

Reilly and others¹ record their results on the extraction of waxy materials from peats, using an azeotropic petroleum mixture. Their yields were much greater, and the peats certainly contain much more organic matter than the fireclays.

It is noteworthy that the fireclays after extraction show no colour change, and all attempts to extract the pigmenting material have failed. Micro-incineration tests show that the organic matter burns off readily at 500–600° C. and leaves a dirty white residue. It chars far below this range. Owing to the rapid oxidation and small amounts of material, accurate melting point and other physical determinations were impossible, but the substance melts at about 90–100° C.

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¹ Reilly, J., Kelly, D. F., and Duff, J., *Sci. Proc. Roy. Dublin Soc.*, **22**, 149–155 (1939).

A New Record of *Phoronis hippocrepia* Wright

I FOUND many colonies of *Phoronis hippocrepia* on limestone boulders uncovered at low water of the biggest spring tides in July and August 1939. This was on the collecting ground known in our laboratory as Black Rocks, at the eastern end of the Menai Straits. Most of the individuals had embryos attached to the lophophore.

This species must be widely distributed around the west coast of Great Britain and the English Channel, for it has been recorded from the Clyde¹, Tenby², Ilfracombe³, Falmouth⁴, Plymouth⁴ and Sheerness⁴, and also from several places on the French coast. On the other hand, anyone requiring fresh specimens might have difficulty in obtaining them. The Plymouth Fauna List does not record it as occurring on the shore although, according to Cori⁵, this is the usual habitat. Mr. D. P. Wilson tells me that it is occasionally dredged at Plymouth to-day, sometimes in considerable quantities; but that it is not always easy to obtain. As for its occurrence elsewhere we have only the old records. Since the other British forms, *P. ovalis* Wright and a form resembling *P. psammophila* Cori, are probably rarer still, the presence of this species near Bangor appeared worthy of note, as it is desirable that material of so interesting an animal as *Phoronis* should be readily available for study.

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Oct. 3.

¹ K lliker, *W rzburg Naturc.*, **7**, 5 (1864).

² Dyser, *Trans. Linn. Soc. Lond.*, **22** (1859).

³ Wright, *Proc. Roy. Phys. Soc. Edin.*, **1** (1856).

⁴ Garstang, *J. Mar. Biol. Assoc.*, **2** (1891).

⁵ Cori, "Bronn's Klassen", **4**, Abt. 4, Buch 1, Teil 1, Leipzig (1939).

Points from Foregoing Letters

K. J. Bostrom, J. Koch and T. Lauritsen have found short periods for the delayed neutron emission accompanying uranium fission in addition to the two previously known periods of 12 seconds and 45 seconds. The results can be related with the measurements on short β -ray periods from uranium fission, and can be explained by theoretical considerations recently published by Bohr and Wheeler.

An attempt has been made by I. Nonaka to determine the neutron resonance energies of nuclei which are not made radioactive by neutron capture, utilizing the gamma-rays emitted in the capture process itself. The intensity of gamma-rays produced by slow neutrons plotted against thickness of paraffin interposed between source of neutrons and the detector shows maxima representing resonance levels in the cases of mercury, cadmium and iron.

T. Kennedy reports the isolation of a solid naphthenic acid from an Iranian petroleum fraction. The acid has the formula $C_{10}H_{18}O_2$, is saturated, contains a tertiary carboxylic acid group and one closed carbon ring. A cyclopentane structure is tentatively suggested.

It has been found by M. Frankel, O. Neufeld and E. Katchalski that on passing carbon dioxide through pure α -amino-acid esters or their solutions carbamates of the α -amino esters of the general formula $RCH.NH.COOR_1$

are formed. These compounds are

also valuable in carrying out poly-condensations of α -amino-acids. They form polypeptide esters of varying chain-length.

P. Bonet-Maury and H. R. Olivier describe a method which should be of value to immunologists whereby non-virulent human tubercle bacilli are produced. The non-virulent bacilli are obtained by irradiating aqueous suspensions of human tubercle bacilli, using the whole of the radiation of radon dissolved in the culture.

S. Ochoa reports that the pyruvate oxidation system of brain requires the presence of magnesium (or manganese) ions.

A. W. Ham and R. E. Haist have made a histological study of the tissues of dogs injected daily with a diabetogenic anterior pituitary extract. A complex histological basis for the early phases of temporary diabetes was indicated by a lack of severe islet damage and profound changes in many other organs related to carbohydrate metabolism. A pancreatropic principle in the extract was indicated by mitotic figures in islets, ducts and acini. The hydropic degeneration which develops later in the course of injections may possibly be explained by the continued action of the pancreatropic principle on beta cells.

The occurrence of wax-like substances from peaty fireclays of the Karroo System in South Africa is described by V. L. Bosazza. He was unable to extract the pigmenting material.

E. W. Knight Jones records the occurrence of *Phoronis hippocrepia* Wright in North Wales, pointing out the paucity of recent records of this form in Great Britain.