Rufa; elytris nigris, fascia communi lata flava; coxis tarsisque posterioribus et pygidio nigris. Q.

Long. 4 lin.

The specimens from which the above descriptions are taken are probably referable to *E. tricolor*, Gerst. (Mon. p. 28). He only describes the female, and the specimens of that sex in the Museum collection differ from his description in having the femora entirely red; on the other hand he does not mention that the posterior coxæ and the pygidium are black.

The male, from its totally different coloration, might be easily mistaken for a distinct species.

Hab. Swan River.

The following allied species appears to be undescribed :-

Emenadia sobrina, n. sp.

Elongata, sat angusta, subopaca, atra; thoracis basi elytrisque obscure rufo-piceis, tibiis posterioribus tarsisque piceis. Q. Long. 3¹/₂ lin.

Closely resembles *E. tricolor*, but distinctly narrower and differently coloured. Head orbicular, smooth, the vertex rounded. Thorax not much narrowed in front, the posterior angles not diverging, very acute and directed backwards; the basal lobe truncate at the apex. Elytra brown, diverging only at the apex, longitudinally impressed on the disk. The punctuation rather close, the punctures rather elongate. One example has the apex blackish. The basal joint of the antennæ and the palpi pale. Sometimes there is a little brown on the front margin and sides of the thorax, as well as on the side of the metathoracic epimera.

Hab. Melbourne.

PROCEEDINGS OF LEARNED SOCIETIES.

DUBLIN MICROSCOPICAL CLUB.

February 16, 1882.

Cosmarium from Deeside, sent by Mr. Bissett, approximating C. cymatopleurum, Nordst.--Mr. Archer showed a Cosmarium of large size from Deeside, Aberdeen, collected by Mr. Bissett, of Banchory, coming near Cosmarium cymatopleurum, Nordst., but seemingly not quite identical therewith; but Mr. Archer had no doubt it was one and the same thing with a form found by himself on a few very rare occasions in Ireland. He had only once met with what appeared to be the true C. cymatopleurum, in a rocky place on the roadside by Loch Tay, in Scotland. The present form agreed in size; but it is more constricted under the upper angles, and the lateral undulations are stronger. Mr. Bissett and Mr. Roy seemed to hold that this was truly distinct from Nordstedt's form.

Alliospora sapucayæ, n. g. et sp., Pim.—Mr. Pim showed a remarkable black mould from the kernel of a Sapuçaya-nut, which will most probably form the type of a new genus. It forms a dense black velvety mycelium on the kernel of the nut, giving off numerous fertile hyphæ. These appear under the microscope of a very deep brown colour and somewhat septate. The heads are globose with chains of spores, much resembling some of the smaller forms of *Aspergillus*. The chains of spores, however, instead of being attached end to end, as in that genus, like a string of beads, arise from extremely delicate threads, reminding one of miniature onions on a hank. The fertile hyphæ have very strongly marked side walls. In allusion to the onion-like arrangement of the spores, Mr. Pim would suggest as a provisional name Alliospora sapucayæ.

Section of Shell of Limax maximus.—Prof. Mackintosh exhibited the shell of Limax maximus, a specimen he had found in the month of December. The shell showed on its upper surface numerous small spicules, which in some places were separate, in others grouped in rosettes; and near the margin of the area were to be seen large polygonal crystals, apparently like those of which the bulk of the shell is composed. Prof. Mackintosh supposes that the spicules represented the first deposits of calcium carbonate laid down when the secreting-power of the cells was but slight, and that as the season opened and the increasing warmth stimulated the vital functions the larger crystalline deposits made their appearance and superseded the lower spicular growth.

Sections to illustrate multiple Staining.—Mr. B. Wills Richardson exhibited sections in part illustration of a paper on multiple staining, published by him in last December's number of the Journal of the Royal Microscopical Society, viz. :—

No. 1. A true double-staining of a transverse section of Sugarcane, in atlas scarlet and soluble blue.

No. 2. Quadruple-staining, in atlas scarlet, soluble blue, iodine, and malachite greens, of stem of Bignonia.

No. 3. A section of Potato in atlas scarlet and a mixture of iodine and malachite greens, the malachite green being in excess. In the specimen the starch-grains are rich green, and the walls of the loculi a very delicate scarlet.

Section of Manus of Human Fætus, and Structure.—Dr. B. C. Windle exhibited three sections taken from the manus of a fœtus of 5 centim. head and buttocks measurement. They pass respectively through the second row of the carpus, through the proximal ends of the metacarpal bones, and through about the middle of the same bones. The first section, viz. that through the second row of the bones of the carpus, shows the following points :— Bones. At first there was some difficulty in determining exactly which bones appeared in the section; but the following description is correct. To the ulnar side lies the unciform, easily recognizable by its hook-like process. Proceeding from it, the next bone in order is the os magnum, then the trapezoid, and finally the trapezium. The latter appears to have a division in it; but this is not of any importance.

Tendons. In the groove of the trapezium lies the tendon of the flexor carpi radialis. At the most superficial part of the palmar surface the tendon of the palmaris longus appears as a faint line. In the centre lie the tendons of the flexors of the fingers.

