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NOTES ON IRISH OLIGOCHAETS.

BY REV. HILDERIC FRIEND.

Having recently had occasion to review some of the questions relating to our British Annelids, I have come across a number of facts which are not without interest in relation to Ireland. The following notes are intended to assist in a better understanding of this important group of animals. Our first problem is :—

WHAT IS LUMBRICUS LINEATUS O.F.M. ?

In W. Thompson's "Natural History of Ireland," vol. iv., p. 428 (1856), we find the following :—

Genus Lumbricus.

L. lineatus, Müller. Coast of Down, W. T. Was so named by Dr. Johnston, to whom a large collection of Irish Annelides was submitted for the purpose of being named and described; the localities noted were attached to the specimens.

That, so far as I am aware, is the first and only reference to the occurrence of this Pachydrilid in Ireland. Can it be confirmed? In 1865 the Trustees of the British Museum published a Catalogue of Worms(1), by Dr. George Johnston, of Edinburgh, in which we find, under the Genus *Saenuris* Hoffmeister, this record :—

"*S. lineata*, dorsal vessel simple, tortuous; segments about 40; anal segment sinuate. Length 6mm.

Der rothe Wurm, Müller, *Wurm-Arten*, 110; der Faden-Wurm, 118, tab. 3, f. 4, 5.

Lumbricus lineatus, Müller, *Verm.* i., ii. 29, *Zool. Dan. Prod.*, No. 2606. Fabricius, *Faun. Groenl.* 278.

Nais littoralis, var. Müller. *Zool. Dan.*, tab. 80. f. 1-4.

Saenuris lineata, Grube, *Fam. Annel.* 103, [146].

Hab.—In wet gravel or sand on the shore where the water is brackish.

Desc.—Worm slender, slightly narrower at both ends, of a reddish colour to the naked eye, smooth, the sides neatly crenulated. Segments about equal in length to their diameter. Anal segment obtuse, deeply sinuate, mutable in form, for the little prominences which bound the sinus can be expanded or shut at pleasure.¹ Spinets in four series, equidistant, from two to four in each fascicle, short, curved like an italic *f*, and sharp at the apex.

(*L.*) Ferne Isles, Northumberland, Dr. Johnston."

¹ This is a curious point, indicating in my judgment that specimens were examined whose anal extremity was infested with parasites. These are of frequent occurrence. Otherwise a Naid may have been mixed with the material.

Though the other species placed under *Saenuris* in Johnston's Catalogue are either Tubificids or Lumbriculids, it is evident that this is a red-blooded Enchytraeid (Pachydrilid). But confusion begins when we turn to Grube,(2) who makes it a Tubificid.

" Gattung Saenuris.

Übersicht der Arten.

Haar- formige Borsten	}	Solang als der Leib breit, viel länger als die Hakenborsten, letztere zu je 4 oder 5, Blut roth, etwa 140-160 Segmente.	<i>S. variegata.</i>
		Wenig länger als die Hakenborsten, letztere zu je 8 oder 9, Blut orange gelb, etwa 70 Segmente.	<i>S. lineata."</i>

From the days of Grube till those of Michaelsen(3) the confusion has gradually become worse confounded.

On the occasion of my visit to Ireland in March, 1913, I first gained a clue to the solution of the mystery so far as the Irish material is concerned. Along with certain Pachydrilids found in and around Dublin were also some specimens of a Tubificid whose identity has not yet been determined. But it was during the recent examination of a large quantity of material from the Manchester sewage works that I was able to place the matter in its true light. Michaelsen(4), in 1909, published an account of *Lumbricillus lineatus* O.F.M., and added that it was doubtful whether this species can be differentiated from *L. subterraneus* Vejd., which is remarkable for its long, thin, sperm-funnel. I would further suggest that we have to enquire whether it can be distinguished from *L. verrucosus* Clap.? Now both *subterraneus* and *verrucosus* are recorded by Southern for Ireland, who further draws attention to the fact that *L. litoreus* Hesse is practically indistinguishable from *lineatus* O.F.M.

