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Dr. von Lendenfeld on the Central Cavity in Euplectella

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Walker described his genus *Deva* in the twelfth volume of his 'Catalogue of Lepidoptera Heterocera,' p. 962, and included in it two species, *D. stimulans*, = *Plusiodonta Thoma*, Guen., and *D. concludens*, = *P. chalcytoides*, Guen. On the following page he described another new genus, *Gadera*, with two species, *G. incitans* and *G. repellens*, both without localities, though he concluded that *G. repellens* was Brazilian. As a matter of fact both are natives of Jamaica.

Now as *P. compressipalpis*, from the United States, is the type of *Plusiodonta*, and differs from all the other species associated with it in its pectinated antennæ, and as the species of *Deva* and *Gadera* differ from one another in no character whatever, the bulk of the species of Guenée's genus *Plusiodonta* fall into *Deva*, Walker; whilst the species referred to *Deva* by Walker, Grote, and myself subsequently, fall into *Polychrysia*, Hübner.

The genus *Polychrysia*, in my opinion, is a true Plusiid (whereas *Deva* belongs to the Calpidæ); it differs from typical *Plusia* in its enormously developed Deltoid palpi, the terminal article of which is curved, compressed, and tapering, the fringe of scales being elongated below the article; the outer margin of the primaries is usually, but not invariably, subangulated.

The genus *Polychrysia* will include *P. splendida*, = *Deva splendida*, from Japan; *P. c-aureum*, = *Plusia c-aureum*, from Europe; *P. mikadina*, = *Plusia mikadina*, from Japan; *P. purpurigera*, = *Deva purpurigera*, from the United States; *P. moneta*, = *Plusia moneta*, from Europe; and *P. palligera*, = *Deva palligera*, from the United States.

Of the above species *P. c-aureum* and *P. mikadina* are nearly allied, but the former has the golden marking on the centre of the primaries of a -shape, whereas that on *P. mikadina* is comma-shaped, ; at the same time it is quite possible that a large series will prove this to be an insufficient distinguishing character.

Dr. von Lendenfeld on the Central Cavity in Euplectella.

By E. A. MINCHIN.

In the last number of this Journal (April 1892, p. 337) Dr. von Lendenfeld calls me to task for having, as he says, attributed to him the statement (which he well terms "preposterous") that the central cavity of *Euplectella aspergillum* is a pseudoscular tube forming part of the inhalant system. He adds that he never doubted the exhalant nature of the central cavity in *Euplectella* and that he fails to see how any one can gather from his statements such a meaning as I impute to them.

No one would gather from reading Dr. von Lendenfeld's note that everything I inferred as to his opinions was supported by full quotations from his writings, and I will therefore content myself by merely amplifying what I have already written.

In the first place I quoted from his 'Monograph of the Horny

Sponges,' p. 757 (by a misprint it came out p. 717), as follows :—
 "In the tubular *Euplectella aspergillum* and in allied forms the central cavity . . . appears as a preoscular tube." In other words, the central cavity is of exhalant nature. Well and good! But on the very next page of the same work we read, "The cribriform membrane which is stretched over the wide terminal pseudosecula of *Dendrilla cavernosa*, covering the entrances to the vestibular cavities, is very remarkable. I do not hesitate to compare it directly to the terminal sieve of *Euplectella aspergillum*. I think it may not be impossible that in some of the cup-shaped or tubular Hexactinellida the central cavity is, like that of *Dendrilla cavernosa*, an inhalant vestibule, and not a præoscular tube." That is to say, the sieve-membrane covering the central cavity in *Euplectella* is compared directly with a similar sieve covering an inhalant space in another sponge. The only rational conclusion from such a homology appeared to me to be that the central space in *Euplectella* was to be regarded as inhalant also. In commenting on these statements I concluded by saying it was not necessary to point out the contradictions in which the author had landed himself. I only hope I have made it clear how I gathered from Dr. von Lendenfeld's statements the meaning I imputed to them. I do not quite follow Dr. von Lendenfeld's meaning when he speaks of a "hostile motive" having prompted me in my interpretation of his statements, and cannot but deprecate the introduction of personalities into a scientific argument.

Zoological Station, Naples,
 April 8, 1892.

On some Specimens of Dendroclava Dohrnii, Weismann. By
 Dr. RAFFAELIO ZOIA.

On the 23rd October, 1891, the Director of the Zoological Station at Naples, with his usual courtesy, gave me some hydroids (*Sertularella*, *Eudendrium*, *Campanularia*) which the fishermen had brought from the coasts of Nisida. Amongst these were a few small colonies of hydrosomæ which at first sight appeared to me to be very similar to *Corydendrium*, although perhaps the zooids were somewhat smaller than those of *Corydendrium parasiticum*. One of these colonies grew from the stalk of a *Campanularia* in the same manner in which the trunks of *Corydendrium parasiticum* spring from those of *Eudendrium*, so that the resemblance between the two was the more striking.

On bringing these hydroid colonies under the microscope, I observed some medusoid buds under the neck of the zooids; and in this, as well as in other respects, the hydroids corresponded exactly with the *Dendroclava Dohrnii* described by Weismann, whose observations, as far as I know, have never yet been called in question.

These colonies were about 2 centimetres in height, somewhat