Annular ligament. The annular ligament can be seen stretching from the hook-like process of the unciform to the trapezoid, and sending a slip to the trapezium.

Muscles. On the radial side the abductor pollicis, on the ulnar side the abductor minimi digiti.

Vessels &c. Ulnar nerve and artery in the angle between the annular ligament and the abductor minimi digiti.

The second section, which passes through the bases of the metacarpal bones, shows :---

Bones. The first and second metacarpals are narrower on the palmar than on the dorsal aspect, the dorsal aspect of the latter being rounded, whilst that of the former is angular. The third roughly resembles one of the forms of shields on which coats of arms are depicted. The fourth and fifth are approximately round.

Muscles. In the thenar region, most externally the abductor pollicis, next to it the flexor brevis pollicis, then the opponens pollicis, separated from the last by the tendon of the flexor pollicis longus, and finally, deepest of all, the adductor pollicis. In the hypothenar region, externally and quite distinct from the other muscles, there is the abductor minimi digiti. Closer to the bone, on its ulnar aspect, is the flexor brevis minimi, whilst on the palmar aspect a few fibres represent the opponens minimi digiti. The line of demarcation between these last two muscles is difficult to make out. In the centre of the palmar aspect two lumbricales can be seen.

In the third section, which passes through the centre or nearly so of the metacarpal bones, attention is drawn to the following points of interest:—

Bones. The first metacarpal roughly resembles the figure conventionally supposed to represent the heart, save that it is broader and its apex (which is dorsally directed) blunter. The second and fourth are nearly circular, and the third and fifth approximately oval. By far the greatest distance between any of the bones is that which intervenes between the first and second. The smallest is that between the second and third, whilst the distances between the third and fourth and fifth are nearly equal.

Muscles. The adductor pollicis, attached to the palmar and partly to the ulnar aspect of the first metacarpal, can be seen extending towards the centre of the palm. On the ulnar and solar aspect of the fifth metacarpal there are two muscles, viz. nearest to the bone

Dublin Microscopical Club.

the flexor brevis minimi digiti, and superficial to it the abductor minimi digiti. The line of demarcation between these two is not so distinct as it was in the former section. The full number of interossei are present, and they are arranged as follows :- The interspace between the first and second bones is almost entirely filled up with the first dorsal interosseus, which is attached to the whole radial and part of the palmar aspect of the second bone. In the second interspace there are two interossei-the dorsal, placed more completely on the dorsum of the hand than any of its fellows, and a palmar, attached to the lower portion of the ulnar aspect of the second bone. In the third interspace the dorsal interosseus lies midway between the bones; the palmar is placed on the radial and partly on the volar aspect of the fourth bone. The two interossei in the fourth interspace lie side by side; the palmar, however, curves much further round the volar aspect of the fifth bone than the dorsal does with respect to the fourth. In the centre of the palm there are to be seen three lumbricales and the tendons of the long flexors of the fingers.

Omentum of Elephant.-Mr. Abraham mentioned that, as the members were aware, the large elephant died at the Zoological Gardens a few weeks ago; and naturally he embraced the opportunity of obtaining portions of the animal for microscopic examination, knowing that little had been made out regarding the histology of the animal. Unfortunately by the time he was able, through the kindness of Prof. Macalister, to secure any pieces of tissue, decomposition had already set in; the results therefore which he had obtained were not so valuable as they would otherwise have been. Nevertheless the specimen on the table presented some interest-a piece of the omentum in a nitrate-of-silver and logwood prepara-When Prof. Macalister produced this membrane from the tion. abdomen it was found to consist of a large bag stretching some 12 feet in length and upwards of 4 feet in diameter; in fact he was able to get inside of it. In spite of the size, the texture and thickness were as delicate as in the smallest animals; and, as in the case of the other tissues, the diameter of the histological elements was found to be by no means in ratio to the large size. The slide exhibited showed that the elephant's omentum is a beautiful fenestrated membrane.

Spicules of a new Alcyonarian.—Dr. E. Perceval Wright exhibited some mounted specimens of the spicules of a new form of Alcyonaria allied to *Primnoa*. The spicules were but feebly calcareous, were very varied in form, but in a manner that seemed characteristic, mostly flat and colourless; in the stem portion of the colonial mass they were sufficiently felted together to form a fairly solid column.

March 30, 1882.

Moss-protonema living on a Fern.-Mr. Greenwood Pim showed

Dublin Microscopical Club.

examples of a protonematous growth, otherwise the primordial state of some moss, seemingly, as it were, parasitic on a fern in the College Botanic Garden. These characteristically reddish obliquely jointed filaments seemed in several places as if inserted into and for the time quasi-organically united to the fern, and issuing as hair-like adventitious structures.

Alliospora sapucayæ, Pim.—Mr. Pim further showed another state of the fungus brought forward by him at last meeting, with the strings of spores in large tufted heads.

