

A Collection of Fishes from Syowa Station, Antarctica*

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昭和基地の魚類

阿部宗明**・星合孝男***

要旨：1961年から1970年の間に，日本南極地域観測隊員が，昭和基地とその付近で釣獲した魚には，次の9種があった。

ノトセニア科 *Nototheniidae*

1. 昭和ギス *Trematomus bernacchii* BOULENGER
2. 昭和ギスダマシ *T. vicarius* LÖNNBERG
3. 禿ギス *T. newnesi* BOULENGER
4. ニセ禿ギス *T. nicolai* BOULENGER
5. 坊主禿ギス *T. borchgrevinki* (BOULENGER)
6. 鱗ギス *T. hansonii* BOULENGER
7. 鱗棘ギス *T. centronotus* REGAN
8. ライギョダマシ *Trematomus* sp.

バンドラコ科 *Bathyaconidae*

9. 牙ゴチ *Gymnodraco acuticeps* BOULENGER

上記の科名も種名も，新和名である。

昭和ギスが最も数多く釣獲された。

During the years 1961 through 1970, some members of the Japanese Antarctic Research Expeditions caught fishes near the coast of Syowa Station with hook and line, and passed on the majority of them to the present writers for study. Despite the remarkable progress in the study of the Antarctic fishes in recent years, there remains much to be done in regard to their individual variation, distribution, ecology and phylogeny. It is thought advisable to publish a record of the fishes of the present collection. With the exception of one species, all the fishes examined by the present writers belong to the family *Nototheniidae* (for which a new Japanese name "Notosenia-ka" is given here) representing eight species.

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The following list of the species will show which are commoner among the coast fishes of Syowa Station.

It is with pleasure that the writers express here their sincere thanks to the members of the expeditions who collected the fishes.

1. *Trematomus bernacchii* BOULENGER. Figs. 1, 2 A and 5 c
Syowa-gisu (new Japanese name)

Specimens examined.

Four Specimens measuring 95–125 mm in total length. Fished on December 7, 1961.

Fourteen specimens measuring 115–ca. 185 mm in total length. Fished in December, 1961. The largest specimen is a female.

One specimen measuring 173 mm in total length. Fished on March 2, 1967; male. Testes fairly well developed.

One specimen measuring 79 mm in total length. Fished on March 28, 1967.

One specimen measuring 160 mm in total length. Fished on June 27, 1967.

One specimen measuring 192 mm in total length. Fished on July 16, 1967; adult male. There are three longitudinal reddish lines on each side of the trunk extending rearwards beyond the vertical through the vent (the specimen has been kept in formalin).

One specimen measuring 177 mm in total length. Fished on July 31, 1971; adult female. Ovaries are spherical in shape. Reddish lines on sides as in the specimen listed just above.

One specimen measuring 88 mm in total length. Fished on September 7, 1967.

2. *Trematomus vicarius* LÖNNBERG. Fig. 2 B
Syowa-gisu-damashi (new Japanese name)

Specimens examined.

Three specimens measuring 150–165 mm in total length. Fished in 1970. Eyes are small, and interorbital width is larger than in *T. bernacchii*.

3. *Trematomus newnesi* BOULENGER. Figs. 3 and 4
Hage-gisu (new Japanese name)

Specimens examined.

One specimen measuring ca. 165 mm in total length. Fished in December, 1961.

One specimen measuring 160 mm in total length. Fished on November 27, 1966.

4. *Trematomus nicolai* (BOULENGER). Fig. 5 b

Nise-hage-gisu (new Japanese name)

Specimen examined.

One specimen measuring 160 mm in total length. Fished in 1970.

5. *Trematomus borchgrevinki* (BOULENGER). Figs. 5 a, 6 and 7

Bôzu-hage-gisu (new Japanese name)

Specimen examined.

One specimen measuring 160 mm in total length. Fished on December 6, 1961.

6. *Trematomus hansonii* BOULENGER. Figs. 5 d and 8

Uroko-gisu (new Japanese name)

Specimens examined.

