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**The Red Devil, *Lyconectes aleutensis* Gilbert, Taken in  
the Gulf of Alaska by a Shrimp Trawler**

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**Abstract**

Few specimens of *Lyconectes aleutensis* have been recorded in the literature. In this paper, a specimen of this species is described, which was captured off the coast of the Shumagin Islands.

**Introduction**

When the author was afforded an opportunity to be on board a trawler as inspector of fishery in the Gulf of Alaska from April 15, 1964 to June 19, he secured a red devil, *Lyconectes aleutensis*, which was captured by the shrimp trawler, "Tenryu-Maru", on May 21, 1964 off the coast of the Shumagin Is. This species, belonging to the family of Cryptacanthodidae, was first described by C.H. Gilbert in 1895 from north of Unalaska Island.<sup>1)</sup> Thereafter, few taxonomic descriptions have been reported up to now,<sup>2),3),4),5)</sup> in spite of considerable records of capture.<sup>6),7)</sup> The present specimen is 219 mm in total length.

**Description**

Head 12.5% of total length; 13.6% of standard length; depth 6.9% of standard length. Dorsal LXVII; Anal II, 45; Pectoral 13; Caudal 19; Pelvic absent; Branchiostegals 7. Body elongated, slender, slightly compressed, more compressed posteriorly, covered with loose naked skin. Head blunt, rather square in cross section, the cheek vertical, the depth smaller than the width. Mouth terminal, moderate, directed almost straight upward; upper jaw protractile, the exposed portion of the maxillary triangular, extending to vertical from middle of the eye, lower jaw heavy. Teeth all similar, bluntly conical; those in premaxillary arranged irregularly, roughly in two series, 13 on each side. Teeth in mandible in a single series laterally, becoming a sparsely filled patch toward symphysis, 13 on each side. Two strong, conical obtuse teeth on head of vomer. Palatines toothless. Nostril tube long, overhanging the upper lip. Eye very small, high, sunken in the socket, its diameter less than half of interorbital width. The supraorbital rim not elevated. Suborbital rim swollen. A series of conspicuous mucous pits along each mandible and the margin of the preopercle, 9 on each side. Ridges on parietals, frontals and nasals; depressions among ridges. A depression on the mid line of the interorbital space, another depression above eye and it continues on postocular; a shallow triangular depression on occiput. Gill-slit narrow, its length 80% of the distance between lower ends of gill-slits. The

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gill membrane united, joined to isthmus; gill-rakers small, conical and weak, 2+10 on the first arch. The origin of dorsal falls behind axil of pectorals. Dorsal and anal confluent with caudal; spines of dorsal flexible, tip of those slightly projecting, not concealed in heavy fin membranes; origin of anal in advance of middle of standard length, its distance from tip of snout is 43% of the length; pectoral small, rounded, its base separated by a prepectoral area from gill-slit, the fin about equaling to the length of gill-slit. Lateral line faint, invisible to the naked eye, 49 pores counted. Scales absent. Colour in life is red with a dash of vermilion on head, body and fins.

A single specimen, female, 201 mm in standard length, dredged on May 21, 1964, off the coast of the Shumagin Is., Lat. 55°37'N, Long. 159°40'W, depth 160 m.

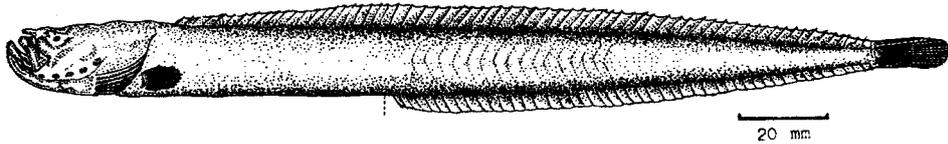


Fig. 1. *Lyconectes aleutensis*: 201 mm in standard length; off the coast of the Shumagin Is.

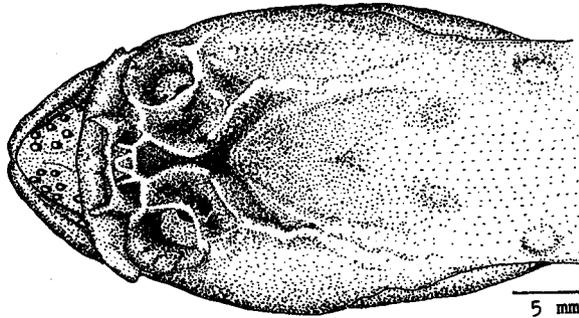


Fig. 2. Dorsal view of the head of the specimen shown in Fig. 1.

### Recognition

This species is very closely related to *Cryptacanthoides bergi* reported by Soldatov, V.K. and Lindberg, G.U.<sup>8)</sup> in 1930 from Peter the Great Bay, Japan Sea, but is distinguished from it in the absence of tooth on the palatine and there being no deposition of pigments on skin and fin membranes.

### Acknowledgements

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### References

- 1) Gilbert, C.H. (1895). The ichthyological collections of the steamer "Albatross" during the years 1890 and 1891. *Rep. U.S. Comm. Fish.* **19**, 393-476, 16 pls.
- 2) Clemens, W.A. and Wilby, G.W. (1961). *Fishes of the Pacific coast of Canada*. Bull. Fish. Res. Board Ca. 68 (2nd ed.). 443 p. 281 figs. Ottawa.
- 3) Hart, J.L. (1973). *Pacific fishes of Canada*. Bull. Fish. Res. Board Ca. 180, ix+740 p. 328 figs. Ottawa.
- 4) Jordan, D.S. and Evermann, B.W. (1896-1900). The fishes of North and Middle America. *Bull. U.S. Nat. Mus.* **47**, 1-3313 (Part 3. 2443-2444, pl. 346).
- 5) Schultz, L.P. (1930). Miscellaneous observations on fishes of Washington. *Copeia* **1930** (4), 137-140.
- 6) Barraclough, W.E., Robinson, D.G. and Fulton, J.D. (1968). Data record. Number, size composition, weight and food of larval and juvenile fish caught with a two-boat surface trawl in Saanich inlet April 23-July 21, 1968. *Fish. Res. Board Ca. MS Rep.* Ser. 1004, 1-305.
- 7) Robinson, D.G., Barraclough, W.E. and Fulton, J.D. (1968). Data record. Number, size composition, weight and food of larval and juvenile fish caught with a two-boat surface trawl in the Strait of Georgia, May 1-4, 1967. *Fish. Res. Board Ca. MS Rep.* Ser. 964, 1-105.
- 8) Soldatov, V.K. and Lindberg, G.U. (1930). A review of the fishes of the seas of the Far East. *Bull. Pac. Sci. Fish. Inst.* **5**, XLVII+576 p. 76 figs. 16 pls.