Cosmarium cymatopleurum, Nordst., and Scottish and Irish Forms. —Mr. Archer showed Herr Nordstedt's specimen of his Cosmarium cymatopleurum, var. tyrolicum, also his figure of the same, as well as that of his original C. cymatopleurum, together with the Scottish specimens of Mr. Archer's gathering, in continuation of the exhibition at last meeting of Mr. Bissett's form taken from the hills on the Dee-side. The form C. tyrolicum appears, Mr. Archer thought, truly a distinct thing, and it has not occurred in Britain; so also is probably Mr. Bissett's form distinct from the true C. cymatopleurum.

Specimens illustrating the Development of Echinus microtuberculatus exhibited.—Prof. A. C. Haddon exhibited a series of Dr. Dohrn's preparations illustrating the development of Echinus microtuberculatus, very beautifully showing various stages in development, and forming as stained very handsome objects.

April 20, 1882.

Ptilopteris Mertensii.—Dr. E. Perceval Wright, in exhibiting some living specimens of *Ptilopteris Mertensii*, showed the peculiar manner in which the ramuli bearing the spores (?) broke off, and themselves grew up into perfect plants, which mode of growth had apparently not been previously described.

Xanthidium concinnum, n. s., Archer, a minute form somewhat of a Cosmarium aspect.-Mr. Archer showed a minute Desmid of rare occurrence, one of those, in their way, interesting forms as to which a decision was difficult as regards their generic position. When met with on the few occasions on which he had detected it, though then in some quantity, he had marked the collecting-bottle "Acuteangled Cosmarium ;" but, as a matter of fact, and taken strictly, the form seemed to fit more properly in the genus Xanthidium. It is very minute (about the size of Cosmarium tinctum), semicells elliptico-hexagonal, the apices bearing at each side and at the upper very obtuse angles a minute but very appreciable mucro, each front surface of each semicell showing a distinct median papilla; end view compressed, showing at the middle on each side the very distinct now prominent papilla. Thus the essentials of the genus Xanthidium were fulfilled; for though the spines were reduced to a minimum, they were there, albeit very minute and acute ; and whilst the conspicuous central boss or elevation bordered by papillæ or ornamented by scrobiculi of the larger forms was reduced to a simple papilla, yet it too was there. It is true that many minute forms, distinctly *Cosmaria*, have a similar median papilla; yet Mr. Archer would lean to the view that, coupled therewith, the presence of the spinules at the corners must compel us to regard this form as a *Xanthidium*, of which genus it would certainly be the most minute species, and might stand as *Xanthidium concinnum*.

Specimens illustrating Development of Cotylorhiza borbonica. —Prof. Haddon exhibited a series of three slides, showing the planula, hydra tuba, and ephyra of Cotylorhiza borbonica, also obtained from Dr. Dohrn's zoological station at Naples.

Cliftonæa pectinata, Harv., from Port Phillip.—Dr. M'Nab exhibited specimens of Cliftonæa pectinata, Harv., found in January 1882 by Bracebridge Wilson at Port-Phillip Heads, and kindly communicated by Baron Ferdinand von Müller. The structure of the ramuli, so far as Dr. M'Nab could make out from the dried specimen, seemed to differ from that described and figured by Harvey.

Histology of Male Flower of Geonoma sarapiguensis.—Dr. M'Nab also showed a section of the centre of the male flower of Geonoma sarapiguensis. The stamens are developed at the end of an internode separating the andrœcium from the perianth; and at the apex three abortive carpels are to be observed. A section showed the fibro-vascular bundles regularly arranged, six going to the stamens, and three others, completely developed, to the abortive carpels. This section showed the value of the presence of the fibro-vascular bundles as indicating the existence of abortive parts.

Histology of Stem of Urvillea ferruginea.—Dr. M'Nab further exhibited sections of the stem of Urvillea ferruginea, a Brazilian plant belonging to the natural order Sapindaceæ. The stem was triangular, with a longitudinal row of hairs at each angle; it contained a ring of united fibro-vascular bundles in the centre, with a pith, the bast showing the bast-vessels with great clearness, whilst the bastfibres were wanting. Three double bundles were developed, one at each angle of the stem; and a ring of sclerenchyma surrounded the stem a short distance below the epidermis. Collenchyma existed in six patches, one at each angle and one in the middle of each face.

Drawings of various Starch-granules. — Mr. William Allen showed some excellent shaded drawings made by himself of a variety of starch-granules, a comparative collection of which he was forming; these sketches very graphically showed the characteristics of each.

Foraminifera from Dublin Bay.—Mr. Balkwill showed a large collection, beautifully mounted and named, of shells of Foraminifera, chiefly from Dublin Bay; several of these slides contained as many as fifty or one hundred species, the names photographed alongside the specimens, and mounted with the greatest neatness on darkground slides.



1883. "Proceedings of Learned Societies." *The Annals and magazine of natural history; zoology, botany, and geology* 11, 281–286. <u>https://doi.org/10.1080/00222938309459147</u>.

View This Item Online: https://doi.org/10.1080/00222938309459147 Permalink: https://www.biodiversitylibrary.org/partpdf/67917

Holding Institution Missouri Botanical Garden, Peter H. Raven Library

Sponsored by Missouri Botanical Garden

Copyright & Reuse Copyright Status: Public domain. The BHL considers that this work is no longer under copyright protection.

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.