudocladochonus* sp.** ハナノエダ属の一種

UMUTZ-Cnid-A-91; eight colonies.

Locality: Sagami Bay, near Dôketsuba, 170-180 fathoms (i.e., 300-330 m).

Date: 12 August, 1895.

Collector: Kumakichi Aoki.

Label data: “*Pseudocladochonus* sp. 170-180 hiro, near Dôketsuba, Kuma, 12-8-95”.

Remarks: “Dôketsuba” is the name of a fishing ground located west of Hôjô, Tateyama city, Chiba Prefecture. These colonies are covered with a thin sponge.

Suborder Alcyoniina ウミトサカ亜目

Family Xeniidae ウミアザミ科

***Xenia* cf. *elongata* Dana** ミナミウミアザミ?

UMUTZ-Cnid-A-79; several colonies connecting by a common base.

Locality: Okinawa Prefecture, Kyan-misaki Cape, Itoman city.

Date: 12 April 1901.

Collector: Prof. Kakichi Mitsukuri and Iwaji Ikeda.

Label data: “産地 沖縄糸満キャム岬, モグリ, 明治34年4月12日 採集 箕作, 池田”.

***Xenia* cf. *mayi* Roxas** コフキウミアザミ?

UMUTZ-Cnid-A-76; one colony.

Locality: Philippines, Marongan, Jolo.

Date: June, 1909.

Label data: “Marongan, Jolo, June 1909, P. I.”

Remarks: The country name was cited on the basis of the label of another specimen (*Nephthea* cf. *elongata* Kükenthal UMUTZ-Cnid-A-4; q.v.). This specimen had been stored in formalin.

***Xenia* sp. 1** ウミアザミ属の一種

UMUTZ-Cnid-A-78; several colonies.

Locality: Philippines, Marongan, Jolo.

Date: June, 1909.

Label data: “Marongan, Jolo, June 1909, P. I.”

Remarks: The country name was inferred on the same basis as that of the above specimen.

***Xenia* sp. 2** ウミアザミ属の一種

UMUTZ-Cnid-A-99; three colonies.

Locality: Okinawa Prefecture, Naha city.

Date: 18 April 1900.

Collector: Mikinosuke Miyajima.

Label data: “産地 沖縄那覇, 明治33年4月18日 採集 宮嶋”.

Remarks: These specimens have almost completely disintegrated.

**Gen. sp.** ウミアザミ科の一種

UMUTZ-Cnid-A-80; one colony.

Locality: Sagami Bay, Okinose Bank, 300 fathoms (i.e., ca. 550 m).

Date: April, 1905.

Collector: Kumakichi Aoki.

Label data: “産地 オキノセ 300 尋, 明治38年4月, 採集 熊”.

Remarks: “Okinose Bank” is located about 20 km south of the Miura Peninsula, Kanagawa

Prefecture. This specimen seems to belong to the family Xenidiidae on account of its being covered with rather large, cylindrical, non-retractile polyps, and there are no sclerites. The specimen has more or less disintegrated.

Family Alcyoniidae ウミトサカ科

*Alcyonium cf. palmatum* Pallas ウミトサカ属の一種

UMUTZ-Cnid-A-47; one colony.

Label data: None.

Remarks: Probably Mediterranean specimen.

*Anthomastus sp. 1* ウミテングタケ属の一種

UMUTZ-Cnid-A-74; one colony.

Locality: Sagami Bay, Okinose Bank, about 350 fathoms (i.e., ca. 650 m).

Date: March, 1894.

Collector: Kumakichi Aoki.

Label data: "ANTHOMASTUS sp. Alcyonacea, Alcyonaria, Okinose, ca. 350 hiro, Mar 1894, 熊吉".

Remarks: This specimen resembles *A. fisheri* Bayer in the appearance. Concerning Okinose Bank, see Remarks for UMUTZ-Cnid-A-80.

*Anthomastus sp. 2* ウミテングタケ属の一種

UMUTZ-Cnid-A-75; two colonies.

Locality: Sagami Bay, 300-350 fathoms (i.e., 550-640 m).

Date: 26 January 1896.

Collector: Golden Hind Expedition.

Label data: "Golden Hind Expedition, Sta. 44, 300-350 fms., Jan. 26, 1896"; "*Anthomastus* sp. det. F. M. B., Smithsonian Institution".

Remarks: The second label is an original label of the Smithsonian Institution. It seems that these specimens were examined by F. M. Bayer. The "Golden Hind Expedition" was conducted by Alan Owston's aboard his yacht "Golden Hind".

UMUTZ-Cnid-A-100; one colony.

Locality: Sagami Bay, Okinose Bank (see Remarks for UMUTZ-Cnid-A-80).

Date: November, 1895.

Collector: Kumakichi Aoki.

Label data: "Okinose, Uchibata, Bottom, Nov. 95, (Kuma)".

*Cladiella sphaerophora* (Klunzinger) タマノウトサカ

UMUTZ-Cnid-A-68; two colonies.

Locality: Bonin Islands, Anijima Island.

Date: early April, 1894.

Collectors: Sadamori Hirota and Ryotaro Sekiguchi.

Label data: "小笠原兄島, 明治 27 年 4 月上旬, 弘田, 関口"; "*Microspicularia sphaerophora*, Ogasawara Is., IV 1894, H. Utinomi det."; "Lobularia sp., #2, F. M. B.".

Reference: Utinomi, 1956: 226-227.

Remarks: It seems that these specimens were first examined by F. M. Bayer of the Smithsonian Institution and then by Huzio Utinomi of Kyoto University.

*Cladiella* sp. ノウトサカ属の一種

UMUTZ-Cnid-A-69; one colony.

Locality: Bonin Islands, Chichijima Island.

Date: April, 1894.

Collectors: Sadamori Hirota and Ryotaro Sekiguchi.

Label data: “小笠原父島, 明治 27 年 4 月, 弘田, 関口”; “*Lobularia* sp., #3, F. M. B.”.

Remarks: It seems that this specimen was also examined by F. M. Bayer of the Smithsonian Institution. This specimen had been stored in formalin.

*Eleutherobia dofleini* Kükenthal エダウミイチゴ

UMUTZ-Cnid-A-49; eight colonies.

Locality: Sagami Bay, Nakano-yodomi, 100 fathoms (i.e., ca. 180 m).

Date: 14 August 1900.

Label data: “*Nidalia*, Alcyoniidae”; “産地 中ノヨドミ, ヤハギ掛, 100 尋, 明治 33 年 8 月 14 日”.

Remarks: “Nakano-yodomi” is located about 15 km west of the Miura Peninsula, Kanagawa Prefecture. The meaning of “ヤハギ掛” is “Yahagi-line” which is a fishermen’s expression used to pinpoint a fishing ground. The “Yahagi-line” is a line extending from Fujiyama Mountain (see Remarks for UMUTZ-Cnid-A-96) in the direction of Yahagi in the western part of Miura city, Kanagawa Prefecture.

*Eleutherobia* cf. *dofleini* Kükenthal エダウミイチゴ?

