

ZOÖLOGISCHE BIJDRAGEN TOT DE KENNIS DER KARAZEE.

(*Nederlandsche Pool-Expeditie, 1882-83.*)

III. Report on the Fishes.

BY

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»Natura Artis Magistra« in Amsterdam.*

1. *Gymnacanthus pistilliger*, PALLAS.

Literature:

1780. *Cottus gobio*, FABRICIUS, »Fauna Groenlandica«. N°. 115. p. 159.
1811. *Cottus pistilliger*, PALLAS, »Zoographia Rosso-Asiatica«. Vol. III. p. 143.
1829. *Cottus ventralis*, CUVIER et VALENCIENNES, »Histoire naturelle des Poissons«. Tom. IV. p. 194.
1829—1830. *Cottus tricuspidis*, J. REINHARDT SEN., »Overs. Kgl. D. Vid. Selsk. Naturv.« Math. Afh. fra d. 31 Maj. 1828 til d. 31 Maj. 1831. 5 Del. p. LII. Kbhn. 1832.
1844. *Phobetor tricuspidis*, KROYER, Naturh. Tidskr. 2 Raekke. I B. p. 263.
1850. *Cottus intermedius*, TEMMINCK et SCHLEGEL, »Fauna Japonica«. p. 38.
1850. *Cottus fabricii*, C. GIRARD, »Monograph of the Cottoids«. — Smithsonian Contributions to Knowledge. Vol. III. Art. 3. p. 59.
1855. *Cottus tricuspidis*, S. NILSSON, »Skandinavisk Fauna«. 4^{de} Delen, Fiskarna, p. 78.
1857. *Acanthocothus patris*, H. R. STORER, »Observations on the Fishes of Nova Scotia and Labrador, etc.« — Boston Journal of Nat. Hist. Vol. VI. p. 250 pl. 7. fig. 2.
1860. *Cottus pistilliger*, | A. GÜNTHER, Catal. of the Acanthopt. Fishes etc. Vol. II.
» ventralis, | p. 167—168.
» tricuspidis,
1861. *Gymnacanthus patris*, GILL, — Proc. Acad. Nat. Sc. Philadelphia. Suppl. p. 42.
1863. *Phobetor tricuspidis*, A. J. MALMGREN, »Kritisk Öfversigt af Finlands Fiskfauna«. p. 11.
1865. *Phobetor tricuspidis*, A. J. MALMGREN, »Om Spetsbergens Fiskfauna«. — Öfvers. af K. Vet. Akad. Förh. 1864. No. 10. p. 504.
1873. *Gymnacanthus tricuspidis*, GILL, Rep. Comm. Fish & Fisheries. 1871—1872. p. 800.
1875. *Phobetor ventralis*, R. COLLETT, »Norges Fiske«. Tillaegsh. til Christ. Vidensk. Förh. 1874. p. 30.
1876—77. *Phobetor ventralis*, CHR. LÜTKEN, »Forelöb. Meddelels. om nord. Ulkefiske«. Vidensk. Meddelels. fra den Naturhist. Foren. i Kjobenh. 1876. p. 363.
1879. *Phobetor ventralis*, R. COLLETT, »Fiske fra Nordhavs-Expeditionens, Sidste Togt, Sommeren 1878«. Christ. Vet. Selsk. Förh. 1878. No. 14. p. 15.
1879. *Gymnacanthus pistilliger*, BEAN, Bull. U. S. Nat. Mus. 1879. No. 15. p. 127.
1880. *Gymnacanthus pistilliger*, R. COLLETT, »Den Norske Nordhavs-Expedition 1876—1878«, Zoologi, Fiske, p. 26.
1881. *Phobetor pistilliger*, W. LILLJEBORG, »Sveriges och Norges Fiskar«. Första Haftet. p. 118.
1883. *Gymnacanthus pistilliger*, DAV. S. JORDAN & CH. H. GILBERT, »Synopsis of the Fishes of North America«. Bull. U. S. Nat. Mus. 1883. No. 16. p. 708.

Only one specimen of this species was obtained by the Dutch expedition.

Descriptive observations:

M.B. 6 : 1 D. 11; 2 D. 15; A. 17; P. 18; V. 4; C. 7/11/7. Lin. lat. 35.

