

The Genus *Calyculosphaeria* in India

By Y. B. Gaikwad
M. G. Mahavidyalaya, Ahmedpur Dist. Osmanabad, India
(With two figures)

The genus *Calyculosphaeria* was originally erected by Fitzpatrick (1923) with *C. tristis* (Pers.) Fitzp. as the type species. However the genus remained unrepresented in the Indian mycological flora until now.

During the recent mycological investigations of this region, the author collected dead stems of *Acacia arabica* Willd. and *Mangifera indica* L. heavily infected with some fungus. These were brought to

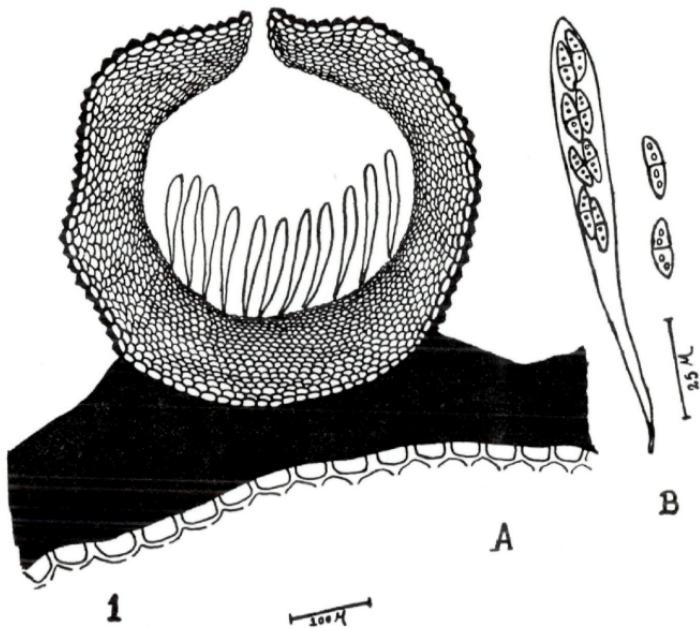


Fig. 1. *Calyculosphaeria acaciae* sp. nov.
A. Vertical section of the peritheciium with subiculum.
B. Ascus and ascospores.

the laboratory and critically studied. The detailed study of the same revealed that the fungus belongs to the genus *Calyculosphaeria* Fitzp.

The genus is characterised by the presence of subiculum, perithecia gregarious, free, obconical, cup-shaped, coarsely rough. A minute simple pore is visible at the apex on the inside of the periderm. Asci originate from the basal region, clavate, 8-spored. Ascospores small, somewhat curved (allantiod) to cylindrical, indistinctly 2-celled.

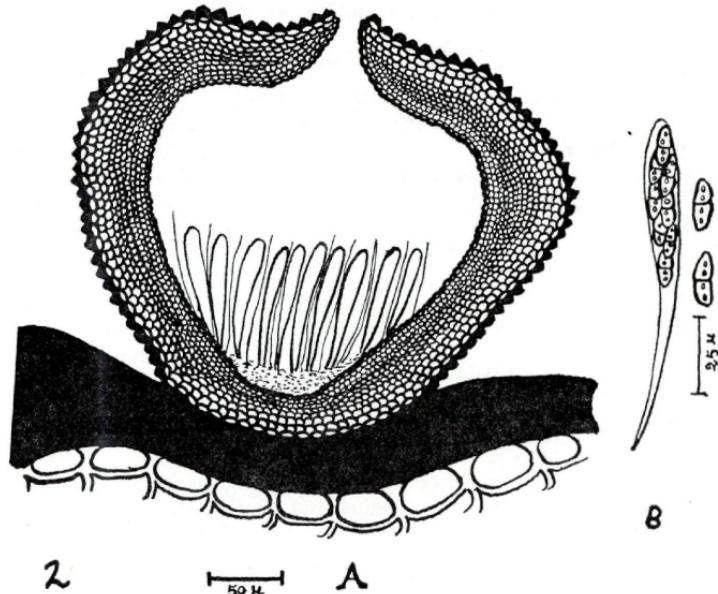


Fig. 2. *Calyculosphaeria mangiferae* sp. nov.

A. Vertical section of the perithecium.

B. Ascus and ascospores.

1. *Calyculosphaeria acaciae* sp. nov.

Perithecia gregarious, black, free, coarsely rough, cup-shaped when dry due to the depression, seated on a subiculum, measuring from 180—396 × 288—432 μ . Asci originate from the basal region, clavate, hyaline, unitunicate, long stalked, 8-spored, aparaphysate measuring from 69—100 × 10—14 μ . Ascospores biseriate, allantoid or cylindrical with 4 oil globules, hyaline, indistinctly 2-celled, 14—18 × 3—4 μ .

Perithecia gregaria, superficialia, rugosa, in sicco collabescentia, subiculo insidentia, 180—396 × 288—432 μ ; asci clavati. crasse tuni-

cati, longe stipitati, 8-spori, paraphysati, $64-100 \times 10-14 \mu$; sporae distichiae, cylindraceae, allantoideae, 4 guttulis oleosis praeditae, hyalinae, indistincte uniseptatae, $14-19 \times 3-4 \mu$.

Collected on the dead stem of *Acacia arabica* Willd. at Wadwal Nagnath in the month of Nov. 1971, Leg. Y. B. Gaikwad and deposited in the herbarium of the Botany Department, M. G. Mahavidyalaya, Ahmedpur under No. 101 (type) and in I. A. R. I. Delhi.

The species is being presented as new to science on the basis of comparative morphological studies and host specificity.

2. *Calyculosphaeria mangiferae* sp. nov.

Perithecia gregarious, free, black, obovate, ostiolate, ostiole slightly depressed, subiculate, measuring from $360-540 \times 288-396 \mu$. Ascii many, originate from the basal region, clavate, hyaline, unitunicate, long stalked, 8-spored, measuring from $3-60 \times 7-10 \mu$, paraphysate. Ascospores allantiod to cylindrical with 4 oil globules, hyaline, indistinctly 2-celled, biseriate, measuring from $14-18 \times 3-3.6 \mu$.

Perithecia gregaria, obovoidea, ostiolata, subiculo insidentia, $360-540 \times 288-396 \mu$; ascii numerosi, clavati, tenuiter tunicati, longe stipitati, 8-spori, $30-60 \times 7-10 \mu$; sporae cylindraceae vel allantoideae, 4 guttulis oleosis praeditae, hyalinae, indistincte uniseptatae, $14-18 \times 3-3.6 \mu$.

Collected on dead stem of *Mangifera indica* L. at Wadwal Nagnath in the month of Nov. 1971. Leg. Y. B. Gaikwad and deposited in the herbarium of Botany Department M. G. Mahavidyalaya, Ahmedpur under No. 102 (type) and in I. A. R. I. Delhi.

The species has been described as new to science on the basis of comparative morphological characters and host relationship.

S u m m a r y

The present paper deals with two new species of *Calyculosphaeria*. The genus is an addition to the generic list of India.

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

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