UMUTZ-Cnid-A-45; one colony.

Locality: Sagami Bay, Kuroba, 178 fathoms (i.e., ca. 330 m).

Date: 12 August 1895.

Collector: Prof. Isao Ijima.

Label data: “Alcyonacea”; “黒場 178 尋, 12/8/95, 飯島”.

Remarks: “Kuroba (黒場)” is probably the name of a fishing ground, but I could not confirm the locality. If “Kuroba” is another name for “Kurose Bank”, the later is located about 150 km south of Sagami Bay (about 30 km north of Hachijo-jima Island).

UMUTZ-Cnid-A-70; one colony.

Locality: Sagami Bay, Jogashima, Miura city, Kanagawa Prefecture.

Date: 16 (or 20) August 1897.

Label data: “Jogashima, near Misaki collected by diver, 明治 30 年 8 月 16,20 日”.

UMUTZ-Cnid-A-73; one colony.

Locality: Sagami Bay, off Niijima Island.

Date: 10 August 1893.

Collector: Sadamori Hirota, Ohnoura-maru.

Label data: “26 年 8 月 10 日, 新島沖, 大の浦丸, 弘田, sp. No. 136”.

UMUTZ-Cnid-A-105; one colony.

Locality: North of Okinawa Island, 28°10’N, 126°2’E to 28°20’N, 126°11’E, 64 fathoms (i.e., ca. 120 m).

Date: 22 June 1913.

Collector: Naokatsu Yanagi.

Label data: “28°10’N, 126°2’E to 28°20’N, 126°11’E, 64fath. 1913 年 6 月 22 日, Trawl, N. Yanaghi”.

*Eleutherobia rigida* Pütter ボウウミイチゴ

UMUTZ-Cnid-A-72; one colony.

Locality: Sagami Bay, Yokohama Port.

Date: June, 1923.

Label data: “横浜港, 4, 大正 12 年 6 月”.

*Eleutherobia aff. rigida* Pütter ボウウミイチゴ類似種

UMUTZ-Cnid-A-98; one colony.

Locality: Sagami Bay, Gokeba, 150-200 fathoms (i.e., 280-370 m).

Date: 16 June 1902.

Collector: Kumakichi Aoki.

Label data: “産地 鬼ガセ ゴケバ, 150-200 ヒロ, 明治 35 年 6 月 16 日 採集 熊”.

Remarks: “鬼ガセ”, transliterated as “Onigase” is located about 3 km southwest of Mera, Tateyama city, Kanagawa Prefecture, and its depth is shallower than 60 m. “ゴケバ”, transliterated as “Gokeba” is located about 15 km southwest of Mera, and its depth is greater than 100 m.

*Eleutherobia rubra* Brundin ウミイチゴ

UMUTZ-Cnid-A-44; one colony.

Locality: Sagami Bay, Misaki, Miura city, Kanagawa Prefecture.

Collector: Prof. Isao Ijima.

Label data: “*Nidalia grandiflora* Kükenthal, Alcyonacea, Alcyonaria, Misaki, Prof. 飯島”.

UMUTZ-Cnid-A-71; two colonies.

Locality: Sagami Bay, Misaki, Miura city, Kanagawa Prefecture.

Collector: Prof. Isao Ijima.

Label data: “産地 ミサキ, 採集 飯島”.

*Eleutherobia cf. rubra* Brundin ウミイチゴ?

UMUTZ-Cnid-A-46; one colony.

Locality: Probably Sagami Bay, 170 fathoms (i.e., ca. 310 m).

Date: 2 April 1895.

Collector: Prof. Isao Ijima.

Label data: “産地 St. 5, 170 f., 95 年 4 月 2 日, 飯島”.

Remarks: Prof. Ijima collected another species, *Carotalcyon sagamianum* (UMUTZ-Cnid-A-81), from “station 5” in Sagami Bay on the same day.

UMUTZ-Cnid-A-101; one colony.

Locality: North of Okinawa Island, 28°10'N, 126°2'E to 28°20'N, 126°11'E, 64 fathoms (i.e., ca. 120 m).

Date: 22 June 1913.

Collector: Naokatsu Yanagi.

Label data: “28°10'N, 126°2'E to 28°20'N, 126°11'E, 64fath. 1913 年 6 月 22 日, Trawl, N. Yanaghi”.

UMUTZ-Cnid-A-113; one colony.

Date: 6 August 1894.

Label data: “Station 13, 6/VIII 94”.

Remarks: This specimen had been stored in the same jar as UMUTZ-Cnid-A-36.

*Klyxum* sp. (和名未定属)

UMUTZ-Cnid-A-118; one colony.

Locality: Okinawa Prefecture, Kubajima Island, Senkaku Islands.

Date: 15 May 1900.

Collector: Mikinosuke Miyajima.

Label data: “産地 黄尾島, 明治 33 年 5 月 15 日 採集 宮島”.

Remarks: Koubijima Island (黄尾嶋) is now called Kubajima Island (久場島). This specimen had been stored in the same jar as UMUTZ-Cnid-A-55.

***Lobophytum crebriplacatum*** (Marenzeller)

ウネタケ属の一種 (和名未定種)

UMUTZ-Cnid-A-61; three colonies.

Locality: Bonin Islands, Tsurihama, Chichijima Island.

Date: March, 1894.

Collectors: Sadamori Hirota and Ryotaro Sekiguchi.

Label data: “*Lobophytum crebriplacatum* (Marenzeller), Ogasawara Is., III 1894, (H. Utinomi det.)”; “小笠原父島ツリハマ, 明治27年3月, 弘田, 関口”.

Reference: Utinomi, 1956: 231.

***Lobophytum* sp. 1** ウネタケ属の一種

UMUTZ-Cnid-A-58; two colonies.

Locality: Okinawa Prefecture, Inanze Bank off Naha city.

Date: 18 April 1901.

Collectors: Prof. Kakichi Mitsukuri and Iwaji Iwata.

Label data: “沖繩ナハ沖イナンゼ, 明治34年4月18日, 箕作, 池田”; “#4 digitata”.

Remarks: It seems that these specimens were examined by F. M. Bayer, because the second label is an official label of the U. S. National Museum.

***Lobophytum* sp. 2** ウネタケ属の一種

UMUTZ-Cnid-A-59; one colony.

Locality: Bonin Islands, Chichijima Island.

Date: February, 1894.

Collectors: Sadamori Hirota and Ryotaro Sekiguchi.

Label data: “LOBOPHYTUM sp., Alcyonacea, Alcyonaria, 小笠原父島, II' 94, 弘田, 関口”.

***Lobophytum* sp. 3** ウネタケ属の一種

UMUTZ-Cnid-A-63; one colony.

Locality: Kagoshima Prefecture, probably Makurazaki city, 5 fathoms (i.e., ca. 10 m).

Date: 7 August 1899.

Collector: Mikinosuke Miyajima.

Label data: “産地 鹿児島県下枕崎 5 尋, 明治32年8月7日 採集 宮嶋”.