The total length of this female specimen is 90 mm., the length of the head 27 mm.; the anal papilla is very short. The frontal region with two distinctly obvious protuberances above the eyes was furnished with a cluster of depressed osseous granulations, — as described by COLLETT (l. c. p. 27). On the preoperculum I do not observe those granulations. The preoperculum is furnished with four spines, the uppermost spine distinctly tridented — not bipartite as described by COLLETT on the specimens of this species (length 80 mm.), obtained by the Norwegian North Atlantic Expedition (1876—1878). I mean however, that the development of those spines will be more or less different in the various individuals of this species.

The two dorsals are separated by a small but obvious space.

The colour of our specimen is brownish-grey on the back with numerous dark spots down the sides; the abdominal surface yellowish-white without patches or spots. The first dorsal fin with an obvious dark transverse band on the upper margin, the second dorsal with irregularly placed brown patches. On each ray of the pectoral fins two or three dark patches.

Food. The stomach of this specimen was distended with remains and fragments of small Crustaceans, probably of *Mysis*-species.

Geographical distribution. This species is circumpolar and has been observed by the various Arctic Expeditions on the shores of Europe, Asia and America, Alaska, Labrador Coast of Greenland, Kamschatka, Bering-Straits, Japan, Novaja Zemlja, Spitsbergen, Finmark Iceland, Nova Scotia.

The specimen obtained by the Dutch Expedition, was dredged in lat. $69^{\circ} 65'$ N., length $58^{\circ} 54'$ E. Depth.: 43 fathoms. Temperature on the bottom: $-1^{\circ} 5$ C.; density of the seawater on the bottom: 1026.0; temperature on the surface $2^{\circ} 3$ C.; density of the seawater on the surface 1008.5. Bottom: Sabulous clay.

Bathymetrical distribution, to 50 fathoms.

In the Museum of the Royal Zoological Society »Natura Artis Magistra« in Amsterdam.

2. *Icelus hamatus*. KRÖYER.

Literature:

- 1839? *Cottus bicornis*, J. REINHARDT SEN., »Overs. 1839. Kgl. D. Vid. Selsk. Naturv. Math. Afh.« 8 Del. p. LXXV. Kbhn. 1841.
- 1844. *Icelus hamatus*, H. KRÖYER, »Naturh. Tidskr.« 2 Raekke 1 B. p. 253 and 261.
- 1845. *Icelus hamatus*, H. KRÖYER, »GAIMARD, Voyages en Scandinavie en Lapponie et en Spitsberg. Zoologie, Atlas,« Poissons Pl. I, fig. 2.
- 1860. *Icelus hamatus*, A. GÜNTHER, »Catal. of the Acanth. Fishes in the Coll. of the Brit. Museum.« Vol. II, pag. 172.
- 1863. *Icelus furciger*, A. V. MALM, »Ichthyol. Bidr. till Skand. Fauna«; Förh. vid. Skandin. Naturforsk. 9de Môte, Stockholm. pag. 410. 1863.
- 1869. *Icelus hamatus*, L. ESMARK, »Bidrag til Finmarkens Fiske-Fauna«; Vidensk. Selsk. i. Christ. Forh. 1868, särsk. aftr. p. 5.
- 1875. *Icelus hamatus*, R. COLLETT, »Norges Fiske«; Tillaegsh. til Christ. Vidensk. Selsk. Forh. 1874. p. 30.
- 1876—77. *Icelus hamatus*, CHR. LÜTKEN, »Forelög. Meddel. om Nord. Ulke fiske«; Vidensk. Meddel fra den naturh. Foren. i Kjöb. 1876. p. 380.

1879. *Icelus hamatus*, R. COLLETT, Meddelelser om Norges Fiske i Aarene 1875—78. Christ. Vid. Selsk. Förh. 1879. No. 1 p. 14.
1880. *Icelus hamatus*, R. COLLETT, »Den Norske Nordhavs—Exp. 1876—1878. Zoologi; Fiske.« p. 34. Pl. I fig. 8.
1881. *Icelus hamatus*, W. LILLJEBORG, »Sveriges och Norges Fiskar«, Första Häftet. p. 164.

Four specimens of this common species in the Arctic regions were obtained by the Dutch Expedition.

Descriptive Observations:

α ♂ M. B. 6; 1. D. 8; 2. D. 20; A. 15; P. 19; V. 4; C. 5/12/5.

