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I. Wissenschaftliche Mittheilungen.

1. The Genital-pores of the Male *Antedon rosacea*.

By William S. Marshall, Asst. Prof. Zoology, Univ. of Wisconsin.

(With 2 figs.)

eingeg. 10. December 1901.

Lang¹ in his text-book when speaking of the expulsion of the genital products by the Crinoids says: »Die Art und Weise, wie die reifen Geschlechtsproducte aus den Pinnulae entleert werden, ist noch nicht in befriedigender Weise ermittelt.«

Earlier, Teuscher², in 1876, said that the genital products of the male pinnules were expelled through pores, and the eggs by dehiscence. When he, however, further states that the male pores »mit einer guten Lupe wahrzunehmen sind« he must have referred to some opening other than the male pores which are not large enough to be seen without a microscope. Ludwig³ and Hamann⁴ thought that regular openings were probable, and Vogt and Yung⁵ noted the expulsion of the spermatozoa through pores which they, however, did not figure.

¹ A. Lang, Lehrbuch der vergleichenden Anatomie. Echinodermata. p. 1090.

² Teuscher, Beiträge z. Anat. d. Crinoiden. Jena. Zeitschr. Bd. X. 1876.

³ Ludwig, Zeitschr. f. Wiss. Zool. Bd. XXVIII. 1877.

⁴ Hamann, Beiträge zur Histologie der Echinodermen. Heft IV. Ophiuren und Crinoiden.

⁵ Vogt und Yung, Lehrb. d. pract. vergl. Anat. Bd. I. p. 575.

While working with a series of sections of a male pinnule of *A. rosacea*⁶ I noticed a number of pores penetrating nearly through the wall, which upon further examination were found to be present in a number of pinnules upon each arm of the two specimens examined. As many as four pores were found on a single pinnule, they having, however, no very definite position other than being in the neighborhood of the sacculi. From the specimens examined I am led to believe that these pores are present in ripe pinnules and that through them the spermatozoa are expelled.

Fig. 1, a longitudinal section of part of a ripe male pinnule, shows one of the pores and its relation to the other parts of the pinnule. The regularity of the infolding of the germinal epithelium is at certain

Fig. 1.

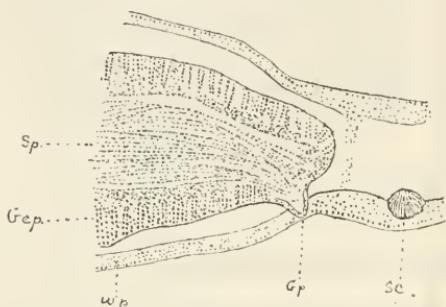


Fig. 1. Longitudinal section of part of a male pinnule. *Sp.*, spermatozoa; *Gep.*, germinal epithelium; *wp*, wall of pinnule; *Gp*, genital-pore; *Sc*, sacculus. Zeiss, Obj. A. Oc. 2.

Fig. 2.



Fig. 2. Section of a genital-pore filled with spermatozoa. *Sp.*, spermatozoa; *wp*, wall of pinnule. Zeiss, Obj. D. Oc. 2.

points interrupted; here the genital strand has grown towards and partially through the wall of the pinnule, and the lining epithelial cells show much plainer at this point than in any other part of the section. The fully developed and developing spermatozoa show a longitudinal linear arrangement which is broken wherever one of the genital pores is developed and at this point they pass outward to fill the pore, undoubtedly remaining within it until its rupture, when they are expelled into the water.

In Fig. 2, a more highly magnified view of another pore, the epithelial cells of the genital strand are shown pushed nearly through the wall of the pinnule. The nuclei of both the genital epithelium and the wall of pinnule were easily seen, but I was unable to distinguish

⁶ My material was taken from museum specimens prepared at the Zoological Station in Naples.

any of the cell boundaries. All of the fifteen to twenty pores examined showed a great similarity of structure containing spermatozoa in nearly every instance, and differing only in the distance that the pore had pushed through the wall of the pinnule. In one specimen the pore was ruptured, the outer wall being broken, but all the spermatozoa still remained within the pinnule; those within and near the entrance of the pore had been cut obliquely and could be seen arranged parallel to the long axis of the pore.

2. Richtigstellung eines Gattungsnamens unter den Siluriden.

Von Franz Poche, Wien.

eingeg. 13. December 1901.

Im Jahre 1888 beschrieb Pfeffer (Jahrb. Hamb. Wiss. Anst. VI, 2, p. 15 f.) einen neuen ostafrikanischen Siluriden und stellte für denselben eine eigene Gattung, *Anoplopterus*, auf. Die Art nannte er *A. uranoscopus*. Neun Jahre später stellte Vaillant (Bull. Mus. Hist. nat. Paris 1897, p. 81) das Genus *Chimarrhoglanis* auf und zwar für eine gleichfalls aus Ostafrika stammende, vermeintlich neue Art, die er (t. c., p. 82) als *C. Leroyi* beschrieb. Bald darauf zog Boulenger (Ann. Mag. Nat. Hist. (7) I, 1898, p. 245 f.) *Pimelodus platychir* Gthr. zu *Anoplopterus* und zeigte zugleich, daß die Gattung *Chimarrhoglanis* mit *Anoplopterus* zusammenfalle und auch die Art *C. Leroyi* mit *A. platychir* identisch sei.

Nun hatte aber Günther schon im Jahre 1864 (Cat. Fishes Coll. Brit. Mus. V, p. 115) für seinen *Pimelodus platychir* eine eigene »division« dieses Genus aufgestellt und dieselbe *Amphilius* genannt. Bald darauf kamen ihm sogar Zweifel, ob es überhaupt richtig gewesen war, diese Form in die Gattung *Pimelodus* zu stellen; denn er sagt (Zool. Rec. for 1864 I, Pisces, p. 165): »*Pimelodus platychir* ist der erste seiner Art, der in Westafrika gefunden wurde, und vielleicht der Typus einer eigenen Gattung *Amphilius*.« Es ist also klar, daß diesem Namen die Priorität gebührt, und es stellt sich daher die Synonymie des in Rede stehenden Genus folgendermaßen:

Amphilius Günther, Cat. Fishes Coll. Brit. Mus. V, 1864, p. 115
(*platychir*).

Anoplopterus Pfeffer, Jahrb. Hamb. Wiss. Anst. VI, 2, 1888, p. 15
(*uranoscopus*).

Chimarrhoglanis Vaillant, Bull. Mus. Hist. nat. Paris 1897, p. 81
(*Leroyi*).

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