Remarks: I could not confirm the precise location of “Shimomakurazaki (下枕崎)”.

UMUTZ-Cnid-A-64; three pieces of one colony.

Locality: Kumamoto Prefecture, Ushibuka, Amakusa city.

Date: June, 1908.

Collector: Kumao Kinoshita.

Label data: “Ushibuka, Amakusa, Juni 1908, Kinoshita leg., durch Taucher”.

***Sarcophyton* cf. *ehrenbergi*** Marenzeller コブウミキノコ?

UMUTZ-Cnid-A-62; two colonies.

Locality: Kumamoto Prefecture, Ushibuka, Amakusa city.

Date: June, 1908.

Collector: Kumao Kinoshita.

Label data: “Ushibuka, Amakusa, Juni 1908, Kinoshita leg. Durch Taucher”.



***Sarcophyton cf. glaucum*** (Quoy et Gaimard) オオウミキノコ?

UMUTZ-Cnid-A-67; five colonies.

Locality: Kumamoto Prefecture, Ushibuka, Amakusa city.

Date: June, 1908.

Collector: Kumao Kinoshita.

Label data: "Ushibuka, Amakusa, Juni 1908, Kinoshita leg. Durch Taucher".

Remarks: These specimens had been stored in formalin.

UMUTZ-Cnid-A-121; one colony.

Locality: Kumamoto Prefecture, Ushibuka, Amakusa city.

Date: June, 1908.

Collector: Kumao Kinoshita.

Label data: "Ushibuka, Amakusa, Juni 1908, Kinoshita leg. Durch Taucher".

Remarks: This specimen had been stored in the same jar as A-62, in formalin.

UMUTZ-Cnid-A-122; five colonies.

Locality: Kagoshima Prefecture, probably Makurazaki city, 5 fathoms (i.e., ca. 10 m).

Date: 7 August 1899.

Collector: Mikinosuke Miyajima.

Label data: "産地 鹿児島県下枕崎, 5 尋, 明治 32 年 8 月 7 日 採集 宮島".

Remarks: I could not confirm the precise location of "Shimomakurazaki (下枕崎)". This specimen had been stored in the same jar as UMUTZ-Cnid-A-63.

***Sarcophyton cf. trocheliophorum*** Marenzeller

ヒダバリウミキノコ?

UMUTZ-Cnid-A-123; two colonies.

Locality: Kumamoto Prefecture, Ushibuka, Amakusa city.

Date: June, 1908.

Collector: Kumao Kinoshita.

Label data: "Ushibuka, Amakusa, Juni 1908, Kinoshita leg. Durch Taucher".

***Sarcophyton sp. 1*** ウミキノコ属の一種

UMUTZ-Cnid-A-65; two pieces of one colony.

Locality: Kagoshima Prefecture, probably Makurazaki city.

Date: 7 August 1899.

Collector: Mikinosuke Miyajima.

Label data: "産地 鹿児島県下枕崎モグリ, 明治 32 年 8 月 7 日採集 宮嶋"; "spicules damaged by Formal".

Remarks: I could not confirm the precise location of "Shimomakurazaki (下枕崎)". It seems that these specimens were examined by F. M. Bayer, because the second label is an official label of the U. S. National Museum.

UMUTZ-Cnid-A-66; two colonies.

Locality: Okinawa Prefecture, Kyan-misaki Cape, Itoman city.

Date: 12 April 1901.

Collectors: Prof. Kakichi Mitsukuri and Iwaji Iwata.

Label data: "沖縄糸満キャム岬, モグリ, 明治 34 年 4 月 12 日, 箕作, 池田"; "#1-FMB".

Remarks: The second label is an official label of U. S. National Museum. FMB are the initials of F. M. Bayer.

***Sarcophyton sp. 2*** ウミキノコ属の一種

UMUTZ-Cnid-A-119; one colony.

Locality: Okinawa Prefecture, Kyan-misaki Cape, Itoman city.

Date: 12 April 1901.

Collectors: Prof. Kakichi Mitsukuri and Iwaji Ikeda.

Label data: “産地 沖繩糸満, 明治 34 年 4 月 12 日, 箕作, 池田”.

Remarks: This specimen had been stored in the same jar as UMUTZ-Cnid-A-56, in formalin.

***Sarcophyton* sp. 3** ウミキノコ属の一種

UMUTZ-Cnid-A-120; one colony.

Locality: Okinawa Prefecture, Inanze Bank, off Naha city.

Date: 18 April 1901.

Collectors: Prof. Kakichi Mitsukuri and Iwaji Ikeda.

Label data: “産地 沖繩ナハ沖イナンゼ, 明治 34 年 4 月 12 日 採集 箕作, 池田”; “#5, agariciform”.

Remarks: It seems that this specimen was examined by F. M. Bayer, because the second label is an official label of the Smithsonian Institution.

***Sinularia* sp. 1** カタトサカ属の一種

UMUTZ-Cnid-A-54; one colony.

Locality: Kumamoto Prefecture, Ushibuka, Amakusa city.

Date: June, 1908.

Collector: Kumao Kinoshita.

Label data: “Ushibuka, Amakusa, Juni 1908, Kinoshita leg., durch Taucher”.

***Sinularia* sp. 2** カタトサカ属の一種

UMUTZ-Cnid-A-55; two colonies.

Locality: Okinawa Prefecture, Kubajima Island, Senkaku Islands.

Date: 15 May 1900.

Collector: Mikinosuke Miyajima.

Label data: “産地 黄尾嶋, 明治 33 年 5 月 15 日採集 宮嶋”.

Remarks: Koubijima Island (黄尾嶋) is now called Kubajima Island (久場島).

***Sinularia* sp. 3** カタトサカ属の一種

UMUTZ-Cnid-A-56; one colony.

Locality: Okinawa Prefecture, Kyan-misaki Cape, Itoman city.

Date: 12 April 1901.

Collector: Prof. Kakichi Mitsukuri and Iwaji Iwata.

Label data: “産地 沖繩糸満 キヤム岬, 明治 34 年 4 月 12 日採集 箕作, 池田”.

Remarks: This specimen had been stored in formalin.

***Sinularia* sp. 4** カタトサカ属の一種

UMUTZ-Cnid-A-57; three colonies.

Locality: Kagoshima Prefecture, probably Makurazaki city, 5 fathoms (i.e., ca. 10 m).

Date: 7 August 1899.

Collector: Probably Mikinosuke Miyajima.

Label data: “産地 鹿児島県下枕崎, 5 尋, 明治 32 年 8 月 7 日”.

Remarks: I could not confirm the precise location of “Shimomakurazaki (下枕崎)”. The collector's name was cited after the labels of other specimens such as *Sarcophyton glaucum* (UMUTZ-Cnid-A-122).

Family Nephtheidae チヂミトサカ科

*Chromonephthea hirotai* (Utinomi) (和名未定属の一種)

UMUTZ-Cnid-A-104; two large and several small fragments.

Type status: **Holotype**.

Locality: Sagami Bay, 1.5 miles (i.e., ca. 2.5 km) off Niijima Island.