β ♂ M. B. 6; 1. D. 8; 2. D. 18; A. 14; P. 17; V. 4; C. 5/12/5.

γ ♀ M. B. 6; 1. D. 8; 2. D. 19; A. 14; P. 17; V. 4; C. 5/12/5.

δ ? M. B. 6; 1. D. 8; 2. D. 18; A. 14; P. 17; V. 4; C. 5/12/5.

α . (male); β . (male); γ . (female); δ . (?)

Total length: 50 mm. 67 mm. 40 mm. 41 mm.

Length of the head: 15 » 20 » 11 » 11.5 »

Diameter of the eye: 5 » 8 » 4 » 4 »

The terminal part of the lateral line is wanting in the four specimens of this species obtained by the Dutch Expedition. In the first specimen (α) I observed only 42 osseous spines in the lateral line, in the second specimen (β) 44; in the third and fourth specimen (γ and δ) those osseous spines are so little developed, that it was impossible to mark their number accurately. All those osseous spines are furnished with well developed small teeth. I observed no osseous tubercles along the anal fin; along the dorsal fin those tubercles are distinctly obvious.

The upper spine on the preoperculum in all the specimens is well bifurcated. The three slender membranous filaments or cirri on the head, mentioned by ESMARK as a specific character, are not more visible in our specimens, which have been preserved long since in alcohol.

The colour of the body is yellow-brownish, with distinct brownish-black patches without transverse bands across the back.

F o o d. The stomach of the four specimens contained fragments of small crustaceans in such a state of putrefaction, that it was impossible to determine those remains exactly.

Geographical distribution. West and Eastern Coast of Greenland, Spitsbergen, Alaska, Coast of Jan Mayen, Shores of Iceland, Norwegian Coast, extending as far south as the Cattegat.

The specimens obtained by the Dutch Expedition were dredged:

α , δ . lat. $69^{\circ} 55'$ N.; length $58^{\circ} 54'$ E.; depth: 43 fathoms. Temperature of the seawater on the bottom: — $1^{\circ}.5$ C.; density of the seawater on the bottom: 1026.0. Temperature on the surface: $2^{\circ}.3$ C.; density of the seawater on the surface 1008.5. Bottom: sabulous clay.

β , γ . lat. $71^{\circ} 39'$ N.; length $64^{\circ} 58'$ E. (Kara Sea). Depth: 78 fathoms. Temperature at the bottom: — $0^{\circ}.1$ C.; density of the seawater on the bottom: 1025.5. Temperature at the surface — $1^{\circ}.0$ C.; density of the water at the surface: 1020.0. Bottom: brownish mud.

Bathymetrical distribution, to 100 fathoms (G. O. SARS, Lofoten, Christiansund).

In the Museum of the Royal Zoological Society »Natura Artis Magistra« in Amsterdam.

3. *Liparis lineatus*, LEPECHIN.

Literature:

1766. *Cyclopterus Liparis*, LINNÉ, »Syst. nat.« Edit. XII^{ma}. Tom. I. p. 414.
 1774. *Cyclopterus lineatus*, J. LEPECHIN, »Novi Commentarii Acad. Scient. imper. Petropolit.« Tom. XVIII. pro anno 1773. p. 522. Tab. V. fig. 283.
 1798. ? *Cyclopterus musculus*, LACÉPÈDE, Hist. nat. des Poissons. Tom. 4. p. 685.
 1828. *Liparis vulgaris*, FLEMING, »History of British Animals«. p. 190.
 1832. *Liparis barbatus*, C. U. EKSTRÖM, »En för Skandinaviens Fauna ny fisk, hörande till Artedi släkte Liparis, funnen i Mörkö Skärgård«. Kongl. Vet. Akad. Handl. för år 1832. p. 168. Tab. V.
 1847. *Liparis lineatus*, H. KRÖYER, »GAIMARD, Voyages en Scand. en Lapponie et en Spitzberg«. Zool. Atlas. Poissons Pl. 13. fig. 2 a—q.
 and: KRÖYER, »Naturhist. Tidskr.« 2 Raekke. 2 Bd. p. 284. 1846—1849.
 1861. *Liparis vulgaris*, A. GÜNTHER, »Catalog of the Acanth. Fish. in the Coll. of the Brit. Museum«. Vol. III. p. 159.
 Liparis vulgaris, H. SCHLEGEL, »De dieren van Nederland. Vissen«. p. 60.
 1864. *Liparis lineatus*, TH. GILL, »Synopsis of the Cyclopteroids of Eastern North America«. Proc. of the Acad. of Nat. Sc. of Philadelphia. 1864. p. 191.
 1875. *Liparis lineatus*, R. COLLETT, »Norges Fiske«. Tillaegsh. til Christ. Vidensk. Selsk. Forh. 1874. p. 65.
 1877. *Liparis stellatus*, A. W. MALM, »Göteborg. och Bohusl. Fauna«. p. 457. Tafl. VII. fig. 5.
 1880. *Liparis lineatus*, R. COLLETT, »Den Norske Nordhavs-Exp. 1876—78. Zoologi. Fiske. p. 50.
 1881. *Liparis vulgaris*, FRANCIS DAY, »The Fishes of Great Britain & Ireland«. Part. III. p. 184. pl. LVI. fig. 1.
 1883. *Liparis vulgaris*, MOEBIUS & HEINCKE, »Die Fische der Ostsee«. p. 57.
 1884. *Liparis lineatus*, W. LILLJEBORG, »Sveriges och Norges Fiskar«. Tredje Häftet. p. 688.

