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1875.

Lacerta muralis cærulea: *a Contribution to the Darwinian Theory.* By Dr. Theodor Eimer.

On the south-east coast of the Isle of Capri four large rocks may be remarked with a very picturesque aspect, three of which are entirely separated from the land, while the fourth is only joined to it by a small low and narrow isthmus, which threatens also to disappear under the action of the waves. The outermost of these islets is in the form of a truncated pyramid with four sides, 115 metres high, and terminated above by a small plateau containing about 50 square metres. Its sides are nearly vertical, and, in consequence, nearly inaccessible. There are only three inhabitants of Capri who venture to climb it, for the purpose of gathering the eggs of sea-gulls.

In the spring of the year 1872 M. Eimer applied to these men in order to procure specimens of the animals which live on this little islet, to ascertain whether the conditions of isolation had not exercised some influence on them.

His prevision was verified, for his collectors brought him a lizard forming a very remarkable variety of the common species (*Lacerta muralis*) of the Isle of Capri. This variety is even so distinct from the type that in the eyes of many zoologists it might be regarded as a species.

M. Eimer has made a complete study of this form, which exists only on the rock in question, and to which he has given the name of *Lacerta muralis cærulea*; and he compares it with the different varieties of *L. muralis* which are met with in Capri, in the Kingdom of Naples, at Genoa, and in Germany.

It is by its colouring that the variety *cærulea* is distinguished in the most striking manner. The colour of the dorsal parts is sometimes of a uniform more or less deep blue, sometimes blue with black markings. The belly, the throat, the lower jaw, and the lower surface of the tail and limbs are of a magnificent deep sky-blue. This colouring presents certain modifications depending on the season, the temperature, sex, &c. Thus at certain periods of the year emerald-green eye-spots make their appearance.

The colour does not result from a deposit of blue pigment, but it is due to the existence of a thick coat of black cells of connective tissue which are placed under a likewise thick coat of colourless epidermis. This arrangement, as is well known, produces the impression of blue. By direct light under the microscope a fragment of skin appears black; by reflected light it is seen to be blue. In the green lizards there is, between the black layer and the colourless layer, a layer of yellow pigment of a fatty nature, which assists in producing the impression of green. In *L. muralis cærulea* this yellow coating is absent or is nearly so.

A constant peculiarity of the *L. muralis* of Germany is the depressed form of the head. This character is not found in the variety *cærulea*, of which the head forms rather a quadrangular pyramid with nearly equal sides.

The new variety differs less from Italian individuals than from those of Germany; but it is distinguished from them nevertheless.

M. Eimer has proved a tendency to the appearance in the variety *cærulea* of characters of the squamation, which manifest themselves in the region where the dorsal granules abut against the ventral plates. Another difference, which is not, however, quite constant, shows itself in the number of femoral pores, which vary from 21 to 25, while in the typical *L. muralis* we rarely count more than 20.

Lastly a very curious peculiarity of the individuals of this variety is their want of fear of man, which is above all interesting if one compares it with the extreme shyness of their cousins in Capri.

When kept in captivity the representatives of the two varieties show affinity towards those of the same form as themselves and hostile dispositions towards those of the other form.

It appears from these physical and moral characters that the form discovered by M. Eimer would be distinct enough to merit, in the eyes of certain zoologists, the title of a species, while on the other hand its affinities and its habits clearly show from what root it has sprung. It furnishes a striking example of what has been called an "incipient species."—*Bibl. Univ.* April 15, 1875, *Arch. des Sci.* p. 346.

New Tertiary Pleurotomaria.

To the Editors of the Annals and Magazine of Natural History.

Gentlemen,—I greatly regret that, in sending you a notice lately of a new Tertiary *Pleurotomaria*, I lost sight of the fact that Goldfuss and Deshayes had also each found a species of the same age many years ago.

Your most obedient Servant,

Frederick M'Coy.

Melbourne,
June 12, 1875.

Note on the Larva of a Longicorn Beetle (Clytus quadripunctatus, *Fabr.*). By Charles O. Waterhouse.

The larva of this insect was brought to me about two years ago. It had been found feeding upon ebony, and appeared nearly full-grown, measuring two thirds of an inch in length. Understanding that this larva would also eat sycamore, I bored a small hole in a piece of an old stand made of that wood and placed the larva in it, on October 7th, 1873. The perfect insect, a female, emerged from the wood on the 14th of August, 1875. The length of time that this example remained in the larval state may have been increased by the great dryness of the wood in which I placed it, the stand having been in use in the British Museum thirty years ago. As I have not met with any description of this larva, I subjoin the following note, made at the time the larva was received:—

"Mandibles black; clypeus transverse, rounded in front, pitchy; labrum white, rounded in front, narrowed towards the base; basal joint of maxillary palpi twice as broad as long, second joint nearly globular, apical joint very small and acuminate; antennæ very short, with only three visible joints, the basal one elongate slightly narrower at the base, second joint a little longer than broad, third joint