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A NEW SPECIES OF CURVULARIA

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(With three Text-figures)

Curvularia papendorfii, isolated from South African soil, is described as a new species. This species is characterized by greater overall dimensions than in any of the known species, and a hilum to the spore that is not protuberant at all.

During his stay at the Centraalbureau voor Schimmelcultures, Baarn, Holland, in 1966, Prof. Dr. M. C. Papendorf, from Botany Department, University of Potchefstroom, South Africa, presented the institute with an isolate of an interesting species of *Curvularia* for identification. Since this isolate differs from all the species of *Curvularia* described so far it is presented here as a new species.

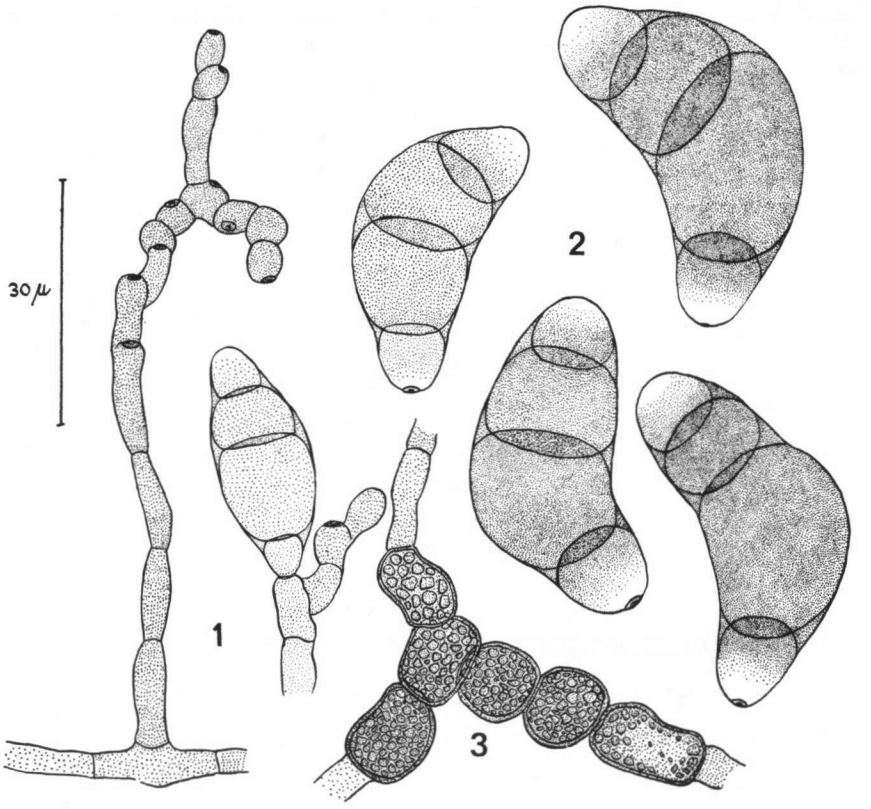
Curvularia papendorfii van der Aa, *sp. nov.*—Figs. 1–3

Hyphae ramosae, septatae, subhyalinae vel brunneae, 2–8 μ diam. Conidiophora brunnea, ramosa, septata, longitudine variabilia. Conidia in apice conidiophori ex poro successive spiraliter nascentia, cylindracea, inaequalia vel leviter curvulata, 3–(4)-septata, cellula secunda maxima, pallide brunnea vel brunnea, distaliter subhyalina, 28–50 × 15–30 μ, plerumque 39.16 × 20.40 μ.

Culta ex terra sub *Acacia Karroo*, Potchefstroom, Transvaal, Africa australis. Typus in herb. C.B.S. Baarn, Holland (cultura CBS no. 308.67).

Colonies on potato-carrot agar fast-growing, plane, grey or black and powdery, sometimes locally white and floccose, reverse greyish blue with many black dots. Hyphae smooth, branched, septate, hyaline to dark-brown, up to 8 μ in diameter, developing locally into more or less rounded, thick-walled, chlamydospore-like cells with brown granular contents. Stromata small, of indefinite shape, frequently produced deep in the agar, in young as well as in old cultures. Conidiophores arising singly, laterally and terminally on the hyphae, simple or branched, septate, geniculate, brown, smooth; the lateral conidiophores from 20 up to 200 μ long, and 4–10 μ thick, the scars dark-brown, up to 7 μ diameter. Conidia acropleurogenous, straight to strongly curved, broadly ellipsoidal, but always more or less inequilateral, 3 (seldom 4)-septate, curved at the second cell from the base, which is often the largest; smooth-walled; hyaline when young, becoming greenish-brown, finally dark-brown; lighter at both the extremities; the hilum not protuberant at all; 28–50 μ (39.16) long, 15–30 μ (20.40) thick at the broadest part. Some abnormal triangular spores were observed.

Isolated from leaf-litter of *Acacia Karroo* in South Africa. Type material is deposited at the Herbarium of the C.B.S. in Baarn. Cultures are maintained in the CBS collection, no. 308.67.



Figs. 1—3. *Curvularia papendorfii*. — 1. Sporophores. — 2. Spores. — 3. Chlamydospore-like cells.

Because of its intermediate position, it is difficult to fit the new species in either the lunata-group or the maculans-group distinguished by Boedijn (1933). In size, more especially in the width of the spores, *Curvularia papendorfii* is comparable only with *Curvularia andropogonis* (Zimm.) Boedijn (Corbetta, 1965; Ellis, 1966). This species, however, produces unbranched sporophores and spores with a very distinct, protuberant hilum. The width of the spores of all other large-spored *Curvularia* species seldom reaches 20 μ, while in *Curvularia papendorfii* it averages a little more than 20 μ.

Literature

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