Four specimens were obtained by the Dutch Expediton.

Descriptive observations:

- α. ♀ M. B. 7; D. 38; A. 36; P. 32; C. 11.
- β. ♀ M. B. 7; D. 34; A. 30; P. 32; C. 10.
- γ. ♀ N. B. 7; D. 32; A. 26; P. 32; C. 10.
- δ. ♀ M. B. 7; D. 32; A. 26; P. 32; C. 10.

α. β. γ. δ.

Total length: 85 mm. 55 mm. 45 mm. 41 mm.

Length of head: 20 » 12 » 11 » 10 »

As the specimens of this species described by COLLETT in the »Fishes« of the »Norske Nordhavs-Expedition«, our specimens belong also to the variety designated by the same author in the »Meddelelser om Norges Fiske i Aarene 1875—1878« (Forh. i Vid. Selskabet i Christiania, Aar. 1879. p. 44) under the name of *Liparis lineatus*. var. *arcticus*. The colour of the body is greyish-yellow with minute brown specks. Over the fins those specks are arranged to small bands; the abdominal and the under surface of the head have no spots or specks at all. (»Naesten ensfarvet brun, Graaagtig gulbrun Bundfarve, der er naesten skjult af brune taetstillede Punkter der isaer give Finnerne og Legemets Sider en mørk Farve, men (hos yngre Ind.) tildels lade lyse Felter af Bundfarven synlige. Undersiden er lysere ufslettet.«)

F o o d. In the stomach of the specimen I found remains and fragments of small Crustaceans, probably of *Mysis*-species und *Gammaridae*.

Geographical distribution. *Liparis lineatus*, Lepech. is distributed as far north as Spitzbergen (lat. 80° N.), on the shores of Iceland and Greenland, North-America, as far as New-England, in the White Sea (Lepechin 1774), in the Baltic; on the shores of Great Britain, Sweden, Denmark, Norway, on the coast of the Netherlands, Belgium and France.

Our specimens are dredged in lat. 69° 55' N.; length 58° 54' E. Depth 43 fathoms; temperature at the bottom — 1°.5 C.; temperature at surface 2°.3. Bottom: clay and sand.

Bathymetrical distribution: to 50 fathoms.

In the Museum of the Royal Zoological Society »Natura Artis Magistra« in Amsterdam.

4. *Lumpenus medius*, REINHARDT.

Literature:

- 1837. *Lumpenus medius*, J. REINHARDT SEN. „Overs. over K. Danske vid. selsk. Förh 1832—1836”. Math. Afh. 6 Del. p. CX.
- 1838. *Clinus medius*, J. REINHARDT SEN., K. Danske vid. selsk. naturvid. o. Math. Afh. 7 Del. p. 194.
- 1861. *Stichaeus medius*, A. GÜNTHER, „Catal. of Fishes in the Brit. Museum”. Vol. III, p. 281.
- 1864. *Anisarchus medius*, TH. GILL, „Note on the family of Stichaeoids” in: Proc. Acad. Nat. Sc. of Philadelphia 1864, p. 210.
- 1864. *Lumpenus medius*, A. J. MALMGREN, „Öfv. Kgl. Vet. Akad. Förh. 1864 p. 517.
- 1880. *Lumpenus medius*, R. COLLETT, „Den Norske Nordhavs-Exp. Zoologi. Fiske”, p. 62 Pl. II Fig. 17.
- 1884. *Lumpenus medius*, W. LILLJEBORG, „Sveriges och Norges Fiskar”. Tredje Häftet 1884, p. 515.

