

The species is only doubtfully a member of the genus *Gymnoascus*, but no change in generic position is proposed as yet. Full details will be published elsewhere.

Considered with the recent discovery of the perfect stage of the closely allied *Keratinomyces ajelloi*<sup>2</sup>, the case for the gymnoascomycete derivation of this important group of dermatophytes is strengthened.

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<sup>1</sup> Nannizzi, A., *Atti R. Accad. Fisiocritici Siena*, 10, 2, 89 (1927).

<sup>2</sup> Dawson, Christine O., and Gentles, J. C., *Nature*, 183, 1345 (1959).

### Occurrence of the Slipper Limpet, *Crepidula fornicata* L., in Ireland

IN May 1959, during an investigation of the intertidal ecology of the Kenmare River, Co. Kerry, full-grown single individuals of this American gastropod were found to be common below mid-tide level at Kilmakillige Harbour, a shallow and protected inlet on the southern shore of the estuary. This species is well known as a pest of oyster beds on the eastern and southern shores of England, and is also present in Wales<sup>1</sup>, but is believed not to have been recorded previously from Irish waters. Studies on the biology of *Crepidula* have shown that distribution on ships is the main, if not the only, means of remote dispersal<sup>2</sup>. It is therefore probable that this species has reached Ireland attached to vessels previously laid up in British harbours. As part of the survey, a special search was also made for the Australasian barnacle *Elminius modestus* Darwin which, though now widespread in Britain<sup>3</sup>, has in Ireland only been reported from Lough Ine, Co. Cork<sup>4</sup>. However, *Elminius* was not found anywhere within the Kenmare River, nor was *Crepidula* noted at other localities.

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<sup>1</sup> Bassindale, R., and Barrett, J. H., *Proc. Bristol Nat. Soc.*, 29, 227 (1957).

<sup>2</sup> Cole, H. A., *Min. Agric. Fish., Fish Invest.*, 17, paper 7 (1952).

<sup>3</sup> Crisp, D. J., *J. Mar. Biol. Assoc. U.K.*, 37, 483 (1958).

<sup>4</sup> Beard, D. M., *Nature*, 180, 1145 (1957).

### A Mesozoic Microflora from South Africa

IN 1948 I examined a specimen of low-grade coal from the Gamtoos River, Eastern Cape Province, South Africa, and found it to be particularly rich in microspores. Carbonaceous mudstones and shales in the Wood Beds of the Uitenhage series in the Gamtoos River basin were afterwards found to contain a comparable, though much less rich, spore assemblage, thus giving a fairly consistent picture of a Mesozoic flora of the region.

At the time of investigation it did not seem possible to name many of the sporomorphs; but owing to the progress in sporomorph taxonomy of the past ten years many can now be named, at least tentatively. Of particular interest are three species of saccate sporomorphs. One of these is similar to, if not identical with, *Pityosporites ellipticus* (Cookson) Balme, a form

known from Australia and New Zealand<sup>1</sup>. Another is *Podosporites* c.f. *micropterus* (Cookson and Pike) Balme, this genus being known from India and Australia. Both sporomorphs have been regarded as likely Podocarpaceae. The third is *Caytonipollenites pallidus* (Reissinger) Couper, identical in form with pollen of *Caytonanthus* (Caytoniales) and very likely referable to this widespread group of Mesozoic Pteridospermae<sup>2</sup>.

Other sporomorphs include *Classopollis torosus* (Reissinger) Couper, *Tsugaepollenites* sp., *Ginkgocycadophytus* sp., *Cicatricosisporites* c.f. *brevilaesuratus* Couper, and trilete spores resembling those of Cyatheaceae, Dicksoniaceae, Matoniaceae, Schizaeaceae and Gleicheniaceae. A total of about thirty sporomorph species has so far been distinguished.

The age of the Uitenhage Wood Beds is regarded as Wealden<sup>3</sup>. The spore assemblage, so far as it has been studied at present, is quite consistent with this, though not proving it, as the microflora is typically mid-Mesozoic, closely comparable with Upper Jurassic and Lower Cretaceous ones and apparently lacking certain forms which seem to be typical of the Lower Cretaceous of Australia, such as *Cicatricosisporites australiensis* (Cookson) Balme and *Microcachrydites antarcticus* Cookson.

Mid-Mesozoic microfloras of South Africa have not been investigated, and the present study suggests some resemblances to both northern and southern floras of about the same age, that is to say, a southern and a cosmopolitan element are present. In view of the occasionally mooted theory of southern origin of angiosperms in lower or mid-Mesozoic times, it is perhaps worth stressing that the present limited evidence is only negative. A fuller taxonomic account of the material is in preparation.

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<sup>1</sup> Balme, B. E., *Fuel Research, T.C.*, 25 (C.S.I.R.O., Australia, 1957).

<sup>2</sup> Couper, R. A., *Palaeontographica*, B, 103 (4-6), 75 (1958).

<sup>3</sup> Du Toit, A. L., "Geology of South Africa", 3rd ed. (Oliver and Boyd, London, 1952).

### Cell Wall Formation in Spores of the Fungus *Allomyces*

IN attempts to elucidate the details of plant cell wall formation, it is obvious that certain types of cells may be more useful than others. The investigation of cells which begin their existence devoid of a wall but which acquire one later may possibly show structural features uncomplicated by the cumulative effects of growth and differentiation. It has been shown by Nicolai<sup>1</sup>, who investigated cell wall formation in the green alga, *Chaetomorpha*, that spores of lower plants can fulfil the special requirements for investigations of this kind. She observed that the motile reproductive cells of this alga were able to form a well-defined cell wall within 24 hr. after cessation of motility. Furthermore, changes in the form and crystallinity of the cell wall constituents