Date: 10 August 1893.

Collector: Sadamori Hirota.

Label data: “*Eunephtya hirotai* Utinomi, Loc. 1.5 miles off Niisima, Date Aug. 10 1893, Coll. Sadamori Hirota, ident. H. Utinomi, TYPUS.”; “新島沖 20 町, 明治二十六年, 大ノ浦丸”.

References: Utinomi, 1951: 31-33; 1960: 22; Ofwegen, 2005: 111-114..

Remarks: The first label is an original label of the Seto Marine Biological Laboratory, Kyoto University. These fragments are all considerably disintegrated.

*Chromonephthea cf. imaharai* Ofwegen (和名未定属の一種)

UMUTZ-Cnid-A-27; one colony.

Locality: Sagami Bay, Okinose Bank (see Remarks for UMUTZ-Cnid-A-80), 100 fathoms (i.e., 183 m).

Date: 13 August 1908.

Collectors: Prof. Kakichi Mitsukuri & Kumakichi Aoki.

Label data: “産地 沖の瀬 100 ヒロ, 明治 41 年月 13 日, 採集 箕作, 熊”.

Remarks: The sclerites forming the anthocodial formula of this specimen seems to be somewhat more robust than the original description of this species indicates.

*Dendronephthya (D.) cf. gigantea* (Verrill) オオトゲトサカ?

UMUTZ-Cnid-A-34; one colony.

Locality: Kagoshima Prefecture, Teuchi, Shimokoshiki Island.

Date: 22 July 1899.

Collector: Mikinosuke Miyajima

Label data: “産地 下コシキ手打, 明治 32 年 7 月 22 日 採集 ミヤジマ”.

Remarks: The anthocodial formula of this specimen was not determined in this study. This specimen had been stored in formalin.

UMUTZ-Cnid-A-35; one colony.

Locality: Kagoshima Prefecture, Teuchi, Shimokoshiki Island.

Date: 22 July 1899.

Collector: Mikinosuke Miyajima

Label data: “産地 下コシキ手打, 明治 32 年 7 月 22 日 採集 宮嶋”.

Remarks: This specimen had been stored in formalin. Its anthocodial formula was not determined in this study.

UMUTZ-Cnid-A-42; two colonies.

Locality: Kumamoto Prefecture, Ushibuka, Amakusa city.

Date: June, 1908.

Collector: Kumao Kinoshita.

Label data: “Ushibuka, Amakusa, 1908 Juni, Kinoshita leg., durch Taucher”.

Remarks: It was difficult to examine this specimen critically to determine the anthocodial formula, because almost of all the polyps were somewhat disintegrated and covered with thick slime.

UMUTZ-Cnid-A-116; two colonies.

Locality: Kumamoto Prefecture, Ushibuka, Amakusa city.

Date: June, 1908.

Collector: Kumao Kinoshita.

Label data: "Ushibuka, Amakusa, 1908 Juni, Kinoshita, durch Taucher".

Remarks: These specimens had been stored in the same jar as UMUTZ-Cnid-A-42.

UMUTZ-Cnid-A-117; one colony.

Locality: Kumamoto Prefecture, Ushibuka, Amakusa city.

Date: June, 1908.

Collector: Kumao Kinoshita.

Label data: "Ushibuka, Amakusa, 1908 June, Kinoshita leg. durch Taucher".

Remarks: This specimen had been stored in the same jar as UMUTZ-Cnid-A-42.

***Dendronephthya (D.) kollikeri*** Kükenthal ケリカートゲトサカ

UMUTZ-Cnid-A-37; one colony.

Locality: Republic of Palau.

Label data: "*Dendronephthya koellikeri* Kükenthal, Palau, date unknown (H. Utinomi det.)".

Reference: Utinomi, 1956: 233-235.

***Dendronephthya (D.) cf. nipponica*** Utinomi アカトゲトサカ?

UMUTZ-Cnid-A-111; two fragments.

Locality: Kagoshima Prefecture, Makurazaki city, 5 fathoms (i.e., ca. 10 m).

Date: 7 August 1900.

Collector: Mikinosuke Miyajima.

Label data: "サツマ 枕崎 5 尋, 明治 33 年 8 月 7 日 採集 宮嶋".

Remarks: The growth form and anthocodial formula of these fragments closely resemble those of *D. (D.) nipponica* except for the color of the polyps, which here have yellowish orange to yellow sclerites, not blood-red ones as stated in the original description.

***Dendronephthya (D.) cf. tuberculata*** Utinomi

トゲトサカ属の一種 (和名未定種)

UMUTZ-Cnid-A-29; one fragment.

Locality: Sagami Bay, Misaki, Miura city, Kanagawa Prefecture.

Label data: "*Dendronephthya (Spongodes)*, Alcyonacea, 三崎".

Remarks: The growth form of this specimen is more or less umbellate. The color is somewhat different from that stated in the original description. The anthocodial armature consists of light red to pink sclerites, and the sclerites of the supporting bundle are very pale pink, whereas the former were reddish orange and the latter orange-yellow in the specimen described by Utinomi (1952).

***Dendronephthya (Morchellana) acaulis*** Kükenthal

コデマリトゲトサカ

UMUTZ-Cnid-A-33; two colonies.

Locality: Sagami Bay, Dôketsuba (see Remarks for UMUTZ-Cnid-A-91), 100 fathoms (i.e., ca. 180 m).

Date: 9 August 1897.

Collector: Kumakichi Aoki.

Label data: "産地 同穴場 (100 尋), 明治 30 年 8 月 9 日採集 熊吉".

***Dendronephthya (M.) densa*** Kükenthal

トゲトサカ属の一種 (和名未定種)

UMUTZ-Cnid-A-32; one colony.

Locality: Mie Prefecture, shallow waters off Shima city near Ise city.

Date: January, 1892.

Label data: “115 *Spongodes*, Prov. Shima”, “25 年 1 月上旬, 伊勢ノ南志摩ノ浅海域動物  
○○○ [illegible]”.

Remarks: This specimen is somewhat disintegrated.

***Dendronephthya (M.) cf. filigrana* Kükenthal**

トゲトサカ属の一種 (和名未定種)

UMUTZ-Cnid-A-8; one colony.

Locality: Probably Sagami Bay, 92 fathoms (i.e., 168 m).

Date: 2 June 1905.

Collector: Kumakichi Aoki.

Label data: “Bashford Dean Collection, Loc. Station 1, 92 hiro, Date. 2 June 1905, Collector:  
Kuma”.

Remarks: This species apparently belongs to the subgenus *Morchellana* based on its growth  
form; however, Tixier-Durivault & Prevorsek (1960) considered it to be a member of the  
subgenus *Roxasia*.

UMUTZ-Cnid-A-13; one colony.

Locality: Sagami Bay, Dôketsuba (see Remarks for UMUTZ-Cnid-A-91), 180 fathoms (i.e., ca.  
330 m).

Date: 12 August 1895.

Collector: Prof. Isao Ijima.

Label data: “同穴場, 180 尋, 12/8/1895, 飯島”.

