

80.6  
P  
u. 96 -  
June 27.

BER 1897.]

[Price 4s.

PROCEEDINGS  
OF THE  
LINNEAN SOCIETY OF LONDON.



---

FROM NOVEMBER 1896 TO JUNE 1897.

---

LONDON:  
PRINTED FOR THE LINNEAN SOCIETY,  
BURLINGTON HOUSE, PICCADILLY, W.,  
BY TAYLOR AND FRANCIS, RED LION COURT, FLEET STREET.



April 1st, 1897.

Dr. A. GÜNTHER, F.R.S., President, in the Chair.

The Minutes of the last Meeting were read and confirmed.

Prof. Graf zu Solms-Laubach, the Rev. Robert Usher, and Mr. William Martindale were admitted, and Messrs. James Bryant Sowerby and John Christopher Willis were elected Fellows of the Society.

Mr. Miller Christy exhibited three royal state-cloaks formerly worn by the Kings of the Hawaiian Islands and made of the feathers of four species of birds, of which the exhibitor gave an account, referring to the coloured figures of them given in Mr. Scott Wilson's 'Birds of Hawaii,' namely, *Vestiaria coccinea* (red), *Psittacirostra psittacea* (green), *Acrulocercus nobilis*, and *Drepanis pacifica* (black and yellow). The last-named, of which no specimen is to be found in the National Collection, was believed to be now extinct.

Mr. W. T. Thiselton-Dyer exhibited:—(i) A series of drawings (on the screen) to illustrate the "Cultural evolution of *Cyclamen latifolium*, Sibth." The species is a native of Greece and the Levant, and is believed to have been first introduced into European cultivation in 1731. In 1768 Miller described a form modified by cultivation under the name of *Cyclamen persicum*. This was erroneous, as according to Boissier neither the wild nor the garden form occur in Persia. The latter persisted in cultivation for about 150 years, and about 1860 became the starting-point of the modern races which were illustrated. *Cyclamen latifolium* has never been hybridized, and it was shown that the striking forms now in cultivation were the result of the patient accumulation of gradual variations. Drawings of the remarkable forms "Papilio," obtained by de Langhe-Vervaene and of "The Bush-Hill Pioneer," by Messrs. Hugh Low & Co., were shown. It was pointed out that the tendency of the species under cultivation was to lose its distinctive generic characters, and to approximate to a more generalized type. The reflexion of the corolla-segments was often lost as in *Lysimachia*, the segments were sometimes multiplied as in *Trientalis*, and the margins were fringed as in *Soldanella* and cultivated forms of *Primula sinensis*. The "Bush-Hill Pioneer" possessed, in the creasing of the petals, a remarkable character without parallel in any primulaceous plant occurring in a wild state.

(ii) A series of plants was exhibited to illustrate the origin of the garden "Cineraria." It was generally agreed that this had sprung from one or more species native of the Canaries. An extreme cultivated form was shown and compared with *Senecio cruentus*, which all internal evidence indicated as the sole original stock. *S. Heritieri*, another reputed parent, was exhibited. But it was pointed out that this has a shrubby habit and stems



markedly zigzag between the internodes, while the leaves are clothed beneath with a dense white tomentum. These characters it transmits more or less to its hybrid offspring. In illustration of this point Mr. Poë's hybrid (*Senecio super-Heritieri* × *cruentus*) was exhibited (a similar one has occurred at Edinburgh); also the Cambridge hybrid (*S. super-cruentus* × *Heritieri*). *S. cruentus* crosses very freely with the garden Cineraria, and as the latter never exhibits any trace of the characters of *S. Heritieri*, it was concluded that that species had no part in its origin, and that, as in the case of the Cyclamen, the striking development of *S. cruentus* in cultivation was due to the continued accumulation of gradual variations.

Mr. A. W. Bennett exhibited a series of drawings by Mr. E. B. Green of Root-hairs of plants with various parasitic growths, and showed preparations of several under the microscope.

Mr. G. R. Murray exhibited several lantern-slides of Coccospheres and Rhabdospheres, prepared from specimens collected by Capt. Milner, of the s.s. 'Para,' while on a voyage to Barbados, including all the forms figured in the 'Challenger' Report. Of these remarkable organisms Mr. Murray gave a detailed account, explaining the formation of coccospheres (so named by Dr. Wallich) as the aggregation into spheres of the so-called coccoliths described by Huxley from deep-sea soundings taken in the North Atlantic by H.M.S. 'Cyclops.' The calcareous scales (or coccoliths) were shown to overlap each other, and to constitute not only a defensive armour, but from their arrangement to admit of the growth of the organism, which is thus not limited by its calcareous coat, as diatoms are by their siliceous shells; each coccolith being attached to the cell by a button-like projection on its inner surface.

In the rhabdospheres with projecting rods, of which figures were shown, the plates (Rhabdoliths) do not fit into each other as figured in the 'Challenger' Report, but their bases are imbedded on the surface of the cell each by itself without contact.

As to the cell-contents, the exhibitor had found nothing more than a granular material resembling protoplasm. There was no trace of colouring-matter in the specimens, all of which had been brought up from a depth of three fathoms.

Mr. H. Groves exhibited a large number of *Characeæ* collected by Mr. T. B. Blow in various parts of Australia and Asia, views of the localities referred to being shown on the screen by the collector.

The following paper was read:—

"On the Germination of the Spores of *Agaricineæ*." By Miss Helen B. Potter. (Communicated by Mr. George Masee, F.L.S.)