

## **Petrakiopsis elegans, a new Hyphomycete**

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With one fig. in the text.

The fungus which forms the subject of this paper was collected on dead fallen leaves of *Eugenia calophyllifolia* Wight in litter from the Sim's Park, Coonoor, Madras State, India. A description of the fungus is given below.

The fungus produces very small, superficial, somewhat globose, dirty brown sporodochia-like masses of conidia on the substratum; these masses are discrete and 123—205  $\mu$  in diameter. The conidia are produced from sporogenous cells forming a simple basal layer or stratum. The sporogenous cells are subhyaline, thin-walled, variable in shape, and  $7-8 \times 4-5 \mu$ . The conidia are blastospores produced by simple budding, one to four or more from each sporogenous cell; they are subhyaline, long, mostly distinctly curved, many (3—21)-septate, constricted at septa, usually widest in the lower half, tapering above; the apical cell usually the longest, the basal longer than most other cells and of characteristic shape. Conidia 32—119  $\mu$  long, 3.5—6.3  $\mu$  where widest; septa 2.8—8.4  $\mu$  apart; apical cells 8.4—21.0  $\mu$  long.

The development of the conidium is as follows. A small bud arises from the sporogenous cell and this bud bulges and elongates; the conidium initial grows to some length before septa are laid down in succession from the base upwards and 7.5—14.0  $\mu$  apart. While this process of elongation and septation is continued, further septa appear in between the primary septa reducing the length of the individual cells. Ultimately, the conidia are constricted at the septa. A sporogenous cell produces several conidia one by one, but there is apparently no orderly sequence in relation to the point of origin of the successive conidia.

Because the conidia are blastospores, the fungus is placed in the family Torulaceae Corda emend. Subram. (Subramanian, 1962). Since we know of no hyphomycete genus which combines the features of our fungus, it is being accommodated in a new genus. The generic name *Petrakiopsis* is after Dr. F. Petrak in commemoration of his eightieth birthday.

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**Petrakiopsis gen. nov.**

Cellulae sporogenae stratum subglobosum, superficiale, sporodochio simile formantes; conidia scolecospora, solitaria, pluriseptata, plerumque curvula.

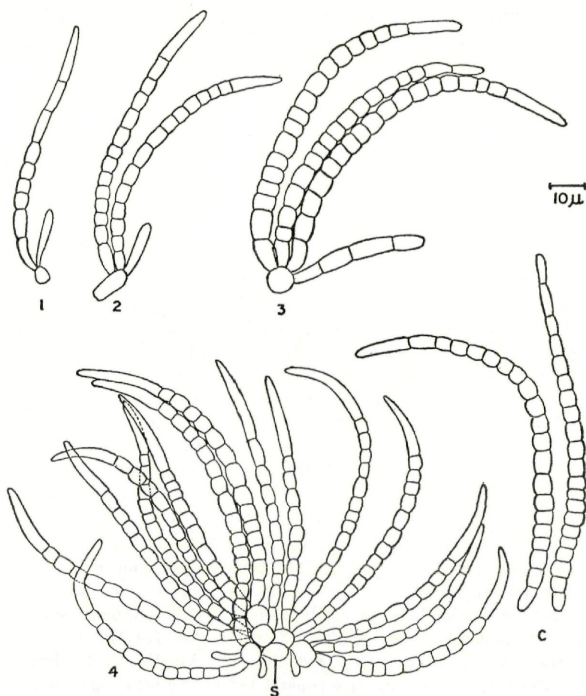


Fig. 1—4. Show stages in the development of the conidia. C, conidia; S, sporogenous cell.

Hyphomycete producing blastospores on sporogenous cells and forming discrete sporodochium-like masses. Sporogenous cells forming a basal stratum, simple. Conidia scolecospores, solitary, many-septate, usually curved.

Type species:

***Petrakiopsis elegans* sp. nov.**

Fructifications sporodochium-like, small, superficial, somewhat globose, discrete, dirty brown and 123—205 μ in diameter. Sporogenous

cells forming a basal stratum, subhyaline, thin-walled, variable in shape,  $7-8.4 \times 4-5 \mu$ ; each sporogenous cell producing 1—4 or more conidia successively and singly by simple budding from different points. Conidia blastospores, subhyaline, long, usually distinctly curved, many (3—21)-septate, constricted at septa, usually widest in the lower half and tapering gradually towards apex; apex rounded; the apical cell usually the longest ( $8.4-21.0 \mu$ ); the basal cell longer than most other cells and of characteristic shape. Conidia  $32-119 \times 3.5-6.3 \mu$ ; conidial septa  $2.8-8.4 \mu$  apart.

Sporodochia superficialia, subglobosa, obscure brunnea  $123-285 \mu$  diam.; cellulae sporogae stratum minutum basale formantes, subhyalinae, tenuiter tunicatae, quoad formam variabiles,  $7-8.4 \times 4-5 \mu$ ; conidia in cellula unaquaque 1—4 vel complura, singulatim iterum iterumque in apiculis minutissimis variis orta; conidia subhyalina, elongata, plerumque, manifeste curvula, pluriseptata (3—21), ad septa constricta, plerumque in dimidio inferiore latissima, superne paulatim angustata; eorum cellula apicalis rotundata,  $8.4-21 \mu$  longa; cellula basalis ceteris plerumque longior, quoad formam propria; conidia  $32-119 \times 9.5-6.3 \mu$ , septis ca.  $2.8-8.4 \mu$  distantibus.

Type: on dead leaves of *Eugenia calophyllifolia* Wight in litter, Sim's Park, Coonor, Nilgiris, Madras State, India, coll. K. R. C. Reddy, 20th February 1966 (Herb. MUBL No. 2003).

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#### References

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Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

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