Remarks: It was difficult to examine this specimen critically to determine the anthocodial  
formula, because it has suffered considerable disintegration.

***Dendronephthya (M.) pectinata* (Holm)**

コンボウトゲトサカ

UMUTZ-Cnid-A-12; four colonies.

Locality: Sagami Bay, Dôketsuba (see Remarks for UMUTZ-Cnid-A-91), 130 fathoms (i.e., ca.  
240 m).

Date: 9 August 1897.

Collector: Kumakichi Aoki.

Label data: “産地 同穴場, 130 尋, 明治 30 年 8 月 9 日 採集 熊吉”.

UMUTZ-Cnid-A-14; two colonies.

Locality: Probably Sagami Bay, 130 fathoms (i.e., ca. 240 m).

Collector: Kumakichi Aoki.

Label data: “産地 ○○○ [illegible] 130 ヒロ ○○○○ [illegible] 熊吉”.

Remarks: These specimens had been stored in formalin.

UMUTZ-Cnid-A-36; one colony.

Date: 6 August 1894.

Label data: “Station 13, 6/VIII 94”.

Remarks: The divaricate-like growth form of this specimen is likely due to its being young.  
This specimen had been stored in the same jar as UMUTZ-Cnid-A-112 and A-113.

***Dendronephthya (M.) sp. 1* トゲトサカ属の一種**

UMUTZ-Cnid-A-11; two colonies.

Locality: Sagami Bay, about 2 km off Niijima.

Date: 10 August 1903.

Collector: Fishing trawler Ohnoura-maru.

Label data: “新嶋沖 20 町, ケタアミ, 明治 36 年 8 月 10 日, 大の浦丸”.

Remarks: Both the sharpness of the polyps and the arrangement of the sclerites of the anthocodial armature closely resemble those of *D. (M.) longicaulis* (Kukenthal); however, the branching form of the colony is quite different.

UMUTZ-Cnid-A-107; one colony.

Locality: Sagami Bay, probably south of the Miura Peninsula, Kanagawa Prefecture, 80 fathoms (i.e., ca. 150 m).

Date: 21 July 1913.

Collectors: Hikoshichiro Matsumoto and H. Chiba.

Label data: "Bishamon-gake, Kimuraippai, 80 hiro, 1913 VII 21, Coll. H. Matsumoto, H. Chiba".

Remarks: Probably a young colony. The meaning of "Bishamon-gake" is probably Bishamon-line, which is probably a line extending from Fujiyama Mountain (see Remarks for UMUTZ-Cnid-A-96) in the direction of Bishamon Bay located in the southern part of Miura city, Kanagawa Prefecture. I could not confirm the location of "Kimuraippai".

UMUTZ-Cnid-A-115; one fragment.

Locality: Sagami Bay, about 2 km off Niijima Island.

Date: 10 August 1893.

Collector: Fishing trawler Ohnoura-maru.

Label data: "Alcyoniidae sp"; "新島沖 20 町, 年 8 月 10 日 大の浦丸"; "新島西沖 20 町, 8 月 10 日 26 年 ケタアミ, No. 145".

Remarks: There are a few very large spindles, more than 1.5 mm long, with rounded points. This specimen had been stored in the same jar as UMUTZ-Cnid-A-41.

#### *Dendronephthya (M.) sp. 2* トゲトサカ属の一種

UMUTZ-Cnid-A-40; two colonies.

Locality: Sagami Bay, Uruga Channel, Jirouzaemonba, 120 fathoms (i.e., ca. 220 m).

Date: 17 August 1900.

Collectors: Juta Hara and Moriwaki".

Label data: "産地 浦賀水道 次郎左衛門場 120 尋, エナ掛け, 青山○○ [illegible], 明治 33 年 8 月 17 日採集 原, 森脇".

Remarks: The meaning of "エナ掛け" is "Ena-line". This is a line from Fujiyama Mountain (see Remarks for UMUTZ-Cnid-A-96) in the direction of Ena in the southeastern part of the Miura Peninsula. It seems that the collecting point lies south of the Miura Peninsula, although I could not confirm the precise location of "Jirozaemonba 次郎左衛門場". The anthocodial formula of these specimens was not determined in this study.

#### *Dendronephthya (M.) sp. 3* トゲトサカ属の一種

UMUTZ-Cnid-A-41; five fragments.

Locality: Sagami Bay, about 2 km off Niijima Island.

Date: 10 August 1893.

Collector: Fishing trawler Ohnoura-maru.

Label data: "Alcyoniidae sp"; "新島沖 20 町, 8 月 10 日 26 年 大の浦丸"; "新島西沖 20 町, 8 月 10 日, ケタアミ, No. 145".

Remarks: The anthocodial formula of these specimens was not determined in this study.

#### *Dendronephthya (Roxasia) cf. candida* (Pütter)

トゲトサカ属の一種 (和名未定種)

UMUTZ-Cnid-A-30; two colonies.

Locality: North of Okinawa Island, 28°10'N, 126°2'E to 28°20'N, 126°11'E, 64 fathoms (i.e., ca. 120 m).

Date: 22 June 1913.

Collector: Naokatsu Yanagi.

Label data: "28°10'N, 126°2'E to 28°20'N, 126°11'E, 64 fath., June 22 1913, Trawl, N. Yanaghi".

Remarks: These specimens are relatively sparsely branched, and the sclerites entering into the anthocodial formula are more slender than those of previously described specimens.

UMUTZ-Cnid-A-124; one colony.

Locality: North of Okinawa Island, 28°10'N, 126°2'E to 28°20'N, 126°11'E, 64 fathoms (i.e., ca. 120 m).

Date: 22 June 1913.

Collector: Naokatsu Yanagi.

Label data: "28°10'N, 126°2'E to 28°20'N, 126°11'E, 64 fath., June 22 1913, Trawl, N. Yanaghi".

Remarks: This specimen had been stored in the same jar as UMUTZ-Cnid-A-30.

UMUTZ-Cnid-A-125; one colony.

Locality: North of Okinawa Island, 28°10'N, 126°2'E to 28°20'N, 126°11'E, 64 fathoms (i.e., ca. 120 m).

Date: 22 June 1913.

Collector: Naokatsu Yanagi.

Label data: "28°10'N, 126°2'E to 28°20'N, 126°11'E, 64 fath., June 22 1913, Trawl, N. Yanaghi".

Remarks: This specimen had been stored in the same jar as UMUTZ-Cnid-A-30.

*Dendronephthya (R.) cf. divaricata* (Gray)

トゲトサカ属の一種 (和名未定種)

UMUTZ-Cnid-A-28; one fragment.

Locality: Sagami Bay, Dôketsuba (see Remrks for UMUTZ-Cnid-A-91), 100 fathoms (i.e., ca. 180 m).

Date: 6 January 1897.

Collector: Kumakichi Aoki.

Label data: "同穴場 100 尋, 30, 1, 6, 熊".

Remarks: This specimen is somewhat disintegrated.

UMUTZ-Cnid-A-38; two colonies.

