

MEDUSAE FROM THE ARCTIC OCEAN

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This report is based on the medusan specimens which are partly preserved in the Zoological Department of University of Southern California, Los Angeles and partly sent by Prof. J.L. MOHR to the Zoological Institute of Hokkaido University. These medusae were all collected at the ice land in the Arctic Ocean. Among these specimens, *Staurophora mertensi*, *Cyanea capillata* and *Phacellophora camtchatica* are deposited in the University of Southern California and *Catablema multicirrata* is hold in the Hokkaido University. The rest of the specimens are all preserved in the Biological Laboratory, Imperial Household. This report is prepared in the three laboratories above mentioned.

Before proceeding further I wish to express my hearty thanks to Prof. J.L. MOHR for sending me these medusan specimens.

Class Hydrozoa

Order Anthomedusae

- Euphysa flammea* (LINKO)
- Platocnide borealis* WAGNER
- Catablema multicirrata* KISHINOUE

Order Leptomedusae

- Staurophora mertensi* BRANDT

Order Tarchomedusae

- Aglantha digitale* (MÜLLER)
- Sminthea arctica* HARTLAUB

Order Narcomedusae

- Aeginopsis laurenti* BRANDT

Class Scyphomedusae

Order Semaestomae

- Cyanea capillata* (LINNÉ)
- Phacellophora camtchatica* BRANDT

Euphysa flammea (LINKO)

Fourteen specimens collected by Mr. LEWIS on July 19, 1960. They were taken at the site of Phronimid collection. The largest specimen is 6 mm high and 4 mm

wide.

Plotocnide borealis WAGNER

Plotocnide borealis: BEYER, 1955, p. 94-98, fig. 1.

Sarsia inabai: UCHIDA, 1933, p. 128, fig. 2.

?*Eucodonium arctica*: HAND & KAN, 1961, p. 9-11, fig. 3.

A well-preserved specimen was obtained on Aug. 1, 1960. The species is circumpolar in distribution. *Eucodonium arctica* reported by HAND and KAN (1961) from the Arctic Ocean is possibly referable to this species.

Catablema multicirrata KISHINOUE

About a dozen specimens probably belonging to this species were examined, but some of them are fragmental. The following specimens have been exactly determined: 1 specimen collected by Mr. R. LEWIS while floating in an ice hole (Station T-3) on March 15, 1960; 1 specimen found in the surface sample collected by traps at Station (23-1) on March 22, 1960; 1 specimen found in the surface sample collected by traps by Mr. R. LAVENBERG (Station T-3) on March 24, 1960; 1 specimen found in the surface collection (Station 27-1) on March 28, 1960; 1 specimen collected in the surface sample (Station 28) on March 29, 1960; 3 well-preserved specimens collected by Mr. LEWIS from the site of Phronimid collection on July 19, 1960.

The largest medusa in the collection is 63 mm in diameter and 55 mm high.

Staurophora mertensi BRANDT

More than a dozen specimens were examined. They were obtained in the surface collection at the station No. 49 (68°37' N, 165° 5' W) on Jan. 28, 1960.

Aglantha digitale (MÜLLER)

Many specimens were collected at the stations 216-1, 216-2, 216-3, 216-6. At these stations *Plotocnide borealis* and *Aeginopsis laurenti* were rarely found.

Sminthea arctica HARTLAUB

Seven specimens were examined. They were collected at the stations 217-4 and 205-3. They are 5-6 mm in diameter and gonads are not yet developed. They have 8 short marginal tentacles and 8 statocysts between them.

Aeginopsis laurenti BRANDT

Many specimens were examined. They were collected at the stations 208-1, 209-2, 209-3, 209-4, 210-1, 210-2, 210-3, 210-4, 212-1, 212-2, 212-3, 217-3, 217-4. Some of specimens have gonads. The largest medusa is 7 mm in diameter.

Cyanea capillata (LINNÉ)

Four specimens were examined at the following stations: Station No. 38, 63° 07'-08' N, 167°33' W on Jan. 1, 1960; Station No. 60A, 70°07.5' N, 164°40.5' W on Aug. 2, 1960; Station No. 49, 63°37' N, 165°15' W on Jan. 28, 1960; Station No. 36, 61°5' N, 168°22' W on July 27, 1960.

Phacellophora camtchatica BRANDT

The single specimen was obtained at the depth of 2 feet at Station No. 21 A on July 21, 1951.

The medusae here recorded are all common boreal species. In 1961 HAND and KAN published a paper on the medusae of the Chukchi and Beaufort Seas of the Arctic Ocean. The 4 medusae in the present report, *Plotocnide borealis*, *Euphysa flammea*, *Aglantha digitale*, *Aeginopsis laurenti* are also described by them, but other five of 9 medusae are not included in their paper. On the other hand, 7 species described by HAND and KAN were not found in the present collection. Judging from the fact that *Aurelia aurita* and *Rathkea octopunctata* are recorded in their collection, it seems to be proved that there are living some medusae of still warmer water in the Chukchi and Beaufort Seas.

LITERATURE

- BEYER, F. 1955. *Plotocnide borealis* Wagner in the Oslofjord. Nytt. Mag. Zool., vol. 3, p. 94-8, fig. 1.
- BIGELOW, H.B. 1920. Report of the Canadian Arctic Expedition 1913-18. vol. 8, pt. H: Medusae and Ctenophora, p. 3H-20H, Pl. 1.
- HAND, C. and L.B. KAN 1961. The medusae of the Chukchi and Beaufort Seas of the Arctic Ocean including the description of a new species of *Eucodonium* (HYDROZOA: Anthomedusae). Arctic Institute of North America, Technical Paper No. 6, p. 1-23.
- UCHIDA, T. 1933. Medusae from the vicinity of Kamchatka. Jour. Fac. Sci. Hokkaido Univ., ser. 6, zool., vol. 2, p. 123-33, figs. 1-8.