

Genus *Quaternaria* from India

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During the survey of the forest fungi of Maharashtra state, India, Authors came across with some black, cushion shaped fungus on dried stems of many hosts. On critical study they found to be belonging to the genus *Quaternaria* Tul. The genus *Quaternaria* was originally erected by Tulsane (1863) with *Q. personi* as a type species. Ainsworth (1961) recoded 4 species of this genus from the world. However this genus remained unreported from Indian flora upto now. As all the present collections were found to be distinct from the hitherto described species and recorded on new hosts they are presented as new species.

1. *Quaternaria indica* sp. nov.

Stroma black, circular, embedded in the bark, perithecia in groups of 3—5, short necked, closely packed in the stroma, flask shaped, obliquely placed, necks not extruded, perithecia measuring from 320—442 \times 188—212 μ . Asci many, clavate, unitunicate, thinwalled, paraphysate, 8-spored, 55—58 \times 8—10 μ . Ascospores hyaline, allantoid, biserial, 8—10 \times 3—3.5 μ .

Stromata nigra, ambitu orbicularia, depresso-conoidea, cortici omnino innata, vertice tantum erumpentia, sed vix prominula; perithecia 3—5 in quoque stromate, ovoidea, sursum paulatim in ostiola cylindraco-conoidea, transcuntia, 320—442 \times 188—212 μ ; asci numerosi, clavati, antice rotundati, vix vel parum, postice paulatim attenuati et breviter stipitati, tenuiter tunicati, paraphysati, 8-sporei, 55—58 \times 8—10 μ ; sporae distichae, cylindracoae, leniter allantoidaeae, utrinque obtusae, non vel lemissime attenuatae, hyalinae, 8—10 \times 3—3.5 μ .

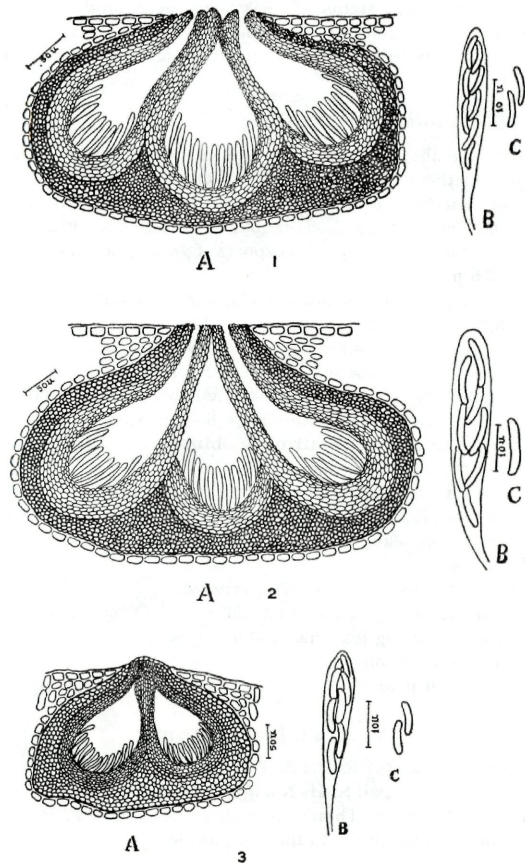
Collected on *Colebrokea oppositifolia* Sm., at Chanda forest, November 1969, Leg. P. G. Sathe and deposited in the herbarium of Maulana Azad College under No. MAH. 1014 (Sathe type).

2. *Quaternaria mahabaleshwarensis* sp. nov.

Stroma black, cushion shaped. Circular, developed in the bark, perithecia in groups of 3—4, closely packed in the stroma, flask shaped, obliquely placed, with a short neck, perithecia measuring from 450—675 \times 200—300 μ . Asci many, hyaline, unitunicate, paraphysate, thin

walled, 8-spored, clavate to cylindric, $60-76 \times 8-10 \mu$. Ascospores allantoid, hyaline to light yellow, biseriata, $10-12 \times 3-4 \mu$.

Stromata nigra, ambitu orbicularia, depresso-conoidea, cortici omnino innata, vertice tantum erumpentia sed vix prominula; perithecia 3-4 in quoque stromate, ovoidea, sursum paulatim in ostiola cylindra-



1. *Quaternaria indica* sp. nov., 2. *Quaternaria mahabaleswarensis* sp. nov.,
 3. *Quaternaria rozabaghensis* sp. nov.
 A. Section through the stroma. B. Ascus. C. Ascospores.

ceo-conoidea transeuntia 450—675 \times 200—300 μ ; asci numerosi, clavati, antice rotundati, vix vel parum, postice paulatim in stipitem brevem attenuati, tenuiter tunicati, aparaphysati, 8-spori, 60—70 \times 8—10 μ ; sporae distichae, cylindraceae, leniter allantoideae, utrinque obtusae, non vel lenissime attenuatae, hyalinae vel pallide luteolae, 10—12 \times 3—4 μ .

Collected on dried stems of *Glycosmis pentaphylla* Corr., in the month of December 1969, at Mahabaleshwar, Leg. S a t h e and deposited in the herbarium of Azad College, under No. MAH. 1015 (Sathe type).

1. *Quaternaria rozabaghensis* sp. nov.

Perithecia embeded in the stroma, stroma black embeded in the host tissue, perithecia in groups of 3—5, closely placed together in the stroma, short necked, necks not exertud, perithecia measuring from 220—300 \times 200—220 μ . Asci many, hyaline, unitunicate, clavate, 8-spored, 45—50 \times 6—8 μ . Ascospores hyaline, allantoid, biseriate, 6—9 \times 3—3.6 μ .

Stromata nigra, ambitu orbicularia, depresso-conoidea, cortici omnino innata, vertice tantum erumpentia, non vel vix prominula; perithecia 3—5 in quoque stomate, ovoidea, sursum paulatim in ostiola cylindraceo-conoidea transeuntia, 220—300 \times 200—270 μ ; asci numerosi, clavati, antice rotundati, postice in stipitem brevem attenuati, tenuiter tunicati, aparaphysati, 8-spori, 45—50 \times 6—8 μ ; sporae distichae, cylindraceae, leniter allantoideae, utrinque obtusae, non vel lenissime attenuatae, hyalinae, 6—9 \times 3—3.4 μ .

Collected on dried stems of *Artocarpus integrifolia* L. in the month of April 1969, at Rozabagh, Aurangabad. Leg. S a t h e and deposited in the herbarium of Maulana Azad College under No. MAH. 1016 (Sathe type).

Key to the Indian species of *Quaternaria*.

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|---|------------------------------|
| A. Perithecia measuring more than 450 μ | <i>Q. mahabaleshwarensis</i> |
| B. Perithecia measuring less than 450 μ | |
| x. Asci 55—58 μ long | <i>Q. indica</i> |
| y. Asci 45—50 μ long | <i>Q. rozabaghensis</i> |

A c k n o w l e d g e m e n t s

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