Locality: Sagami Bay, about 2 km off Nijima Island.

Date: 10 August 1903

Collector: Fishing trawler Ohnoura-maru.

Label data: "No.146, 新島沖 20 町, 8 月 10 日 36 年, 大ノ浦丸"; "*Alcyonacea* sp.".

Remarks: The anthocodial formula of these specimens was not determined in this study.

*Dendronephthya (R.) cf. gracillima* Kükenthal

トゲトサカ属の一種 (和名未定種)

UMUTZ-Cnid-A-110; one colony.

Locality: Sagami Bay, Dôketsuba (see Remarks for UMUTZ-Cnid-A-91), 60 fathoms (i.e., ca. 110 m).

Date: 10 January 1908.

Collector: Kumao Kinoshita.

Label data: "産地 同穴場 60 尋, 明治 41 年 1 月 10 日 採集 木下".

***Dendronephthya (R.) sp.*** トゲトサカ属の一種

UMUTZ-Cnid-A-9; one fragment.

Locality: Yamaguchi Prefecture, three miles (i.e., ca. 5 km) off Shimonoseki city, 300 fathoms (i.e., ca. 550 m).

Date: 14 July 1894.

Collector: Prof. Isao Ijima.

Label data: “3 ri of Shimonoseki, 300 Hiro, 14/7 94, Ijima, 70%”.

Remarks: This specimen is a very young colony, and almost completely disintegrated. The word “ri” on the label seems to mean “kairi: 海里”, i.e. a nautical mile.

***Gersemia cf. rubiformis*** (Ehrenberg) アカキタトサカ?

UMUTZ-Cnid-A-60; one colony.

Locality: Eastport, Maine, U.S.A.

Label data: “*Alcyonium carneum* Sp., Eastport Me. ○○○ [illegible]”.

Remarks: The latter half of the label was extremely hard to read. *Alcyonium carneum* Verrill is a junior synonym of *Gersemia rubiformis*, according to Utinomi (1961). This specimen had been stored in formalin, and also had once dried out.

***Lemnalina cf. cervicornis*** (May) ロッカクウミゼリ?

UMUTZ-Cnid-A-1; two colonies

Locality: Okinawa Prefecture, Inanze Bank, off Naha city.

Date: 18 April 1901.

Collectors: Prof. Kakichi Mitsukuri & Iwaji Ikeda.

Label data: “ナハ沖イナンゼ, 34年4月18日, 箕作, 池田”.

Remarks: With pedicellate polyps.

***Nephthea cf. chabrolii*** Audouin チヂミトサカ?

UMUTZ-Cnid-A-6; one colony.

Locality: Okinawa Prefecture.

Label data: “Riukiu, Alcyonacea Alcyonaria”.

***Nephthea cf. elongata*** Kükenthal  
チヂミトサカ属の一種 (和名未定種)

UMUTZ-Cnid-A-4; one colony.

Locality: Philippines, Marongan, Jolo.

Collector: Probably Prof. Felty S. Light.

Label data: Magongan, Jolo, Philippine Islands. (Prob. Coll. S. F. Light), F.M.B., 1953”.

Remarks: This specimen was probably presented to this museum by F. M. Bayer when he came to Japan in 1953. F. S. Light was a Professor of the University of the Philippines who published several articles on the systematic of octocorals.

***Nephthea cf. erecta*** Kükenthal タチチヂミトサカ?

UMUTZ-Cnid-A-2; three colonies.

Locality: Kagoshima Prefecture, off Cape Makurazaki, 5 fathoms (i.e., ca. 10 m)

Date: 7 August 1899

Collector: Mikinosuke Miyajima.

Label data: “産地 サツマ枕崎五尋, 明治32年8月7日採集 宮嶋”.



*Nephthea junipera* Thomson et Dean  
チヂミトサカ属の一種 (和名未定種)

UMUTZ-Cnid-A-5; one colony.

Locality: Okinawa Prefecture, Kyan-misaki Cape, Itoman city.

Date: 12 April 1901.

Collectors: Prof. Kakichi Mitsukuri & Iwaji Ikeda.

Label data: “*Nephthea junipera*, Thomson & Dean, Itoman, Okinawa Is., 1901 (H. Utinomi det.)”; “産地 沖縄糸満キャム岬, モグリ, 箕作, 池田, 採集 明治34年4月12日”.

Remarks: This specimen agrees well with *N. junipera* in the *Stereonephthya*-like appearance and considerable stinging armature of the polyps.

*Nephthea cf. setoensis* Utinomi  
チヂミトサカ属の一種 (和名未定種)

UMUTZ-Cnid-A-7; two colonies.

Locality: Probably Sagami Bay, Kôzushima Island.

Label data: “神集嶋”.

Remarks: The supporting bundle of this specimen is less well developed than that shown in the original description of this species. There are two “神集島” Islands in Japan: the old name of Kôzushima (神津島) in Sagami Bay is “神集島”, and the present Kashiwajima (神集島) is located off Karatsu city, Saga Prefecture in Kyushu.

*Nephthea* sp. チヂミトサカ属の一種

UMUTZ-Cnid-A-3; two colonies.

Locality: Okinawa Prefecture, Kyan-misaki Cape, Itoman city.

Date: 12 April 1901.

Collectors: Prof. Kakichi Mitsukuri & Iwaji Ikeda.

Label data: “沖縄糸満キャム岬 モグリ, 明治34年4月12日, 箕作, 池田”.

Remarks: The anthocodial armature of these specimens resembles that of *N. chabrolii*, but the supporting bundle is considerably more weakly developed than that of UMUTZ-Cnid-A-6.

*Paraspongodes* sp. ウミツゲ属の一種

UMUTZ-Cnid-A-10; one colony.

Locality: Sagami Bay.

Collector: Kumakichi Aoki.

Label data: “*Eunephtya spiculosa* Kükenthal, Loc. Sagami Bay, Date. ? Coll. K. Aoki”

References: Utinomi, 1951: 30-31, 1960: 20-22.

Remarks: This specimen was identified as *Eunephtya spiculosa* Kükenthal (= *Paraspongodes spiculosa*) by Utinomi (1951, 1960). According to Utinomi's paper, there was another label, “*Eunephtya spiculosa* det. K. Kinoshita. Collected by K. Aoki”, which I could not find. However, the type specimens of *P. spiculosa* have slender rods peculiar to the genus *Scleronephthya* in the polyps according to the figures of the original description (Kükenthal, 1906), and my preliminary studies on the type specimen confirm this (Imahara, unpublished). It seems that this specimen belongs to the genus *Paraspongodes* or *Chromonephthya* on account of the polyps not having these peculiar slender rods.

*Stereonephthya japonica* Utinomi キバナトサカ

UMUTZ-Cnid-A-15; one colony.

Locality: Kagoshima Bay, probably Shimizucho, Kagoshima city.

Date: 29 March 1896.

Collectors: Prof. Kakichi Mitsukuri & Juta Hara”.

