Utharomyces epallocauls Boedijn in Ghana.

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With 2 Text-figures.

A remarkable mucoraceous fungus, *Utharomyces epallocaulus* was described by Boedijn (1959) as the type of a new genus. It is evident from his figures and description that this fungus agrees with one observed by the writer in January 1958 on horse dung

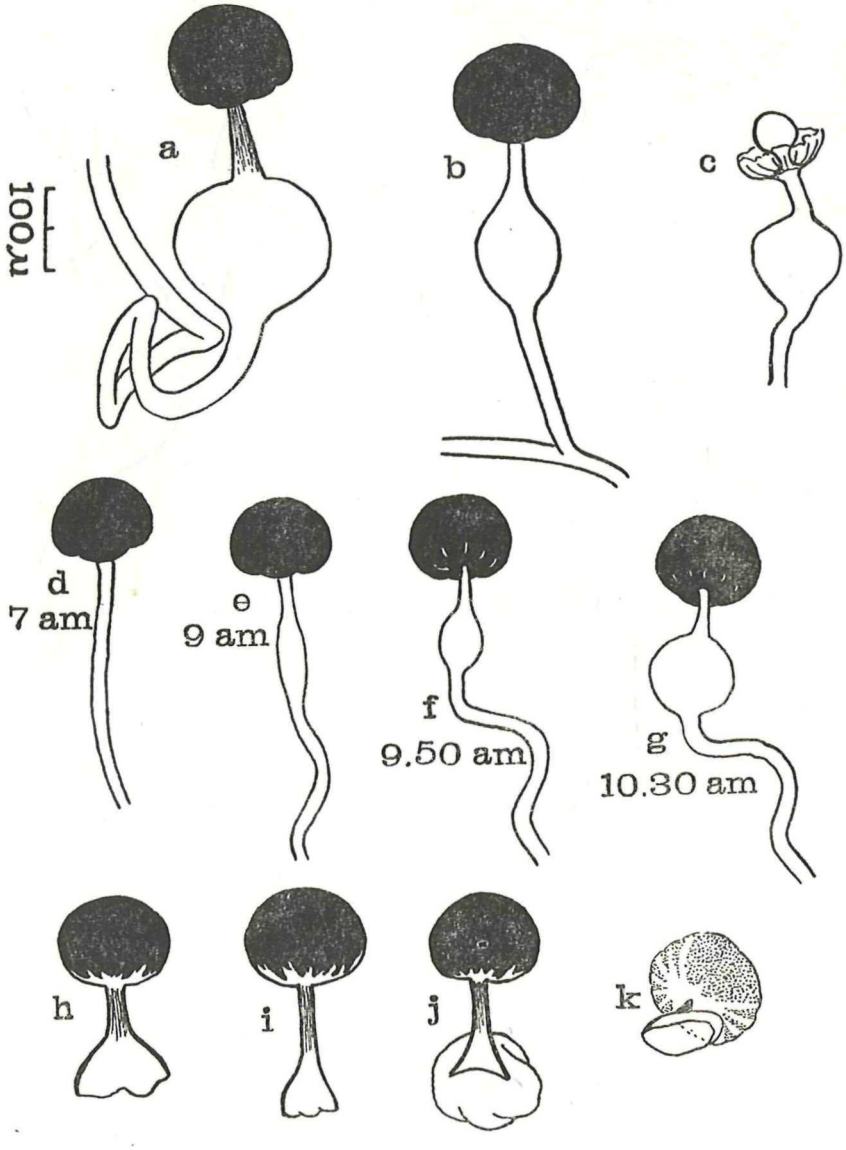

Fig. 1. *Utharomyces epallocaulus* Boedijn. a — mature sporangium with coiled sporangiophore. b — sporangium arising from side-branch. c — empty sporangium after artificially induced rupture. d, e, f, g — formation of subsporangial vesicle and initiation of coiling. h, i, j — sporangia after collapse of vesicles. k — sporangium several weeks after collapse of vesicle.

collected at Accra, Ghana. This African collection corresponded in all essentials (including spore size) with Boedijn's account. However, there were certain features of this material not noted by that author. The sporangiophores were coiled below the subsporangial vesicle (Fig. 1, a). Further, there were rib-like radial thickenings of the basal part of the sporangial wall giving it a fluted appearance (Fig. 2; a, b).