Only one specimen has been dredged by the Dutch Expedition.

Descriptive observations:

M. B. 6. D. 62; A. 42; P. 14; V. 4; C, 2/17/2.

Total length: 78 mm.

Length of head: 14 mm.

The depth of the body at nape 7 mm.; the length of the anterior part of the body till the vent 34 mm. The jaws are equal in length, reaching back to the anterior margin of the eye. Diameter of the eye 4.5 mm. In proximity of the nostrils I observed two pairs of pores, one pair before and between the nostrils, the second pair behind the nostrils, at a distance of 1 mm.

The teeth on the jaws, and on the palatine bones well developed.

The lateral line is distinct. The ground-colour is uniform brownish yellow with a few very minute spots on the fins; the margin of the dorsal fin is brownish. Male.

F o o d. In the stomach of the specimen fragments of small crustaceans were observed (*Mysis*?)

Geographical distribution. Hitherto this species was only observed on the shores of Greenland and Spitsbergen. By the »Norske Nordhavs-Expedition«, 1876—1878, seven specimens were obtained on different localities.

The specimen obtained by the Dutch Expedition was dredged on lat. 71° 5' N., length 64° 7' E. in the Kara Sea. Depth: 54 fathoms. Temperature on the bottom — 1°. Density of the seawater on the bottom 1025.0. Temperature on the surface — 1°.6. Density of the seawater on the surface 1022.5. Bottom: grey clay covered with brownish mud.

Bathymetrical distribution: to 60 fathoms (Advent Bay, West-Spitzbergen).

5. *Lycodes Lütkenii.* COLLETT.

Literature:

1880. *Lycodes Lütkenii*, ROBERT COLLETT, »Fiske« (Norske Nordhavs-Expedition 1876—1878. Zoologi) p. 103. Pl. III. fig. 25.

Only two specimens of this species, established by COLLETT as a new one, distinguished from *Lycodes reliculatus*, have been obtained by the Dutch Expedition.

Descriptive observations:

- α. M. B. 6; D. 86; A. 71; P. 16; V. 3; C. 11.
- β. M. B. 6; D. 86; A. 72; P. 17; V. 3; C. 11.

	α	β
Total length	86 mm.	66 mm.
Greatest height (at origin of dorsal)	11 »	9 »
Height at vent	8 »	6.5 »
Length of head	22 »	16 »
Distance from snout to nape	23 »	17 »
Distance of nostrils from eye	5 »	3 »
Length of upper jaw	8 »	5.5 »
Length of mandible	5 »	3 »
Distance from snout to orbit	6 »	4.5 »
Long diameter of eye	4.5 »	4 »
Distance from snout to dorsal	25.5 »	23 »
Distance from snout to anal	41 »	31 »
Distance from snout to pectoral	19 »	15.5 »
Length of pectoral	12 »	9 »
Distance from snout to ventral	16 »	12.5 »
Length of ventral	3 »	2 »

Scales are entirely wanting. ¹⁾)

The greatest height of the body is contained about 7.8 times in total length; the height at the vent is contained about $10\frac{1}{2}$ times in total length. The length of the depressed head is contained about 4 times in the length of the whole body. The nostrils are tubular. The length of the upper jaw is less than half the length of the head. There are slightly recurved slender teeth on the vomer. The intermaxillaries have 15, the palatines 15 and the vomer 5 teeth.

The total numbers of rays in the dorsal fin amounts to 92, in the anal to 76 (dorsal and anal fin including half the caudal fin each).

The pectoral fins are large, with 16 to 17 rays on each side. Collett in his describel individual has found 23 rays in those pectoral fins. The typical individual of Collett has a length of 370 mm.; in larger individuals the number of the rays in the fins can be greater.