- Label data: “鹿児島湾薩摩田浦, 明治 29 年 3 月 29 日採集 箕作, 原”.  
 Remarks: It seems that “Satsuma-Tanoura (薩摩田浦)” is a old local name for Shimizucho, Kagoshima city. This specimen is somewhat damaged.
- UMUTZ-Cnid-A-16; Number of specimens: five colonies.  
 Locality: Kagoshima Prefecture, Teuchi, Shimokoshiki Island.  
 Date: 22 July 1899.  
 Collector: Mikinosuke Miyajima.  
 Label data: “産地 下コシキ手打, 明治 32 年 7 月 22 日採集 宮嶋”.  
 Remarks: These specimens had been stored in formalin.
- UMUTZ-Cnid-A-17; one colony.  
 Locality: Probably Kagoshima Prefecture, Kamise, probably off Yamakawa fishery port, Ibusuki city.  
 Date: 30 March 1896.  
 Label data: “神瀬, M29, 3, 30”.  
 Remarks: The locality was ascertained based on a published record of the collection trip of Prof. Kakichi Mitsukuri with Juta Hara to Kagoshima in 1896 (Isono, 1988). There are two 神瀬 in Kagoshima Prefecture i.e., a deep bank off Ibusuki city (see *Telestoa tubulosa*: UMUTZ-Cnid-A-103) and a small Island in Kagoshima Bay. The locality was considered to later, because the habitat of this species is shallow bottom.
- UMUTZ-Cnid-A-21; two colonies.  
 Locality: Sagami Bay, Araibama, Misaki, Miura city, Kanagawa Prefecture.  
 Date: April, 1916.  
 Label data: “April 1916, Misaki Araibama”.  
 Remarks: These specimens had been stored in formalin.
- UMUTZ-Cnid-A-23; one colony.  
 Locality: Sagami Bay, Misaki, Miura city, Kanagawa Prefecture.  
 Date: April, 1916.  
 Label data: “*Dendronephthya* with *Coeloplana bocki* Komai, Misaki, IV 1916”.  
 Remarks: *Coeloplana bocki* is a sessile, epizoic ctenophore, “Kuragemushi” in Japanese.
- UMUTZ-Cnid-A-31; one colony.  
 Locality: Kagoshima Prefecture, Cape Makurazaki, 5 fathoms (i.e., ca. 10 m).  
 Date: 7 August 1899.  
 Collector: Mikinosuke Miyajima.  
 Label data: “産地 サツマ枕崎 5 尋, 明治 32 年 8 月 7 日 採集 ミヤシマ”.

***Stereonephthya cf. japonica*** Utinomi キバナトサカ?

- UMUTZ-Cnid-A19; one colony.  
 Locality: Kumamoto Prefecture, Ushibuka, Amakusa city.  
 Date: June, 1908.  
 Collector: Kumao Kinoshita.  
 Label data: “Ushibuka, Amakusa, Juni 1908, Kinoshita leg., durch Taucher”.  
 Remarks: The construction of the anthocodial armature of this specimen closely resembles that of *S. japonica*; however, the color of the branches and the lower part of the polyp stalks is pink.
- UMUTZ-Cnid-A-20; three colonies.  
 Locality: Kumamoto Prefecture, Ushibuka, Amakusa city.  
 Date: June, 1908.  
 Collector: Kumao Kinoshita.  
 Label data: “Ushibuka, Amakusa, 1908 Juni, Kinoshita, durch Taucher”.  
 Remarks: Several parts of the branches are pinkish in color, just as in UMUTZ-Cnid-A-19.

UMUTZ-Cnid-A-22; two colonies.

Locality: Kumamoto Prefecture, Ushibuka, Amakusa city.

Date: June, 1908.

Collector: Kumao Kinoshita.

Label data: “Ushibuka, Amakusa, Juni 1908, Kinoshita, durch Taucher”.

Remarks: Several parts of the branches are pinkish in color, just as in UMUTZ-Cnid-A-19.

*Stereonephthya cf. papyracea* Kükenthal

ハナトサカ属の一種 (和名未定種)

UMUTZ-Cnid-A-26; four colonies.

Locality: Sagami Bay, Dôketsuba (see Remarks for UMUTZ-Cnid-A-91), 60 fathoms (i.e., ca. 110 m).

Date: 10 January 1908.

Collector: Kumao Kinoshita.

Label data: “産地 同穴場 60 尋, 明治 41 年 1 月 10 日 採集 木下”.

Remarks: The color of these colonies closely resembles that of *Stereonephthya osimaensis* Utinomi, but the size of the polyps is considerably smaller, and the construction of the anthocodial armature quite different. *Stereonephthya papyracea* has been recorded only once previously, from the type locality in Palau by Kükenthal (1905).

*Stereonephthya rubriflora* Utinomi アカバナトサカ

UMUTZ-Cnid-A-18; one colony.

Locality: Kagoshima Prefecture, probably Kamise in Kagoshima Bay.

Date: 30 March, 1896.

Label data: “神瀬 29, 3, 30”.

Remarks: The locality was determined by reference to the same record of Prof. Kakichi Mitsukuri's collection trip as was used for UMUTZ-Cnid-A-17 (Isono, 1988).

UMUTZ-Cnid-A-25; one colony.

Locality: Kumamoto Prefecture, Ushibuka, Amakusa city.

Date: June, 1908.

Collector: Kumao Kinoshita.

Label data: “Ushibuka, Amakusa, 1908 Juni, Kinoshita leg., durch Taucher”.

*Stereonephthya sp.* ハナトサカ属の一種

UMUTZ-Cnid-A-24; two colonies.

Locality: Kagoshima Prefecture, Teuchi, Shimokoshiki Island.

Date: 22 July 1899.

Collector: Mikinosuke Miyajima.

Label data: “産地 下コシキ 手打, 明治 32 年 7 月 22 日採集 宮嶋”.

Remarks: The color of these specimens closely resembles that of *Stereonephthya osimaensis* Utinomi, but the construction of the anthocodial armature is quite different. These specimens had been stored in formalin.

*Umbellurifera sp. 1* (和名未定属の一種)

UMUTZ-Cnid-A-39; three fragments.

Locality: Sagami Bay, Dôketsuba (see Remarks for UMUTZ-Cnid-A-91), 60 fathoms (i.e., ca. 110 m).

Date: October, 1908.

Collector: Kumao Kinoshita.

Label data: “産地 同穴場 60 尋, 明治 41 年 10 月, 採集 木下”.

Remarks: These specimens had been stored in formalin.

***Umbellurifera* sp. 2** (和名未定属の一種)

UMUTZ-Cnid-A-114; one fragment.

Locality: Sagami Bay, about 2 km off Niijima Island.

Date: 10 August 1893.

Collector: Fishing trawler Ohnoura-maru.

Label data: "Alcyoniidae sp"; "新島沖 20 町, 8 月 10 日 大の浦丸"; "新島西沖 20 町, 8 月 10 日 26 年 ケタアミ, No. 145".

