

From what literature is available to me here, it seems that even where polyspermy is recorded or discussed, it is only in connexion with fertilisation of the egg. But in *Acacia Baileyana* I have seen no suggestion of such an occurrence, polyspermy being indicated only in connexion with the endosperm. The problem will shortly receive detailed attention as an abundance of suitable material is available here in the Acacias.

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Feb. 16.

¹Newman, I. V., *Aust. and N.Z. Assoc. Adv. Sci.*, 21, 367; 1932.
²Ishikawa, M., *Ann. Bot.*, 32, 277; 1918.
³Navashin and Finn, *Mem. Acad. Imp. Sci. St. Petersburg.*, 31, 1; 1913.

Chemistry of the Red and Brown Algæ

IN view of the fact that a study of the literature on the red and brown algæ revealed considerable uncertainty as to whether true cellulose occurs in these plants, the following seaweeds were examined for cellulose by the usually accepted methods:— among the red algæ, *Corallina officinalis*, *Bostrychia scorpioides*, *Chondrus crispus*, *Rhodymenia palmata*; among the brown algæ, *Laminaria saccharina*, *L. digitata*, *Fucus serratus*, *F. vesiculosus*, *Ascophyllum nodosum*, *Pelvetia canaliculata* and *P. canaliculata*, forma *libera*.

The 'crude fibre' was obtained by boiling alternately with dilute sulphuric acid and dilute caustic soda, washing the product and testing its solubility in cuprammonia, its reaction to iodine and sulphuric acid, and the possibility of obtaining acetyl cellulose. By these tests the presence of cellulose was established in every plant examined. A full report of this investigation will appear in due course in the *Annals of Botany*.

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March 19.

Specific Resistance of the Interior of the Red Blood Corpuscle

MEASUREMENTS of the electric impedance of suspensions of red corpuscles in serum, up to 16×10^6 cycles/sec., give for the specific resistance of the interior of the corpuscle (sheep, rabbit, chicken) $140 (\pm 10 \text{ per cent})$ ohms at 20°C . This value is about twice that of the serum. The value is lower than that previously derived¹ from measurements up to 4.5×10^6 cycles/sec., the difference being due to the inaccuracy of the extrapolation from these comparatively low frequencies. The low value of the resistance of the interior of the corpuscle as compared with that of the serum is chiefly accounted for by the non-conducting bulk of the hæmoglobin.

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¹H. Fricke and S. Morse, *J. Gen. Physiol.*, 9, 153; 1925.

Thermal Metamorphism around the Ballachulish Granodiorite

FROM recent studies of the metamorphic rocks lying within the aureole of the Ballachulish granodiorite, it has appeared that there are present there most of the types of hornfels listed in Goldschmidt's classification. Derived from these are also silica-poor types in which corundum and spinel are common. Hypersthene has, however, not been identified in any of the hornfels which have been examined up to the present.

There is definite evidence that the contact margin of the granodiorite has undergone some contamination by assimilation of the country rocks. This is shown by the presence of cordierite in specimens of the granodiorite from the contact. It is also noteworthy that hornblende does not appear in these rocks; biotite is alone present and resembles more the red-brown haughtonite variety of the metamorphics than the greenish-brown variety common to the normal granodiorite. Since it appears that the igneous rock has assimilated material from the surrounding schists, etc., it is probable that the hornfels have received something in exchange from the granodiorite. From a mineralogical examination of the rocks there are indications that, while the granodiorite has become richer in alumina and potash, the hornfels have received lime and magnesia. It is proposed to carry out a number of chemical analyses which may definitely establish the details of the suspected interchanges of material.

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The Theory of Vision

THE view that the stimulation of the cones of the retina is indirect and takes place through the photo-chemical decomposition of the visual purple by light seems to be proved and a fact. How can the colourless transparent cones be directly stimulated by light? How does this direct stimulation agree with the laws of photo-chemistry? According to Grotthus's law, no effect can be produced by light unless it is absorbed.

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Occurrence of the Floating Barnacle in British Waters

ORTON and Rawlinson record, in *NATURE* of March 17, the occurrence of *Lepas fascicularis* and *L. pectinata* on the Cornish coast in the summer of 1933. As they state that the latter has been recorded only about five times in British waters since 1803, it is worthy of record that several specimens were taken on a box found floating off Port Erin, I.O.M., in April 1933.

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