

Listeria: Change of Name for a Genus of Bacteria

I HAVE been informed that at the Third International Congress for Microbiologists, held in New York City, September 2-9, 1939, it was reported to the Committee on Nomenclature that the name *Listerella*, which I proposed for a genus of bacteria in 1927, had already been given to a Mycetozoan by Jahn in 1906.

My proposed name therefore becomes a homonym, but as the genus has acquired some importance in both human and veterinary pathology and references to "Listerellosis" are becoming fairly common in literature, I think that a name as near to my original proposal as possible is desirable. I therefore propose *Listeria* as the name for the genus of bacteria as defined by me in Publication No. 20 of the South African Institute for Medical Research, "The Plague Problem in South Africa", by J. A. Mitchell, J. H. Harvey Pirie and A. Ingram (Whole vol. 3, p. 169).

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Jan. 16.

Neurosecretory Cells in the Ganglia of Lepidoptera

For many years the investigators of metamorphosis in the Lepidoptera have maintained that the source of the moulting hormone is the brain rather than the corpora allata, which Wigglesworth¹ formerly considered to be the organs producing the secretion in the bug, *Rhodnius*. Recently, however, Wigglesworth² has produced evidence which suggests that an area in the pars intercerebralis of the supra-oesophageal ganglion of *Rhodnius* is responsible for



SECTION OF THE SUPRA-OESOPHAGEAL GANGLION OF THE MOTH *Eacles imperialis* DRU., SHOWING LARGE FUCHSINOPHIL CELL WHICH IS CONSIDERED TO BE SECRETORY IN FUNCTION. BOUIN FIXATION, GOLD IMPREGNATION FOLLOWED BY MALLORY'S TRIPLE. PHOTOMICROGRAPH \times c. 700.

the production of the moulting hormone. As he points out, Hanström³ had already described modified nerve cells in this same region which are considered, on morphological grounds, to be probably secretory in function. Neurosecretory cells have been described in several other insects, but it has been reported that, in spite of careful search, no such cells could be found in the brain of the moth larvæ (*Ephestia kuehniella*) studied by Schrader⁴.

It seems of interest, therefore, to be able to report the discovery of cells very similar to those described by Hanström which I have found in the ganglia of certain Lepidoptera. They have been demonstrated in the pars intercerebralis of the supra-oesophageal ganglion of adult moths, in larvæ of all instars, and in pupæ. They have been found occasionally in the sub-oesophageal ganglia of larvæ, and in certain of the abdominal ganglia, but not in all. These cells have essentially the same staining properties as those of *Rhodnius*, being apparently modified ganglion cells, from which they differ in containing a granular cytoplasm or a number of droplets which are intensely fuchsinophil. They are well differentiated by Mallory's Triple strain.

They have been most studied in the larvæ of the moth *Ceratonia catalpæ* Bdv. (Sphingidæ), in which they are generally scattered singly, but may be grouped as those of *Rhodnius*. Although they may vary in number and in their exact position from larva to larva, no indication has been found of a cyclical production of secretion.

Similar cells have been found in the brains of several species of Heterocera belonging to the families Citheroniidæ, Phycitidæ, and Saturniidæ.

In view of the above-mentioned experimental evidence, it seems possible that these cells are the source of the moulting hormone in the moths, but the fact that similar cells can be demonstrated in some abdominal ganglia indicates that further experimental work must be done before a function can definitely be assigned to them. However, the similarity in staining properties of the cells from the brain and the abdominal ganglia does not, of course, necessarily indicate identity of function.

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¹ Wigglesworth, V. B., *Quart. J. Micr. Sci.*, **77**, 191 (1934).

² Wigglesworth, V. B., *NATURE*, **144**, 753 (1939).

³ Hanström, B., *Lunds Univ. Arsskrift*, N.F., **34**, No. 16 (1938).

⁴ Schrader, K., *Biol. Zbl.*, **58**, 52 (1938).

Zoological Nomenclature

PROPOSAL of a 'stereotyped' zoological nomenclature almost invariably comes from a non-systematist or from a systematist working sporadically on a restricted group in a field where there is but a small literature and few workers. Any active worker in a large and progressive systematic field would realize at once that any 'stereotyping' plan is impossible. In my own subject, ichthyology, there is no general world monograph suitable for 'stereotyping' subsequent to Günther's "Catalogue" (1859-1870), and Günther's classification and nomenclature are now so out of date that no ichthyologist would