Fig. 1. Sporelings of *Fucus vesiculosus* var. *evasiculosus* ♀ × *F. serratus* ♂, 4 months old

species. All have reached a comparable stage and at four months old are 4–7 mm. in length. Although the majority are still in the cylindrical stage with well-developed apical hairs (Fig. 1), some have already flattened and are producing cryptostomata.

The sporelings have been raised on glass slides and small stones in glass vessels containing Erdschreiber culture solution in sea-water. The vessels are suspended in a constant-temperature culture tank kept at 10° C. and lighted from above by 'Daylight' fluorescent tubes for 18 hr. each day. No attempt has yet been made to imitate conditions of tidal exposure, and this has not appeared to be necessary.

We wish to thank Prof. N. A. Burges, in whose Department this work is being carried out.

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¹ Thuret, G., *Ann. Sci. Nat.*, **4**, 197 (1854).

² Kniep, H., *Flora*, **118-9**, 331 (1925).

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A Pedigree for Three Types of Colour-Vision Defect

THE following pedigree is of interest because it shows three types of red-green colour vision defect together, namely, protanopia (*P*), extreme protanomaly (*EPA*) and protanomaly (*PA*) with darkened red, and because it supports the theory that *PA* is dominant to *EPA*^{1,2}.

The gene for *P* is represented as *p*, that for *EPA* as *r''* and that for *PA* with darkened red as *r'*. *N* is the normal gene of the 'protan' series, and the gene for *PA* with red of normal brightness would be shown as *r* but does not appear in this pedigree.

The maternal uncle is a protanopic dichromat. He must have inherited his defect from his mother. The father is protanomalous with darkened red. The mother and her sister are presumably *EPA*-normal heterozygotes, their defective genes having come from their father. The first daughter is normal in colour vision and must be a *PA*-normal heterozygote. The second and third daughters are protanomalous and must be *PA-EPA* heterozygotes in which *r'* is dominant to *r''*. The son is an *EPA* subject and must be a hemizygote for the gene *r''*.

The second daughter is exactly like her father in colour vision, but the third daughter is slightly more defective, in the sense that she has a larger matching range but a smaller mean deviation. In order to account for this, it must be assumed that in her the gene *r''* has more penetrance than in her sister, owing to unknown physiological differences, and that in her *r'* is incompletely dominant to it. The brother is much more defective, and includes the normal matching point in his matching range, but he is far from being a dichromat. All defectives in this pedigree failed the Ishihara test unequivocally and it did not distinguish them from each other.

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Glasgow, W.2. Aug. 10.

¹ Franceschetti, A., *Schweiz. Med. Wochsch.*, **58**, 52, 1273 (1928).

² Pickford, R. W., 'Individual Differences in Colour Vision', 361 (London, 1951).

Zoological Nomenclature

NOTICE is hereby given that the International Commission on Zoological Nomenclature has under consideration the following cases involving the possible use of its plenary powers for the purposes specified against each entry. Full particulars of these cases have been published in the *Bulletin of Zoological Nomenclature* in Double-Part 4/5 of Volume 9. (1) *Astacus* Fabricius, 1775 (Class Crustacea, Order Decapoda), validation of (correction of an error in *Opinion* 104); (2) *Favus* Lanchester, 1900 (Class Crustacea, Order Decapoda), validation of (correction of an error in *Opinion* 73); (3) *flavipes* Olivier, 1795, *Dytiscus* (Class Insecta, Order Coleoptera), validation of, by the suppression of *flavipes* Fabricius, 1792, *Dytiscus*.

Comments on the above cases should be sent as soon as possible to me.

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