

contamination. Furthermore, their intensities relative to the main line 32 will be double those of atomic abundance. On photographing the spectra all three lines were quite clear, and by giving suitable exposures, for example, 3 seconds and 15 minutes, their relative intensities could be estimated. Line 32 was found to be 268 times as intense as line 34, which was 4.2 times as intense as line 33.

These can only be regarded as rough minima, for owing to the action of the oxygen discharge on the wax and grease it is certain that sulphur is present, and if to the extent of 1 per cent, would enhance line 34 by about ten per cent and line 33 even more. It is clearly useless to push the accuracy further until an apparatus is available from which sulphur and other possible sources of contamination can be excluded, but so far as they are valid, the ratios 536 and 4.2 support the figures 630 and 5 given by Mecke and Childs³ as against the lower abundances previously estimated.

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Cavendish Laboratory,
Cambridge, June 16.

¹ "Rays of Positive Electricity", 83; 1921.

² *Phys. Z.*, 31, 888; 1930.

³ *Z. Physik*, 68, 362; 1931.

An Ocean Sunfish in Malaysian Waters

THE species under consideration (*Mola lanceolata*) is so rare that I venture to think that a preliminary note on a recent capture may not be out of place in the columns of NATURE. A more detailed account will, it is hoped, appear in the *Bulletin of the Raffles Museum* during the course of the year.

A specimen of an ocean sunfish, *Mola lanceolata* (Liénard), was taken in a fishing-stake at Noembing, off Bintan Island in the Rhio Archipelago, during the night of April 11-12, 1932. Fortunately, the owner of the stake realised the unusual nature of his catch and presented it to this Museum.

The adult specimens now known appear to be as follows:

1. The type, described by Liénard in 1840, taken off Mauritius.

2. A specimen taken off Amboina and described by Bleeker in 1873 as *Orthogoriscus oxyuropterus* (*Vers. Akad. Amsterdam* (7), 2; 1873). The "Zoological Record" for that year contains a reference to the possible identity of this species with *O. lanceolatus*, and Fowler (*B. P. Bishop Museum Occasional Papers*, 8, No. 7, 1923, 387) includes it in the synonymy of *Masturus lanceolatus*.

3. A large specimen (2 metres in length) taken near the Azores by the Prince of Monaco (Johs. Schmidt, *NATURE*, 107, 76; 1921).

4. A specimen in the Honolulu Museum recorded as *Masturus lanceolatus* by Jordan and Jordan (*Mem. Carnegie Mus.*, 10, No. 1, 89; 1922, fig.). The authors refer to it as the third recorded specimen, but had evidently not seen Schmidt's work. A fuller account is given by Fowler ("Fishes of Oceania", *Mem. B. P. Bishop Mus.*, 10, 474; 1928, fig.).

5. The present specimen. Like that from Honolulu, it is about 4 ft. in length.* The spotting of the caudal is much as in Fowler's figure, but only extends slightly on to the bases of the other vertical fins. The small gill opening is in the form of a short funnel, projecting backward, and there can be little doubt that it is used as an auxiliary steering apparatus by squirting out a jet of water, as suggested by Capt. Damant for *Mola mola* (*NATURE*, 116, 543; 1925).

* According to Jordan and Jordan, the Honolulu cast is 4 ft. in length; presumably, therefore, this represents the length in life, but Fowler gives the length of the spirit specimen as 948 mm., or just over 3 ft.

The cartilaginous layer under the skin has a thickness in parts of about 1½ inches. The flesh was strikingly white, tender, and watery, disintegrating rapidly when scraped. In the stomach was a sucker-fish (*Echeneis remora* Linn.), 8 inches in length.

The remarks of Schmidt (*loc. cit.* and *NATURE*, 117, 80; 1926) on the early stages of *Mola lanceolata* and allied species are of very great interest in view of the wide range from which the few known adults of *M. lanceolata* have been taken. If any specific or racial distinction could be found between these specimens, it would be logical to look for local breeding grounds. In the case of a single species, it would appear from Schmidt's conclusions that the Sargasso Sea is the nursery, and the wide distribution must be attributed solely to the action of ocean currents.

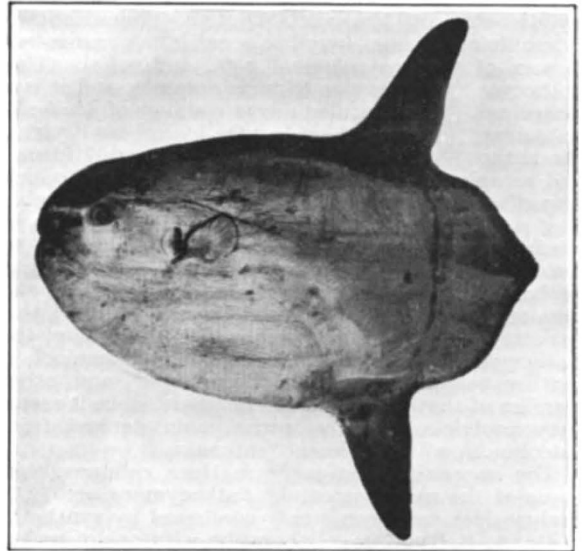


FIG. 1.—*Mola lanceolata*, from Noembing, Rhio Archipelago.

In such a case, it is difficult to believe that *Mola mola* would not be found with equal if not greater frequency over the same range. Perhaps Dr. Schmidt is in a position to suggest the true state of affairs. It would also be interesting to see the evidence for regarding the larvæ from the Sargasso Sea as those of *Mola lanceolata*. They were apparently not bred from the egg, and a very close series would therefore appear to be necessary to make certain of specific identity. In this connexion I would point out that I am handicapped by lack of literature, and have not been able to read Dr. Schmidt's detailed work ("Meddelelser fra Kommissionen for Havundersø-gelser", Serie Fiskeri, 6, 1921), in which this latter point may be successfully met.

It seems probable that other specimens of *Mola lanceolata* have been taken and not put on record; duly authenticated notices of the capture of this species may help towards the solution of a problem of no little interest.

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April 14.

'Powder-Post' Beetles

As a result of detailed observations supplemented by experiments, it can be stated that the actual food of the larvæ of *Lyctus* spp. (the powder-post beetles) is the starch present in the cells of the wood they infest. This starch is the main reserve substance of the plant, is present in the sap-wood only, and varies in quantity