

A NEW TROPICAL SPECIES OF TRIPOSPORIUM

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SUMMARY

An illustrated description of *Triposporium novoguineensei* Rifai sp. nov. is presented based on a specimen collected at Garaina, New Guinea.

A special visitor award from the Australian Government enabled me to attend the 42nd Australian and New Zealand Association for the Advancement of Science (ANZAAS) Congress held in August 1970 in Port Moresby (Territory of Papua and New Guinea), and to participate in a botanical and agricultural post-congress tour around the Territory. The ample opportunity to collect fungi during this tour was fully utilized and a specimen which appeared to represent an undescribed species of *Triposporium* was found in Garaina Tea Estate, Garaina, Territory of Papua.

Although the generic name *Triposporium* has appeared several times in Malesian mycological literature (Wakker & Went, 1898; van Overeem & van Overeem — de Haas, 1922; Boedijn, 1931; Boedijn & Steinmann, 1931; Teodoro, 1937), Hughes (1951) showed that the many species involved were in fact almost always referable to the sooty mould genus *Tripospermum*. They were totally unrelated to *Triposporium elegans* Corda — the type species of the genus — which so far has only been reported from temperate regions. Except for one collection from Ghana in West Africa, the second species accepted in this genus by Hughes, *Triposporium cambriense* Hughes, is also mainly a temperate species.

Without doubt the new tropical species described below belongs to *Triposporium*. It has all the diagnostic characters of that genus, which include the dark coloured, tetra- or poly-radiate aleuriospores typically provided with three arms born on an obconical stalk or pedicel and produced by stout and erect conidiophores which in the present species are also capable of elongating themselves by percurrent proliferations. From the other two species of *Triposporium*, the present taxon can be distinguished by the shape and size of its aleuriospores.

***Triposporium novoguineense* Rifai, spec. nov. — Fig". 1**

Coloniae inconspicuae, effusae, atro-brunneae. Mycelium immersum vel superficiale, ex hyphis pallide-bruneis, septatis, ramosis 2 — 4.5 μ diam. compositum. Conidiophora curta, erecta vel flexuosa, attenuata, 40 — 65 μ longa, 2.5 — 4.5 μ , crassa, ad basi saepe inflata ad 7 μ diam., pallido-brunnea, septata, interdum perproliferationes elongascentia. Conidia singularia in apice conidiophora oriunda, pallido-brunnea vel brunnea, stauriformia, ex pedicello et ramis composito; ramis plerumqua 3 vel interdum 4, subconicis, 1 — 3 septatis, usque 20 μ longis, basi 6 — 10 μ crassis, apice pallido-brunneis, 2 — 3.7 μ crassis; pedicello obconico, truncato, 1 — 3 cellulato, 7 — 12 μ crasso, usqua ad 17 μ longo.

Colonies effused, blackish brown, usually inconspicuous. Mycelium composed of mostly immersed, branched, septate, pale brown hyphae 2 — 4.5 μ diam. Conidiophores generally solitary, erect or bent or occasionally flexuous, short but stout, those seen measuring up to 65 μ long, base inflated to somewhat bulbous about 7 μ diam. then immediately above this attenuate into a 3 — 4.5 μ diam. body and 2 — 3 μ diam. apex, septate, unbranched and capable of elongating by a series of percurrent proliferations. Conidia aleuriosporous, produced singly and successively as blown out ends of the conidiophores, tetra- or polyradiate, with an obconical 1 — 3 celled stalk or pedicel which is pale brown to brown, truncate and measuring 2 — 3 μ diam. at the base, then widened to 7 — 12 μ diam. and up to 17 μ long; on top of this broadened pedicel are attached 3 (or sometimes 4) subconical short 1 — 3 septate arms, up to 20 μ long, 6 — 10 μ diam. at the base and attenuate considerably at the blunt and much paler 2 — 3.7 μ tips.

The details of the conidial development do not differ from those of *Triposporium cambriense* as elucidated by Hughes (1951). Apparently precocious germination of conidia occurs readily in this species, because from the tips of the arms of conidia can often be seen elongating, slender, septate, very pale brown, undulating hyphae.

TYPE: between colonies of other Hyphomycetes, on dead stick, Garaina Tea Estate, Territory of Papua, New Guinea, August 1970, M. A. Rifai (BO)

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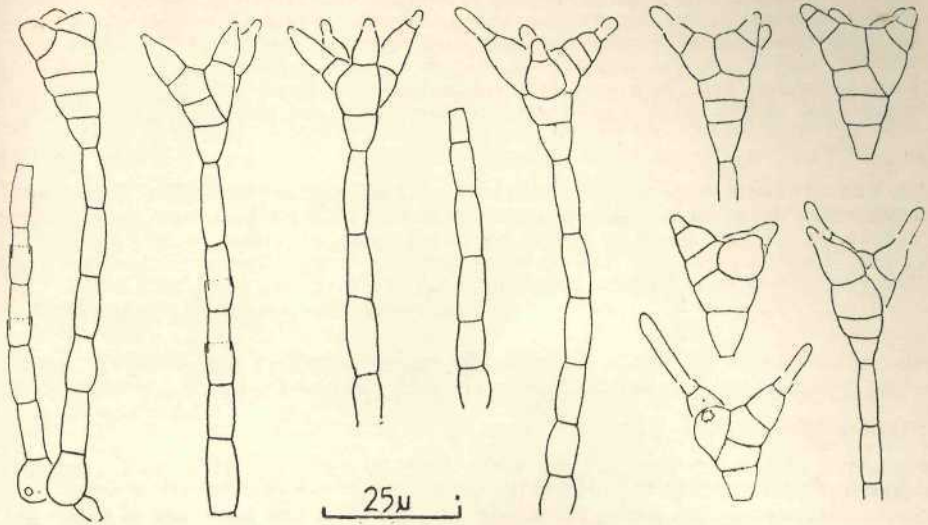


Fig. 1. *Triposporium novoguineense* Rifai: conidiophores and conidia.

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