Two specimens measuring 125 and *ca.* 175 mm respectively, in total length. Fished in December, 1961.

Four specimens measuring *ca.* 195–*ca.* 220 mm in total length. Fished in 1970.

Two specimens probably of this species measuring 125 mm and 127 mm respectively, in total length. Fished in 1970.

7. *Trematomus centronotus* REGAN

Hire-toge-gisu (new Japanese name)

Specimen examined.

One specimen measuring 205 mm in total length. Fished in 1970.

8. *Trematomus* sp. Figs. 9 and 7

Raigyo-damashi (new Japanese name)

Specimens examined.

One specimen measuring *ca.* 235 mm in total length. Fished on November 19, 1966.

One specimen measuring *ca.* 220 mm in total length. Fished in 1970.

9. *Gymnodraco acuticeps* BOULENGER. Figs. 11, 12, 13 and 14

Kiba-gochi (new Japanese name)

Specimen examined.

One specimen measuring 225 mm in total length. Fished in 1970.

References

As to the famous publications published before 1970, readers are requested to see "Literature Cited" of the following paper by Hugh H. DEWITT (1970).

ANDRIASHEV, A. P. and M. JAKUBOWSKY (1971): Morphological grounds for generic separation

- of the Antarctic broadhead-fishes (*Trematomus borchgrevinki* BOULENGER and *T. brachysoma* PAPPENHEIM) and a new status of the genus *Pagothenia* NICHOLS et LAMONTE (Nototheniidae). Zool. Djurn, 50 (7), 1041-1055. In Russian; summary in English.
- DEWITT, Hugh H. (1970): A revision of the fishes of the genus *Notothenia* from the New Zealand region, including Macquarie Island. Proc. California Acad. Sci., 4th Ser., 38 (16), (Festschrift for George Sprague Myers), 299-340.
- HUREAU, J. C. (1970): Biologie comparée de quelques poissons antarctiques (Nototheniidae). Bull. Inst. Océanogr. Monaco, 68 (1391), 244.
- JAKUBOVSKY, M. (1970): The morphological characteristics of the lateral line organs in fishes belonging to the Antarctic genus *Trematomus* BOUL. (Nototheniidae, PISCES). Problems of Ichthyology, 10 (2), 385-390. In Russian; title in English,
- _____ (1971): Morphological features of the system of lateral line organs in fishes belonging to genus *Notothenia* RICH. and other genera of family Nototheniidae (PISCES). Problems of Ichthyology, 11 (4), 595-601. In Russian; title in English.
- PERMITIN, Y. E. and Z. S. SILYANOVA (1971): Some data on the reproduction biology and the fecundity of *Notothenia* RICH. of the Sea (the Antarctic). Problems of Ichthyology, 11 (5), 806-819. In Russian; title in English.

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Fig. 1. *Trematomus bernacchii* BOULENGER;
“Syowa-gisu”.

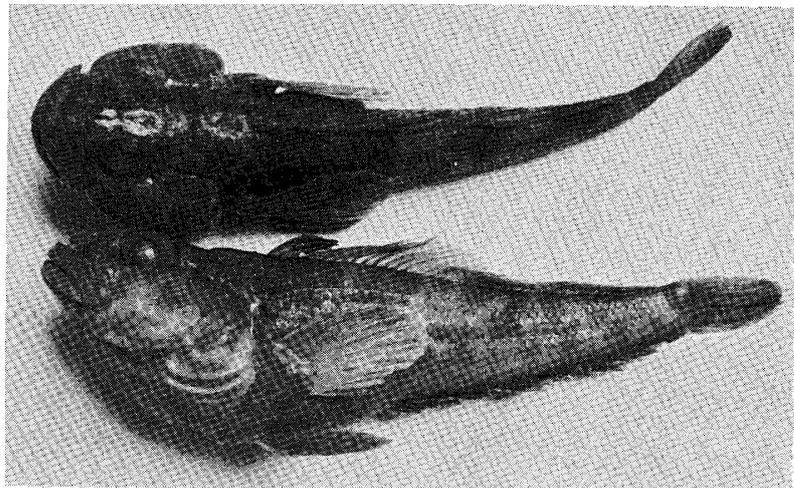


Fig. 2. *Trematomus bernacchii* BOULENGER.
A: Dorsal view of *T. bernacchii*.
B: Dorsal view of *Trematomus vicarius* LÖNNBERG;
(Syowa-gisu-damashi). From NORMAN,
1938.

