

DORATOMYCES COLUMNARIS SP. NOV.

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In the course of a routine investigation of fungi growing on dung pellets of hares collected in the Melville Koppies Nature Reserve in Johannesburg some rather small coremia were noticed. Slides were prepared and an attempt made to isolate the organism in pure culture was successful. The structure of the coremium appeared to be the same as in the genera *Doratomyces* (MORTON and SMITH, 1963) and *Trichurus* (SWART, 1964), and in addition the conidia were seen to occur in chains on annellophores. No setae were present and therefore the organism was classified as a species of *Doratomyces*, however it did not fit the description of any of the species as summarised by MORTON and SMITH (1963), for this reason the organism is described here as a new species. The description is based on the study of the original material and of material from cultures on oatmeal decoction agar and oatmeal-dung extract agar.

Doratomyces columnaris H. J. Swart, sp. nov.

Coremia sunt parva, raro plus quam $50\ \mu$ alta, quae caput parvum et supra paene aequum habent; annellophora $6\text{--}10\ \mu$ alta, basi tumefacta $2\text{--}3.5\ \mu$ diam., quae in zonam annellatam, $1.75\text{--}2.25\ \mu$ diam., praerupte fastigata sunt; conidia sunt levia, basi truncata et cacumine plerumque acuto ovata, $6(4.5\text{--}8) \times 3.5(3\text{--}4)\ \mu$, et cinerea aut etiam nigra universa, quae in vinculis cohaerent et columnam summo coremio efficiunt.

Coremia small, rarely more than $50\ \mu$ high, bearing an almost flat topped small head; annellophores $6\text{--}10\ \mu$ long with swollen base $2\text{--}3.5\ \mu$ diam., tapering abruptly into the annellated zone $1.75\text{--}2.25\ \mu$ diam.; conidia smooth, ovate with truncate base and usually distinctly pointed apex, $6(4.5\text{--}8) \times 3.5(3\text{--}4)\ \mu$, dark grey to black in mass, produced in chains which adhere to form a column on top of the coremium.

Growth in agar culture is rather fast; coremia form a dense stand in which individual ones cannot be distinguished; smaller conidio-phores are abundant.

The coremia follow the pattern established by MORTON and SMITH (1963). The downward growing branches are limited in number

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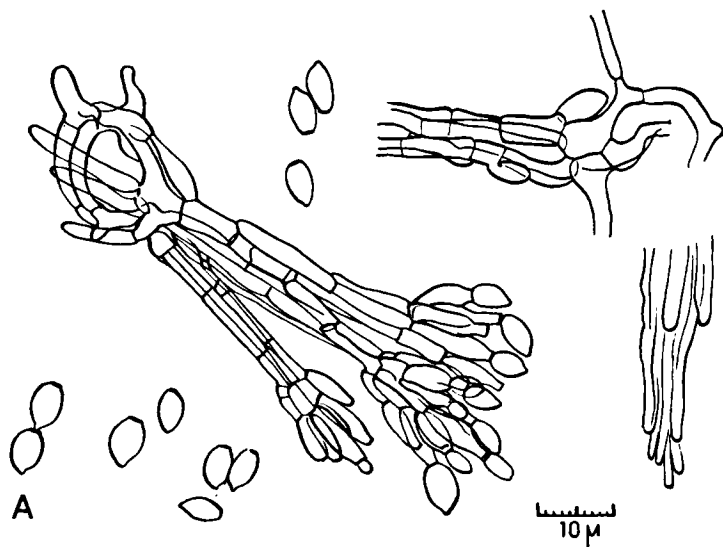
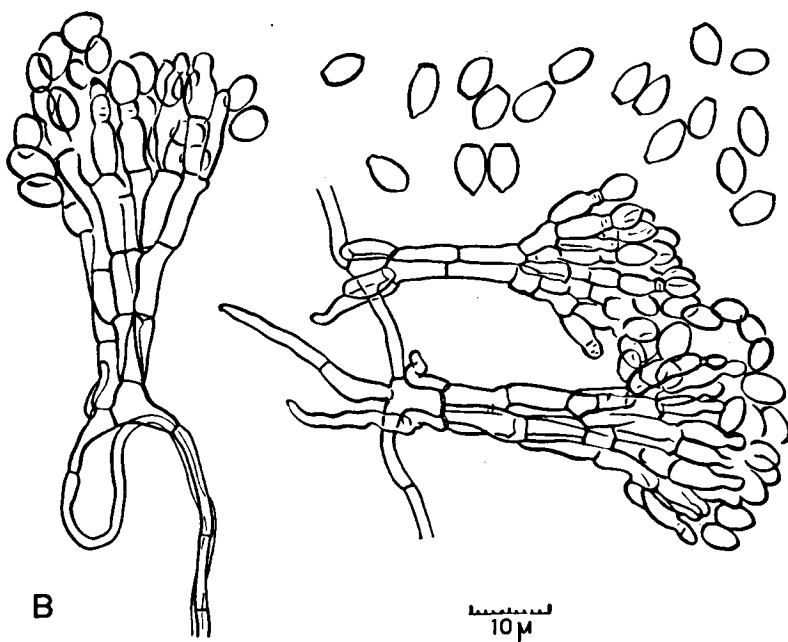


Fig. 1. Details of coremia and conidia of *Doratomyces columnaris*. A: from dung;



B: from agar culture. Scale 10 μ.

and arise from the lower part of the coremium. In several cases coremia have been seen to arise from a hyphal coil. The coremium often arises from a distinct basal cell in the mycelium, occasionally two such cells can be seen at the base of a single coremium.

The main characteristic features of the species are the very short coremium topped by a small almost flat head from which the conidia arise in a column.

Cultures of the type strain have been deposited at the C.M.I., Kew, and the C.B.S., Baarn.

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REFERENCES

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