

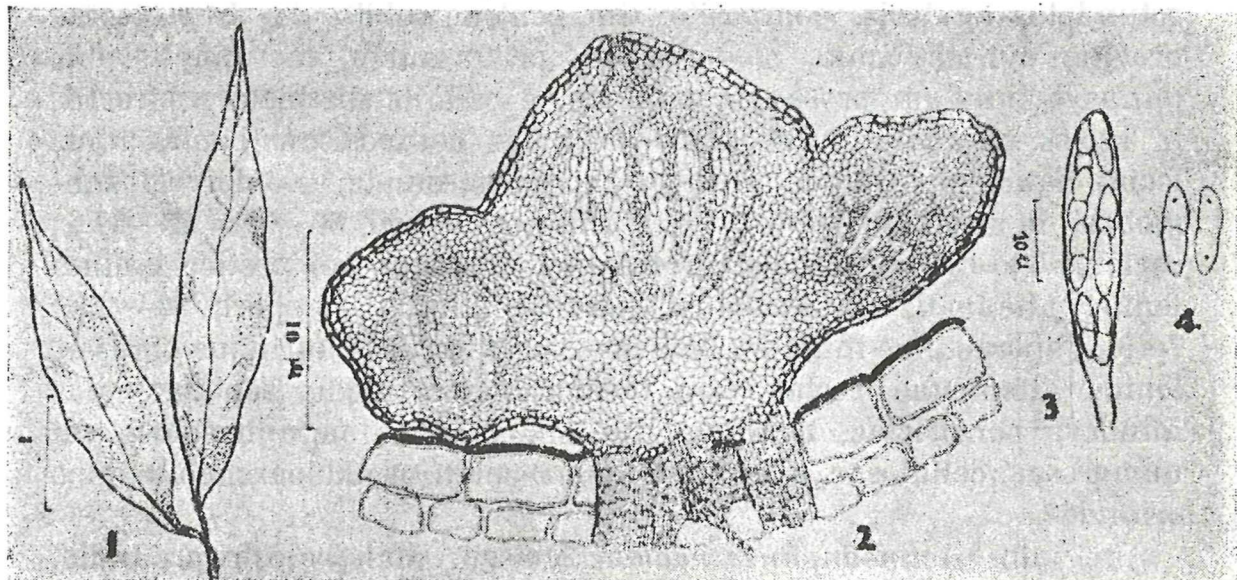
## A new Species of *Microcyclus* from India.

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With one text figure.

During the course of his studies on the fungus genus *Phyllachora* the tar-spot pathogen, the writer collected a new fungus closely associated with the typical tar-spots on *Actinodaphne hookeri* Meissn. from Mahabaleshwar, India. On closer examination in sections, the fungus was identified as a species of *Microcyclus*. This genus has so far remained unrepresented in the Indian Flora. It may have escaped notice because of the scattered inconspicuous infection spots produced on the host associated with the prominent tar-spots of *Phyllachora actinodaphnes* Uppal et al. These considerations aroused interest and led to detailed observations on this fungus, which are briefly presented here.



1. Habit. — 2. Section of Stroma showing arrangement of locules. —  
3. Ascus and spores.

The observations were made in permanent sections stained with Haidenhain's iron alum haematoxylin, counterstained with light green in clove oil. A critical examination of the literature showed that the Dothidiaceous genus *Microcyclus* first established by Saccardo (1904), is represented by only a few species, mostly obtained from South America as described by Müller and Sanwal (1954). The

present fungus showed closer affinities with *M. angolensis* Sacc et Syd. A comparison between this type species and the Indian representative is presented in the following table:

| Species              | Stroma  | Locules                 | Asci                 | Ascospores         |
|----------------------|---------|-------------------------|----------------------|--------------------|
| <i>M. angolensis</i> | 200—400 | 60—80<br>≅ 70—100 $\mu$ | 50—60<br>12—16 $\mu$ | 14—18<br>4—5 $\mu$ |
| New species          | 150—275 | 50—90<br>45—60 $\mu$    | 30—45<br>7—9 $\mu$   | 10—14<br>3—4 $\mu$ |

The Indian species of *Microcyclus* is distinct in all respects from the type and from previously described species and has much smaller dimensions. Besides it is collected on a hitherto unreported host. The fungus, therefore, is presented as a new species of *Microcyclus* with Latin diagnosis.

***Microcyclus indicus* Tilak sp. nov.**

Maculae laxae dispersae, indistinctae, plerumque hypophyllae, irregulares, brunneae vel nigrescentes; stromata subdense dispersa, crasse pulvinata, loculis plus minusve prominulis minute verrucosa, ambitu plus minusve orbicularia, sed plerumque irregularia, 150—275  $\mu$  diam., contextu pseudoparenchymatico, e cellulis irregulariter rotundato-angulosis composito, in centro subito in hypostroma breviter cylindraceum, epidermidem perforantem, mesophyllo plus minusve innatum prosenchymaticum, e cellulis distincte protractis, in series parallelas, verticaliter ordinatas compositum contractum; loculi pauci, plerumque 3—6 in quoque stromate, ovoidei vel subglobosi, in stromatis superficie poro minuto aperti, 50—90  $\mu$   $\cong$  45—60  $\mu$ ; asci clavato-cylindracei vel subfusoides, utrinque vel postice tantum leniter attenuati, antice obtusi, breviter stipitati, 8-sporei, 30—45  $\mu$   $\cong$  7—9  $\mu$ ; sporae plus minusve distichae, subfusoides, utrinque obtusae, leniter attenuatae, rectae, raro inaequilatae, medio septatae, plus minusve constrictae, hyalinae, 10—14  $\mu$   $\cong$  3—4  $\mu$ ; paraphysoides sat numerosae, cellulosa, e stromate intertheciali pseudoparenchymatico oriundae.

In foliis *Actinodaphnes hookeri* Meissn., Mahabaleshwar, India, leg. S. T. Tilak II.—III. 1958.

The fungus, besides being a new species collected on a hitherto unreported host, is a new addition to the Indian genera.

The type specimens have been deposited in the herbaria of the Commonwealth Mycological Institute, Kew, England, and Indian Agricultural Research Institute, New Delhi, India.

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### Literature.

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2. Saccardo, P. A. 1904. Sylloge Fungorum. Vol. 17, pp. 844.

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