is used. From the development of its luminous organs, which cover in great number not only the lower but also the lateral parts of the body, we may infer that its habits are nocturnal. It is not known to what depth it descends during the daytime, but it is very improbable that the two specimens from Station 101 were caught at the depth of 2500 fathoms.

No more is known about the habits of the other species of the genus which have been described, viz., *Astronesthes richardsonii* (Poey), *Astronesthes barbatus* (Kner),[1] *Astronesthes martensii* (Klunz.), *Astronesthes chrysophekadion* (Blkr.).[2]

Stomias, Cuv.

Stomias boa.

Esox boa, Risso.
Stomias boa, Cuv. Val., vol. xviii. p. 368, fig. 545.
„ *barbatus*, Cuv., Règne animal.
„ „ Bonap., Faun. ital. Pesc. (*c. fig. mala*).

I refer to this species a specimen obtained south of Australia, Station 158, in 1800 fathoms, as it agrees with the only detailed and reliable description and figure which have hitherto been given of the Mediterranean fish, viz., by Valenciennes. Peters[3] also states that he has not found any difference between a specimen from Nice and one from the Pacific, caught in lat. 42° 56′ S., and long. 149° 26′ W. However, I must not omit to mention that none of the authors referred to have given the number of luminous spots along the abdomen, and that, not having a specimen from the Mediterranean, I am consequently unable to assert the agreement of our fish in this respect; also that Valenciennes has counted seventy-two scales along the side of the body, whilst our Antarctic specimen possesses eighty-eight. Ussow,[4] in his valuable contribution to our knowledge of the structure of the luminous spots, states that *Stomias barbatus* and *Stomias anguilliformis*[5] possess fifteen luminous spots in a series from the caudal fin to the anal, thirty-five from the anal to the ventral, and twenty-two from the ventral to the pectoral. But these numbers differ so much from my own observations that I cannot help thinking that by some error the numbers were confused in his table.

As a full description has been given of *Stomias* elsewhere, I append here only a diagnosis taken from the Antarctic specimen.

[1] = *Stomias leucopterus*, Eyd. and Soul., Voy. Bonite. Zool., tom. i. p. 193, pl. vii. fig. 4.

[2] A fish mentioned and figured in *La Nature*, 1884, p. 185, under the name of "*Eustomias obscurus* (N. S. N. S., L. Vaill.)," is not characterised, but the figure represents it with a long barbel terminating in a phosphorescent button-like swelling; it was captured in the Atlantic during the voyage of the "Talisman" at a depth of 2700 metres.

[3] *Monatsber. d. k. preuss. Akad. d. Wiss. Berlin*, 1876, p. 846.

[4] *Bull. Soc. imp. des Nat. Moscou*, 1879, p. 108.

[5] A name for which I have unsuccessfully searched ichthyological literature.