6. Notes on Some North Pacific Holothurians.

By Hubert Lyman Clark, Professor of Biology, Olivet College, Michigan, U. S. A. eingeg. 15. Mai 1902.

Through the kindness of Professor D'Arcy W. Thompson, a small collection of Holothurians, made by himself at several points in the North Pacific, was recently placed in my hands for examination. Although containing no new species, it extends the range of several species very considerably, and adds quite a little to our knowledge of the distribution of the holothurians of the Pacific Coast of North America.

1. Chiridota discolor Eschscholtz.

One specimen from Station 3634 (Albatross), small and contracted: two fragments from Copper Island. These specimens are referred to this species only after comparison with several hundred specimens of North Pacific *Chiridotas* in the collection of the United States National Museum. The differences between this and the following species are exceedingly difficult to define clearly, but the color is an important factor, as well as size, texture, etc.

2. Chiridota laevis (Fabricius).

One small specimen from Sitka, very similar to specimens from the North Atlantic, except that the color is a little darker.

3. Cucumaria japonica Semper.

Four much contracted specimens from Sitka, from 3 to 5 inches in length, and light gray or yellowish-gray in color. These specimens agree well with Lampert's notes on specimens from the Gulf of Georgia, and the species seems to be well-characterized by the greatly reduced calcareous ring, the very long Polian vessel and the numerous short stone-canals. The large plates at the opening of the cloaca are not at all noticeable in these Alaskan specimens. The head is drawn back very far, into the body, and the whole anterior end appears to be more slender than the posterior part of the body and the feet are larger and arranged in more regular rows. This portion of the animal, and the tentacles, retain a very decided bronze-red color, which I presume is the color of the animal in life. The differences between these specimens and C. frondosa are very obvious, when the animals are side by side.

4. Cucumaria lubrica Clark.

There are four small, much contracted specimens from Yokohama Bay, which I refer to this species with some hesitation. They differ from the type in being white, and in the occurrence of numerous "knobbed baskets" in the outermost layer of the body-wall. As all of the specimens of this species which have come into my possession are greatly contracted and have been in alcohol some years, I do not feel justified in attempting to separate these japanese specimens from those collected in Puget Sound.

5. Cucumaria vegae Théel.

This would seem to be the most abundant holothurian of the North Pacific islands, for besides 35 specimens from Sitka, there are in this collection 35 specimens from St. Paul, Pribilof Islands, and 30 from Copper Island. They range in size from 10 to 50 mm but the color is remarkably uniform. Nearly all are very dark, almost black, except on the ventral side, where they are pale brown. A few are brown of some shade, and one, from Copper Island, is very light brown all over except the extreme anterior end. These specimens answer perfectly to Théel's description of the specimens he had from Behring Island. Whether, as suggested by Théel, this species is really identical with Brandt's nigricans seems to me doubtful. It resembles carata Cowles, but differs very clearly in the calcareous deposits.

6. Stichopus californica (Stimpson).

Two specimens from Sitka, thus extending the known range of the species very much to the nothward.

7. Stichopus japonicus Selenka.

There is a single very small *Stichopus*, 18 mm long, from Sitka. It is pale brown, the skin is very thin, and there are a few large dorsal papillae in 2 irregular rows, 8—10 in each zigzag row. On the ventral side are 3 irregular rows of pedicels, merging at each end, but distinct at the middle, each row with about 12 pedicels. The deposits are very crowded tables, exactly like those described by Mitsukuri from the young of *St. japonicus*. There are also many, very small almost cylindrical short rods in the outermost layer of skin, but these may possibly be artefacts. At any rate, I think there can be no question that the specimen is a very young individual of the japanese *Stichopus* and its occurrence at Sitka is a matter of very great interest.

Although this small collection contains only these 7 species, 4 of them, taken at Sitka, are to be added to my list of the holothurians of the Pacific Coast of North America, published in the Zoologischer Anzeiger, March 25, 1901, while the range of 2 other species is very greatly extended. The following are the additions to the previous list of 20 species:

- 21. Chiridota laevis (Fabricius). Sitka. Taken also by the »Albatross« at several stations near the Aleutian Islands, off the coast of Washington, and off southern California. Numerous specimens from all these stations show no satisfactory, constant differences.
- 22. Cucumaria japonica Semper. Gulf of Georgia (Lampert). Sitka.
- 23. Cucumaria vegae Théel. Sitka. Pribilof Islands. Copper Island. Behring Island.
- 24. Stichopus japonicus Selenka. Sitka. Numerous stations in Japan; being the commonest holothurian of that country (Mitsukuri). March 10, 1902.

II. Mittheilungen aus Museen, Instituten etc.

1. Naturvetenskapliga Studentsällskapet, Upsala.

Zoologische Section.

Sitzung, den 28. Februar 1902.

J. Arwidsson, Phil. Lic., hielt einen Vortrag über einige biologische Beobachtungen an schwedischen Maldaniden.

T. Odhner, Phil. Cand. sprach über die Organisation eines bisher wenig bekannten Distomums, Fasciolopsis Buski (Lank.). Das Material gehörte dem zoologischen Museum Kopenhagen, und war in den Excrementen eines 13 jährigen siamesischen Knabens in Bangkok angetroffen. Die Art war der wohlbekannten Fasciola hepatica verwandt, von derselben aber generisch verschieden.

Sitzung, den 14. März 1902.

Docent Dr. L. A. Jägerskiöld sprach über einen von ihm während der schwedischen zool. Expedition nach Sudan 1901 in Lates niloticus angetroffenen Nematoden Dichelyne fossor n. g. n. sp. Das Thier lebte in fistelartigen Gängen der Darmwand des Wirthes. Durch seine beiden lateralen Lippen bot es eine gewisse Ähnlichkeit mit Physaloptera dar, war aber von dieser in der inneren Organisation durchaus verschieden. Als Beweis hierfür wurde angeführt, daß der Übergang zwischen der dorsoventral ausgezogenen symmetrischen Mundkugel und dem dreieckigen Lumen des Oesophagus bei Dichelyne symmetrisch, bei Physaloptera aber asymmetrisch angeordnet war. Der Oesophagus war in seiner ganzen Ausdehnung stark musculös und der Darm mit einem nach vorn gerichteten Blindsack ver-

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Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: Zoologischer Anzeiger

Jahr/Year: 1901

Band/Volume: 25

Autor(en)/Author(s): Clark H.L.

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