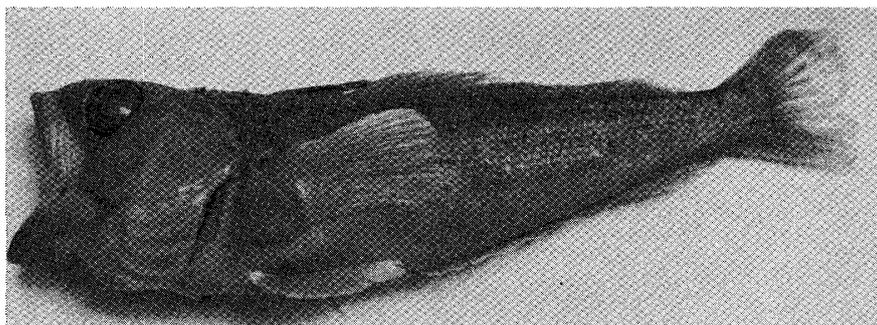
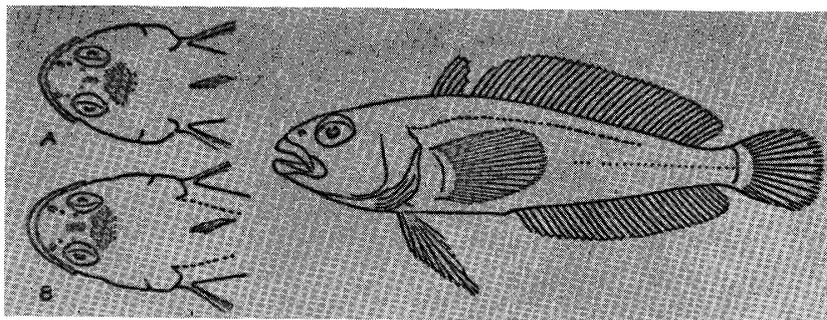


Fig. 3. *Trematomus newnesi* BOULENGER; “Hage-gisu”.

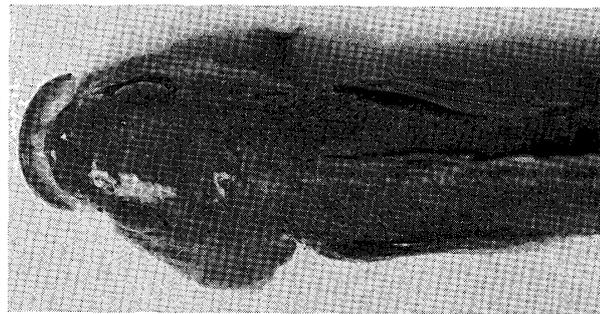


Fig. 4. Dorsal view of *T. newnesi*.