The lateral line is single and medio-lateral commencing above the gill-opening. Some small pores are visible above the lateral line on the greatest height of the body. The ground colour is greyish-brown, the abdominal part of body and head is cream. Ten to eleven bands of cream colour, bordered with brown, start from the dorsal fin to the lower half part of the body or to the anal fin (on the tail). Above each gill-opening on the head is a white or cream band.

¹⁾ Bleeker proposed in his „Typi nonnulli genericis piscium neglecti“ (Versl. en Mededeelingen der Koninklijke Akademie van Wetenschappen, Afd. Natuurkunde, 2e Reeks, VIIIe Deel, 3e St. 1874. p. 369) to establish for the no-scaled species of the Lycodidae a new genus, *Lycodalepis*. I can not except this genus, because the variations relating to the development of the scales in different individuals of the same species under the Lycodidae are numerous.

Geographical distribution. The only example of this species was obtained by the Norwegian North-Atlantic-Expedition, in the years 1876—1878, from a considerable depth in the frigid area of the ocean, a few leagues west of the north Coast of Spitzbergen in lat. about 80°N.

The two specimens obtained by the Dutch-Expedition were dredged:

- α. lat. 69° 55' N; length 58° 54' E. Depth: 43 fathoms. Temperature of the bottom — 1°.5 C; density of the seawater on the bottom 1026.0. Temperature on the surface 2°.3 C; density of the seawater on surface 1008.5. Bottom: sabulous clay.
- β. lat. 71° 7' N.; length 62° 39' E. (Kara Sea). Depth: 69 fathoms. Temperature on the bottom — 1°.2 C.; density of the seawater on the bottom 1026.0. Temperature on the surface 1°.5 C.; density of the seawater on the surface 1001.0. Bottom: brown mud.

Bathymetrical distribution till 459 fathoms.

In the Museum of the Royal Zoological Society »Natura Artis Magistra« in Amsterdam.

6. *Gadus saida*, LEPECHIN.

Literature:

- 1774. *Gadus saida*, J. LEPECHIN, »Novi Commentarii Acad. Scient. emper. Petropolit.« Tom. XVIII. 1774. p. 512. Tab. V. fig. 1.
- 1780. *Gadus aeglefinus*, O. FABRICIUS (nec Linné), »Fauna Groenlandica«. No. 100. p. 142.
- 1824. *Merlangus polaris*, SABINI, »Suppl. App. Parry's First Voy.« p. 211.
- 1836. *Gadus fabricii*, J. RICHARDSON, »Fauna Boreali Americana«. Vol. III. p. 245.
Gadus polaris, J. RICHARDSON, idem. p. 247.
- 1838. *Gadus agilis*, J. REINHARDT SEN., »Kgl. D. vid. Selsk. Natur. Math. Afh.« 7 Del. p. 126.
- 1861. *Pollachius polaris*, TH. GILL, Proc. Acad. Nat. Sc. of Philadelphia. 1861. App. p. 48.
- 1862. *Gadus (Boreogadus) Saida*, A. GÜNTHER, „Catal. of Fishes in the Brit. Mus.“ Vol. IV. p. 337.
Gadus (Boreogadus) fabricii, A. GÜNTHER idem p. 336.
- 1863. *Boreogadus polaris*, TH. GILL, »Synopsis of the North American Gadoid Fishes«. Proc. Acad. Nat. Sc. of Philadelphia 1863. p. 233.
- 1874. *Gadus glacialis*, PETERS, 2. Deutsche Nordpol-Exp. Bd. II p. 172 (Leipzig 1874).
- 1883. *Gadus Saida*, R. COLLETT, »Den Norske Nordhavs-Exp. 1876—1878.« Zoologi: Fiske, p. 126, Pl. IV fig. 33.

Two specimens of this common fish in the Polar regions were obtained by the Dutch-Expedition.

Descriptive observations:

- α. 1.D. 12; 2.D. 12; 3.D. 16; 1.A. 16; 2.A. 17; P. 17; V. 6.
- β. 1.D. 12; 2.D. 13; 3.D. 17; 1.A. 16; 2.A. 17; P. 17; V. 6.

	α ♀	β ♀
Total length	92 mm.	102 mm.
Length of heath	24 »	25 »
Diameter of the eye	7 »	7.5 »

As in the specimens of this species obtained by the „Norske Nordhavs Expedition“ the length of head by our specimens is also about $\frac{1}{4}$ of total length; the eyes are about $\frac{1}{3}$ or $\frac{1}{4}$ of the length of the head. On the chin they have a small rudimentary barbel.