Some years ago (1912) I found typical specimens of *Lumbricillus lineatus* O.F.M. at Middlesborough, and in the same year it was found by me in great abundance in a streamlet at Blackfordby, near Ashby-de-la-Zouch, and by the Canal in Nottingham, as well as by the Gelt, at Gilsland. In recording the fact in the *Zoologist* for that year I gave some attention to the present question, and shewed that two different genera had been confused.

The problem before us has exercised Southern(5) as well as myself, and he hesitated whether or not to record *L. lineatus* as Irish. On looking over my notes of Irish Oligochaets collected by myself in Belfast and Dublin in former years, however, I find that more than one description agrees entirely with that of *lineatus*, while the material from Manchester provided specimens of such diverse form that one could be named *lineatus* and another *verrucosus*, though every intermediate stage could be traced. Since Müller's name takes precedence, and his species is undoubtedly to be recorded as Irish, we have the following results:—

1. *Lumbricillus lineatus* O.F.M. Collected at Belfast by myself, Whitsuntide, 1896; Ringsend, Dublin, March, 1913; Dodder, in mud, by Ballsbridge, same date.

2. *Lumbricillus verrucosus* Clap.

3. *Lumbricillus subterraneus* Vejd.

4. *Lumbricillus litoreus* Hesse,

all to be regarded as more or less closely related to *lineatus*, either as mere varieties or as subspecies.

5. An undetermined worm, wrongly associated by me with *Saenuris lineata* Grube, found at Ringsend, Dublin, with *L. lineatus*, March, 1913.

I wrote in the *Zoologist*(6): "While it is an undoubted Tubificid, it is the only species yet discovered in Britain which has setae like *Lumbricillus*. In this respect, therefore, it is a link between the red-blooded Enchytraeids and the Tubificids." As it is desirable to be able to refer to this interesting worm in future under a definite name, and as my attempt to co-ordinate it with *Saenuris lineata* Grube was an error, I propose the following solution of a difficult question.

GENUS AEGIALINA Friend, n. gen.

Characters as defined for the family Tubificidae by the authorities, except that there are "absolutely no capilliform setae, and no forked setae, but all of the Pachydrilid (*Lumbricillus*) type."—*Zoologist*, June, 1912, p. 221.

¹ The generic name is from the Greek word *αἴγιαλος*, the seashore, strand; and the specific name has allusion to the sigmoid shape of the setae.

AEGIALINA SIGMA, n. sp.

Saenuris lineata Friend, *Zoologist*, 1912.

Length about 20 mm.; segments 65 or thereabouts; Tubifex-like in character, coiling up, and not swimming like *Lumbricillus*. Head and tail pale, middle portion of the body ruddy brown, owing to the blood vessels (red) and chloragogen cells (brown); setae sigmoid, or shaped like an italic *f*, 4 bundles in each segment, 2-4 per bundle. Hearts as in *Clitellio* and other genera in the 8th or 9th segments. Nephridia in 6-7 and 7-8 with glandular cells, clear as in *Limnodrilus* (*Hoffmeisteri*, &c.); also in segments 12 and later. Chloragogen cells begin in 6; no strong pharynx as in *Enchytraeus*, but cephalization exactly as in Tubificids. Male pores on segment 11, without ventral setae. Brain concave in front, incised behind. Cf. *Zoologist*, as cited above.

Distribution.—Ringsend, Dublin, March, 1913, in sand, with *Lumbricillus lineatus* O.F.M. and other *Pachydridilids*. Generally distributed on the sea coast and estuaries of the British Isles—Middlesborough, Gravesend, Plymouth, and Aberystwyth. At present unknown on the Continent of Europe or elsewhere.

A NEW IRISH NAID.