Remarks: The sclerites are in a more or less disintegrated state. This specimen had been stored in the same jar as UMUTZ-Cnid-A-41

Family Nidaliidae タイマツトサカ科

***Nidalia* cf. *macrospina*** Kükenthal

タイマツトサカ属の一種 (和名未定種)

UMUTZ-Cnid-A-112; one colony.

Date: 6 August 1894.

Label data: "Station 13, 6/VIII 94".

Remarks: This specimen had been stored in the same jar as A-36.

***Siphonogorgia* cf. *dipsacea*** (Wright & Studer) アカバナクダヤギ?

UMUTZ-Cnid-A-53; five fragments and one colony.

Locality: Sagami Bay, 400 fathoms (i.e., ca. 730 m).

Date: 10 August 1897.

Collector: Kumakichi Aoki.

Label data: "SIPHONOGORGIA DIPSACEA Wright et Studer, Alcyonacea, Alcyonaria, Sagami Bay 400 h. 10/VIII/97, 熊吉"; "椿山○○○ [illegible], 30 年 8 月 10 日".

Remarks: I could not confirm the meaning of "椿山".

***Siphonogorgia* sp. 1** クダヤギ属の一種

UMUTZ-Cnid-A-50; two fragments.

Locality: Kagoshima Prefecture, Shimo-tsukurase Island, about 20 km south of Takarajima Island, coral ground, 70 fathoms (i.e., ca. 130 m).

Date: 13 July 1899.

Collector: Mikinosuke Miyajima.

Label data: "産地 鹿児島県下津倉瀬島 珊瑚場 70 尋, 明治 32 年 7 月 13 日採集 宮嶋".

Remarks: With completely retracted polyps.

***Siphonogorgia* sp. 2** クダヤギ属の一種

UMUTZ-Cnid-A-51; one colony.

Locality: Sagami Bay, 200 fathoms (i.e., ca. 370 m).

Date: 5 August 1896.

Collector: Golden Hind Expedition (Alan Owston).

Label data: "Station 48, 200 hiro, muddy bottom, 5/8/1896, Golden Hind Expedition".

Remarks: With completely retracted polyps.

***Siphonogorgia* sp. 3** クダヤギ属の一種

UMUTZ-Cnid-A-52; one colony.

Locality: Sagami Bay, Misaki, Miura city, Kanagawa Prefecture, 330-340 fathoms (i.e., ca.

600-620 m).  
Date: May, 1895.  
Collector: Kumakichi Aoki.  
Label data: “*Siphonogorgia* sp. Alcyonacea, Alcyonaria, Misaki, 330-340 hiro V1895”; “巖戸掛外, 330-40 尋 38 年 5 月 熊”.  
Remarks: With somewhat non-retracted polyps. See Remarks for UMUTZ-Cnid-A-96 for the meaning of “巖戸掛外”, i.e. “outside of the Iwado-line”.

**Gen. sp.** クダヤギ科の一種

UMUTZ-Cnid-A-48; one colony.  
Locality: Sagami Bay, Dôketsuba (see Remarks for UMUTZ-Cnid-A-91), 60 fathoms (i.e., 110 m).  
Date: October, 1908.  
Collector: Kumao Kinoshita.  
Label data: “産地 同穴場 60 尋, 明治 41 年 10 月, 採集 木下”.  
Remarks: This non-branching, slender, club-like small colony probably belongs to either the genus *Nidalia* or *Siphonogorgia*.

Family Maasellidae カクレトサカ科  
***Carotalyon sagamianum*** Utinomi ニンジントサカ

UMUTZ-Cnid-A-81; one colony.  
Type status: **Holotype**.  
Locality: Sagami Bay, 170 fathoms (i.e., ca. 310 m).  
Date: 2 April 1895.  
Collector: Prof. Isao Ijima  
Label data: “Samples of Sponges from 170 hiro, near stat. 5, Apr. 2nd 1895, To be studied. Colors taken note of Ijima”; “*Carotalcyona sagamianum* Utinomi, Loc. Sagami Bay 170 fm. Date Apr., 1895, Coll. Prof. Ijima”.  
Reference: Utinomi, 1952: 441-446.  
Remarks: The second label is an official label of the Seto Marine Biological Laboratory, Kyoto University.

***Paralcyonium elegans*** (M. Edwards) ヘンゲトサカ属の一種

UMUTZ-Cnid-A-82; one colony.  
Locality: Naples.  
Label data: “Naples, PARALCYONIUM ELEGANS, Alcyonacea, Alcyonaria”.  
Remarks: It seems that Prof. Ijima brought this specimen home from his overseas trip.

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## Summary

The alcyonacean collection housed in the University Museum, the University of Tokyo, consists of Japanese specimens from off the Boso Peninsula to the Ryukyu Islands, including the Bonin Islands and the coral grounds of Kochi and Kagoshima, as well as specimens from several foreign countries, viz., the Philippines, Ponape Island (= Pohnpei Island, Federated States of Micronesia), Palau Islands (= Republic of Palau), and Naples, Italy, collected between 1892 and 1923. The majority were collected from Sagami Bay, probably representing the collections of the Misaki Marine Biological Laboratory and the Department of Zoology, Tokyo Imperial University (the predecessor of the present University of Tokyo). Almost all of the specimens had been stored in ethanol, although several specimens had been stored in formalin. A total of 112 jars of specimens were found, including 20 jars identified by earlier workers to 16 species, 5 jars identified to 4 genera, and 3 jars identified to 3 families. The scientific names were determined by the present author based on observation of specimens' external appearance and by reference to the label data and the references cited herein. The anthocodial formula was also referred to in the case of polyps possessing anthocodial armed sclerites. The specimens were found to comprise a total of 77 species, including 32 unidentified species, now divided among 125 jars. The following three type specimens were rediscovered in the present study:

*Carotalcyon sagamianum* Utinomi (UMUTZ-Cnid-A-81, Holotype)

*Chromonephtea hirotai* (Utinomi) (UMUTZ-Cnid-A-104, Holotype)

*Telesto tubulosa* Kinoshita (UMUTZ-Cnid-A-103, Holotype)

The following three type specimens expected to be present were not found and may be lost:

*Paratelesto rosea* (Kinoshita) (Holotype), one colony, Miyake Island, south of Izu Province, 10 August 1893, collected by S. Hirota.

*Telesto sagamina* Kinoshita (Syntypes), two fragments probably belonging to one colony, Dohketsuba, Sagami Bay, 60 fathoms (i.e., ca. 110 m), October, 1908, collected by Kinoshita himself.

The list was made, in principle, according to the recent system outlined by G. C. Williams and S. D. Cairns on the web-site <<http://research.calacademy.org/research/izg/OCTOCLASS.htm>>. For each specimen or lot, the scientific name and collecting information are provided in the following order: 1, registration number; 2, number of specimens included in the jar; 3, type status; 4, collecting locality; 5, collection date; 6, collector's name(s); 7, original label data; 8, reference(s); 9, remarks. The entries are abbreviated if there was no information on the label or in the references. The traditional Japanese unit for measuring depth, the "hiro" is taken here as equivalent to one fathom.

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