The minute teeth on the intermaxillaries, the lower jaw and on the vomer are obvious; on the palatine bones I do not observe any teeth.

The position of the vent is vertical under the first ray of the second dorsal fin. The space between the dorsal and anal fins is distinct; the width of the spaces less than the diameter of the eye. Caudal fin equally lobed. Scalis very minute, circular in form, covering the whole surface of the body.

The ground colour is yellowish brown with a great quantity of reddish brown points, especially on the head. The fins have an equal colour, the ends of the fin-rays are dark brownish. The abdominal surface argenteous. The system of mucous pores over the head is distinct and arranged in the manner as described by COLLETT (»Den Norske Nordhav-Expedition« 1876—1878. p. 129).

Food. In the stomach of the two specimens no remains of food were found.

Geographical distribution. Spitzbergen (PARRY), Beeren Island, Magdalene Bay, Barentz Island, Matotskin Sharr (HEUGLIN), in the White sea (exceedingly abundant), on the shores of Greenland and in the Arctic regions of North-America. Alaska.

The two species obtained by the Dutch Expedition were dredged :

α . lat. $71^{\circ} 6'$ N.; length $63^{\circ} 4'$ E. (Kara Sea). Depth: 76 fathoms. Temperature on the bottom: — $1^{\circ}.2$ C.; density of the water on the bottom: 1025.0; temperature on the surface: $0^{\circ}.6$ C.; density of the water on the surface: 1001.0. Bottom: brown mud.

β . lat. $71^{\circ} 4'$ N.; length $62^{\circ} 45'$ E. (Kara Sea). Depth: 77 fathoms. Temperature on the bottom: — $0^{\circ}.9$ C.; density of the seawater on the bottom 1027.0; temperature on the surface: $1^{\circ}.1$ C.; density of the seawater on the surface: 1001.0. Bottom: brown mud.

Bathymetrical distribution. Shorefish. Depth: to 76 fathoms.

In the Museum of the Royal Zoological Society »Natura Artis Magistra« in Amsterdam.

16 Dec. 1886.

My Report on the Fishes of the Dutch Arctic-Expedition was already finished when I received from Prof. CHR. F. LÜTKEN in Copenhagen his treatise »Et Bidrag til Kundskab om Kara-Havets Fiske«. Kjøbenhavn. 1886. (Saertryk af »Dymphna-Togtets Zoologisk-botaniske Udbytte«). According to the treatise of Prof. LÜTKEN ten species of fishes were obtained by the Danish Arctic-Expedition in the Kara-Sea: *Aspidophoroides Olrikii* Ltk., *Icelus hamatus*, Kr., *Lycodes pallidus*, Coll., *Lycodes Lütkenii*, Coll., *Lycodes perspicillum*, Kr., (?), *Lumpenus medius*, Rhdt., *Liparis Reinhardtii*, Kr., *Liparis Fabricii*, Kr., *Gymnelis viridis*, Fabr. and *Gadus Saïda*, Lep. Only four of those species were dredged in the Kara-Sea by the Dutch Expedition: *Icelus hamatus*, Kr., *Lumpenus medius* Rh., *Lycodes Lütkenii*, Coll., and *Gadus Saïda*, Lep.; the other species, named in my Report were dredged in lat. $69^{\circ} 65'$ N., length $58^{\circ} 54'$ E. west from Waigatsj-Island, and also one individual α of *Lycodes Lütkenii* was obtained from the same station. Relating to our knowledge of the Ichthyological Fauna of the Barents-Sea, in comparison to our knowledge of the same Fauna in the Kara-Sea, I can not find a great difference between. Lütken remarks (l. c. p. 6), that the two genus *Lycodes* and *Liparis* are not been found till now in the Barents-Sea, but against this opinion I ask the attention to the facts, in the first place, that one individual of *Lycodes Lütkenii*, according to my Report, was dredged by the Dutch Expedition on a station, west from Waigatsj-Island and in the second place, that I found several individuals of the two genus *Lycodes* and *Liparis* under the fishes, obtained by the »Willem-Barents« Expedition, collected during the cruises of that schooner in the years 1880—1884. In a few time I hope to publish the results of my researches relating to the Ichthyological Fauna of the Barents-Sea.

10th of July 1887.