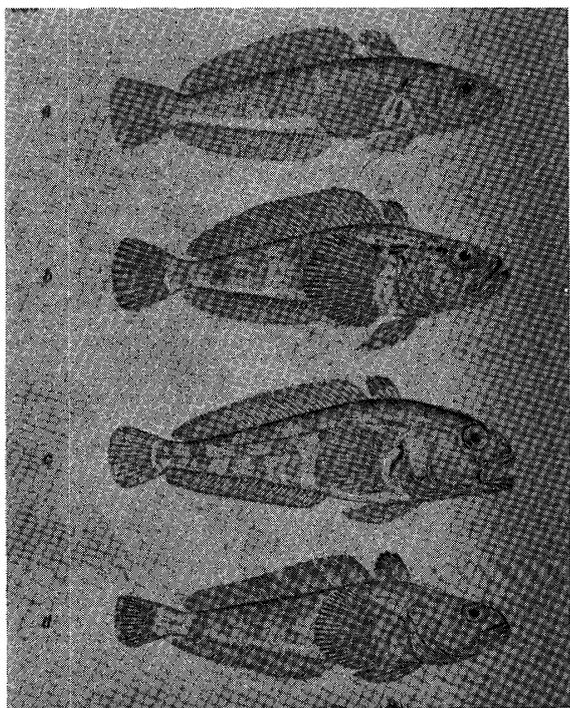


Fig. 5. a: *Trematomus borchgrevinki* (BOULENGER);
“Bozu-hage-gisu”.
b: *Trematomus nicolai* (BOULENGER); “Nise-
hage-gisu”.
c: *Trematomus bernacchii* BOULENGER;
“Syowa-gisu”.
d: *Trematomus hansonii* BOULENGER;
“Uroko-gisu.” From ANDRIASHEV. 1965.

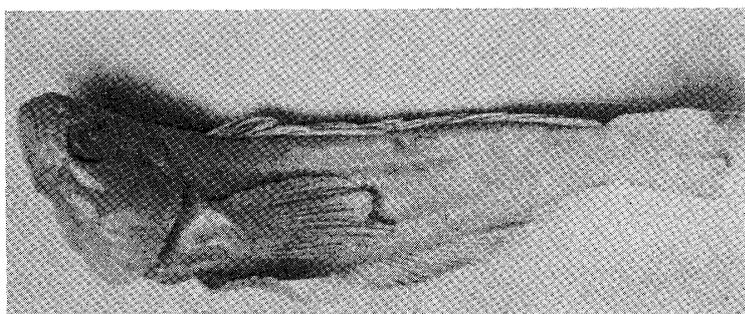


Fig. 6. *Trematomus borchgrevinki* (BOULENGER);
“Bozu-hage-gisu”.

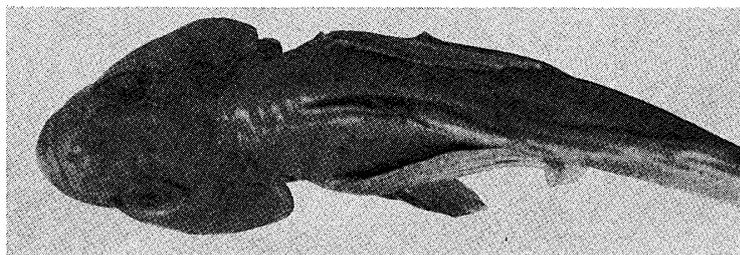


Fig. 7. Dorsal view of *T. borchgrevinki*.

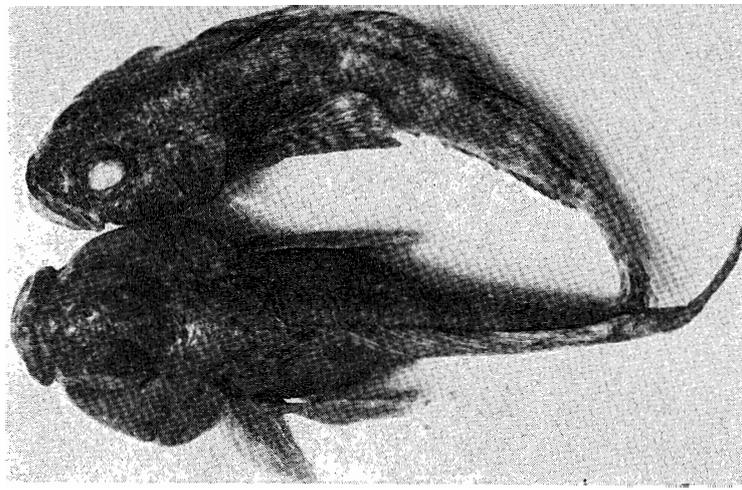


Fig. 8. *Trematomus hansonii* BOULENGER; "Urokō-gisu".