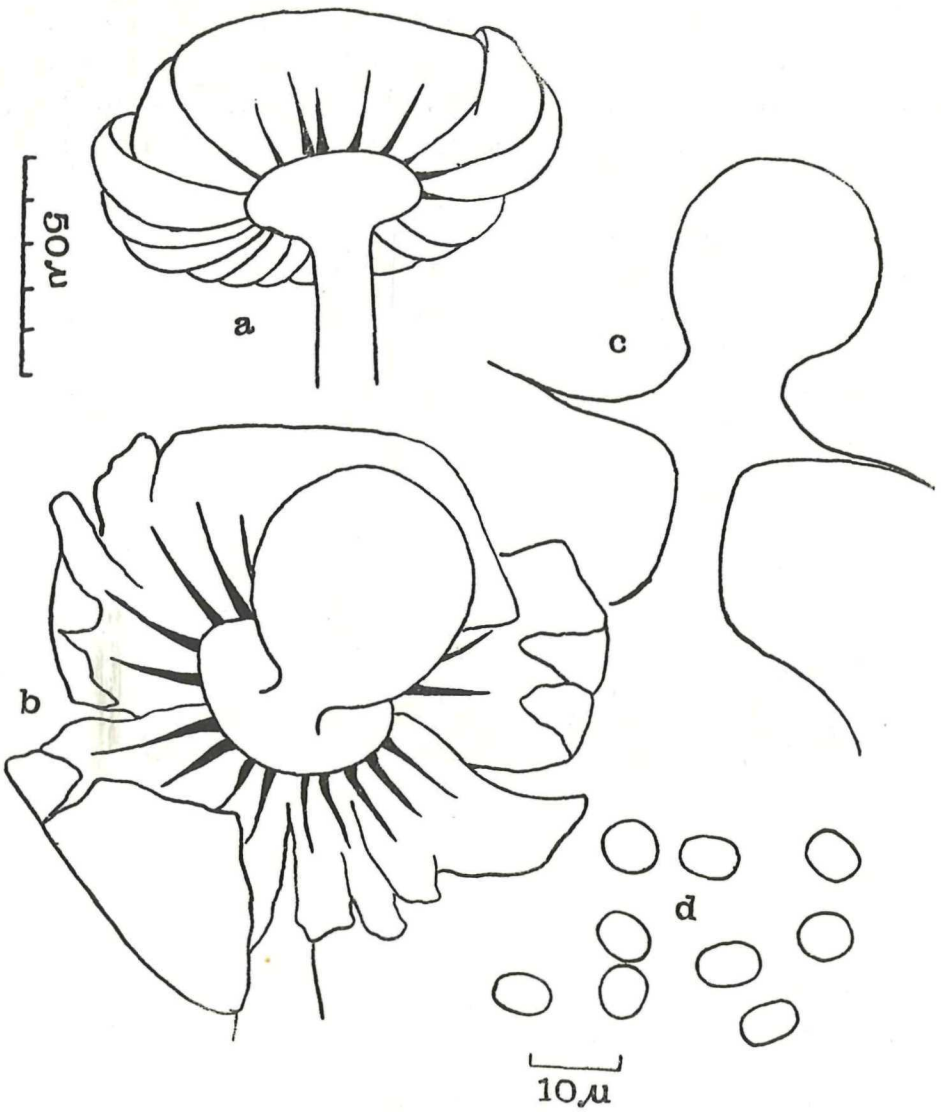

Fig. 2. a, b — artifically ruptured sporangium to show radial thickenings of sporangial wall around base of columella. c — columella in optical section. d — spores.

A diurnal rhythm was observed in the maturation of sporangiophores. In spite of careful search, no very early stages in sporangiophore development were seen; the earliest was just before vesicle formation. It is thought that sporangia developed during the night, when observations were not possible. Vesicle development always occurred between 7 and 11 a. m. (Fig. 1, d—g).

The Ghanian collection appears to differ from those of B o e d i j n in certain respects. The whole colony resembled *Rhizopus stolonifer* for which, at first sight, it was mistaken. The aerial hyphae were long, often exceeding 5 cm., sparingly branched and formed a loose weft over the surface of the substratum. Sporangia developed laterally at intervals, and also terminally. The subsporangial vesicle was occasionally sessile on the parent hypha, but was more usually situated at some distance from it on a side branch (Fig. 1 b).

Trophocysts were not observed, nor was natural dehiscence of the sporangium. Sporangia which were examined several weeks after the subsporangial vesicle had collapsed showed no sign of dehiscence, although the sporangial wall appeared thinner and less rigid than before (Fig. 1 k).

All attempts to culture this fungus failed and the spores did not germinate in rain-water or on dung agar.

Slides have been deposited at the Commonwealth Mycological Institute, Kew, Herb.IMI. 77677.

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R e f e r e n c e.

B o e d i j n, K. B. (1959). Notes on the *Mucorales* of Indonesia. Sydowia, *12*, 321—362.