During my visit to Ireland in 1896 a good deal of material was collected which has never yet been properly examined. Among my notes I find references to a water-worm which has not hitherto been recorded. It is a species of *Naidium* which differs from all whose descriptions I have been able to study, and I therefore name it *Pristina variabilis*.¹ The full description will appear elsewhere, but the following detail may serve for its recognition should it again be found:—

Pristina variabilis, sp. n.—Number of segments, 25. Very transparent. Two black eye-spots. Setae commence in the second segment, and consist of two kinds, bidentate and capilliform. The capilliform are of unequal lengths,

¹ The name *Pristina inaequalis*, which I intended to use, has already been employed by Ehrenberg.

hence the trivial name; they begin in segment 6, and number 2 to 5 in each dorsal bundle. Usually one finds 1 or 2 long and 2 to 3 short ones. The setae of the first segments are paired; they are more numerous in the middle of the body and stouter than those at the extremities. The length of the bidentates fully equals one half the body diameter, while the capilliforms gradually diminish in length posteriorly—another inequality. The intestine begins with the sixth segment, and the coelomic corpuscles are circular or globular. Fission was in process.

Habitat.—Lough Erne; also in water at Aghaderg. Collected Whitsuntide, 1896.

AN UNKNOWN ANNELID.

Among my gleanings around Belfast in 1896 were a few tiny worms which I have only once found since, viz., in 1912, at Middlesborough. They were about 10 mm. in length and 1 in diameter, looking at first very like a newly emerged *Allolobophora rosea*. The breadth was much greater than is usual in aquatic worms. They were so delicate that they either did not survive transit, or died as soon as they were placed on a slide in fresh water. The great peculiarity was the setae, which were of three kinds, one of which has never come under my observation in any other worms. In segments two to seven there were five or six *sickle-shaped* setae of quite a typical nature. Next followed palmate setae, which ultimately gave place to forked setae, of which there were only one or two in each bundle posteriorly. Two black eyespots gave the worm a certain resemblance to the Nais. The living creature was pale pink in colour, and had strongly developed blood vessels about the eighth or ninth segment, as in *Citellio* and *Limnodrilus*.

I should be very grateful to collectors if they could rediscover it. The ooze by river or estuary is the most likely locality.

POPULAR IRISH NAMES FOR WORMS.

By some means I have entirely omitted in past years to draw attention to this subject. But now that Dr. Scharff has interested us in Bird names, the matter ought to be touched upon.

In April, 1893, I received a letter from Mr. G. E. J. Greene, of Ferns, saying that he had been in conversation with an angler, and had obtained from him the names of certain earthworms. Mr. Greene had been studying my articles and knew the species, and this is his list :—

1. Maggot worm or Long worm—*Lumbricus papillosus* Fr. (with *L. terrestris* and *A. longa* probably).
2. Sprat worm—*Lumbricus rubellus* Hoffm.
3. Brambling (—Brandling)—*Eisenia foetida* Sav.
4. Green worm—*Allolobophora chlorotica* Sav.
5. Milk worm—*Allolobophora turgida* Eisen.
6. Small Brambling—*Dendrobaena subrubricunda* Eisen.

The angler had never heard the latter called Gilt tail or Cockspur, the names which anglers in England frequently employ.

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IRISH SOCIETIES.

ROYAL ZOOLOGICAL SOCIETY.

Recent gifts include a Grivet Monkey from Mr. Mooney, a Bonnet Monkey from Mr. J. S. Sandes, two Rabbits from Mr. C. Maude, a Cavy from Miss Gaisford, a Grass Parrakeet from Mrs. Cusack, a Roseate Cockatoo from Mrs. Glenn, a Silver Pheasant from Dr. Timmon, an Amherst Pheasant from Lady Ardilaun, and a Heron from Mrs. Potterton. Three Egyptian Dogs have been received on deposit, and two Lion-cubs—the parents “Red Hugh” and “Mitze”—have been born in the Gardens.