

The typical specimen, which is nearly 17 inches long (head $3\frac{1}{2}$ inches) came from Port Arthur. But the species appears also on the New Zealand coast, whence I have received specimens 21 inches long, the head measuring $4\frac{1}{2}$ inches. These specimens offered evidence of the change of the form of the snout which the species of this genus undergo with age, the snout being comparatively longer in old specimens than in young ones, as may be seen from the following measurements:—

	Head.	Eye.	Snout.
a. Port Arthur, . . .	42 lines	12 lines	11 lines
b. Wellington, . . .	54 „	16 „	20 „

Several very young specimens, 4 to $4\frac{1}{2}$ inches long, were obtained by the Challenger at Station 166, in 275 fathoms. In these the snout is comparatively still shorter, and scales are developed only on the anterior part of the body. There is a fontanelle-like depression between the ventral fins, but it does not seem to persist throughout life in this species, as in *Macrurus cælorhynchus*. Also in an example $5\frac{1}{2}$ inches long, from Cape Campbell, New Zealand, the ventral fontanelle is still present, but the whole body is clothed with hard and well-developed scales, which, however, show a structure different from that of the scale of the adult fish. Each scale is provided with five radiating keels, prominent, and projecting beyond the margin of the scale. Each keel, being in fact a series of imbricated spines, is serrated in its whole length.

Macrurus cælorhynchus.

- Lepidoleprus cælorhynchus*, Risso, Ichth. Nice, p. 200, pl. vii. fig. 22; Eur. mérid., iii., p. 244.
Macrourus cælorhynchus, Bonap., Faun. Ital. Pesc. (pl. *Macrourus mysticetus*).
 „ „ Costa, Faun. Nap., pl. xxxix.
 „ „ Canestrini, Arch. Zool., ii. p. 374.
 „ „ Johns., Ann. and Mag. Nat. Hist., 1862, vol. x. p. 169.
 „ „ Vinciguerra, Ann. Mus. Genov., vol. xiv., 1879, p. 619; vol. xviii. 1882, p. 565.
Macrurus atlanticus, Lowe, Proc. Zool. Soc. Lond., 1839, p. 88.
 „ „ Günth., Fish., vol. iv. p. 392.

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Snout moderately produced, angular in front, a little shorter than or equal to the eye, the diameter of which is one-third of the length of the head. Scales of moderate size, covered with minute spines, giving a granular appearance to their surface. There are five or six scales in a transverse series, between the first dorsal fin and the lateral line. Dorsal spine smooth. Abdomen, that is, distance of the vent from the isthmus, equal to the length of the head without snout in specimens about 12 inches long. Outer ventral ray produced into a short filament.