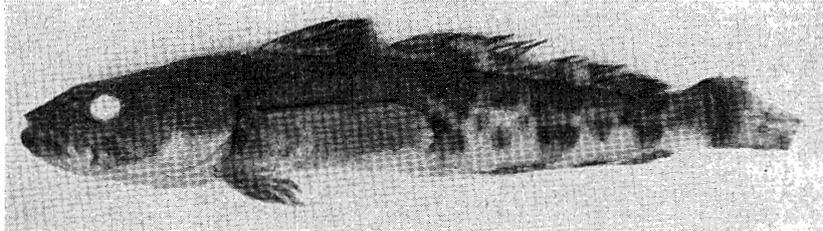


Fig. 9. Lateral view of *Trematomus* sp.; "Raigyō-damashi".

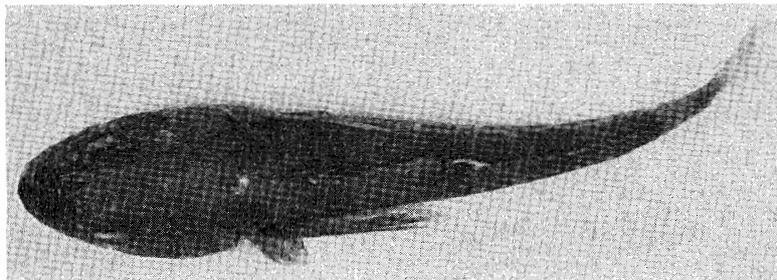


Fig. 10. Dorsal view of *Trematomus* sp.

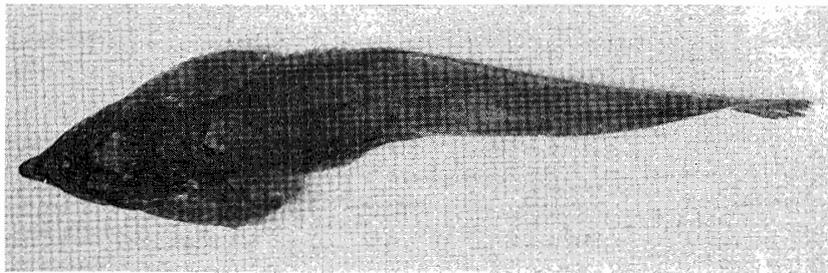


Fig. 11. Dorsal view of *Gymnodraco acuticeps* BOULENGER; "Kiba-gochi".

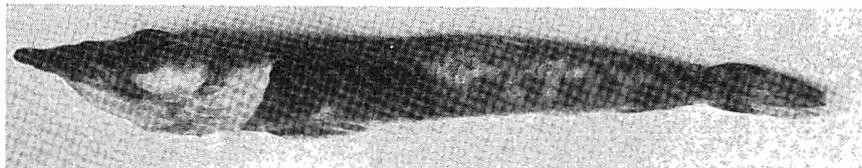


Fig. 12. Lateral view of *G. acuticeps*.

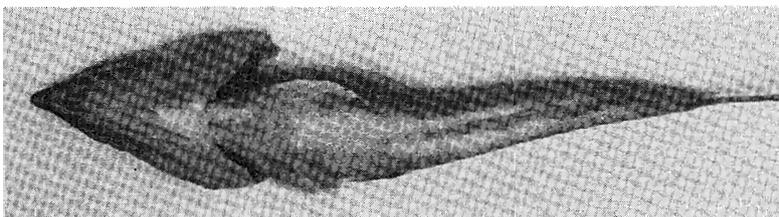


Fig. 13. Ventral view of *G. acuticeps*.

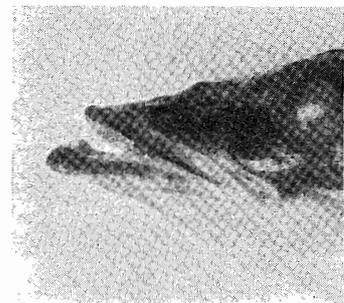


Fig. 14. Snout of *G. acuticeps*.