

A new Species of *Pythium*.

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With 5 fig. in the text.

During the investigation of parasitic fungi of Maize plant, the authors have come across a peculiar spindle shaped leaf spot with red margin and white central portion with a minute black spot in the centre (Fig. 1). These leafspots were plated on PDA and everytime the same fungus was found growing from the spot. Thus for the first time a species of *Pythium* causing leaf spots was isolated. Owing to its host specificity, peculiar cultural characters and morphology of its asexual and sexual organs it has been described in this paper as a new species.

***Pythium zeae* sp. nov.**

Mycelium intra- and extra-cellular, in culture media exhibiting a very good aerial growth; hyphae regular, 6 μ in diameter, laterals tapering, 3 to 4 μ in diameter; laterals occasionally forming allantoid structures; asexual reproduction metasporeic, prosperangia or conidia are abundant, spherical, terminal or intercalary and occasionally showing sporangial proliferations, 13—16 μ in diameter; oogonia spherical, 18—23 μ in diameter; abundant, terminal or intercalary, sometimes in chains; antheridia clavate 13 \times 27 μ ; oospores spherical, intra- and extra-matrical, plerotic, single 23 μ in diameter, produced in one week old culture.

Mycelium intra- et extracellulare, in cultura aerium et optime evolutum; hyphae primigenae conformes, 6 μ crassae, laterales interdum allantoidae, 3—4 μ crassae; regeneratio asexualis, metasporeica; conidia numerosa, sphaerica, terminalia vel intercalaria, 13—16 μ diam.; oogonia globosa, terminalia vel intercalaria, numerosa, interdum catenulata, 18—23 μ diam.; antheridia clavata, 13 \times 27 μ ; oosporae globosae, intra- et extramatricales, 23 μ diam.

The fungus when cultured on PDA, in plates or on slopes always produced red pigment inside and around the colony. Young hyphae produced the pigment. When grown for a week, the central old hyphae become blackish with raised, sclerotium like, brick coloured fructifications, which contain sexual organs in abundance. It also shows concentric rings of growth, ring of younger hyphae being whitish.

The type specimen and cultures have been deposited at Indian Agricultural Research Institute, New Delhi and in the Herbarium of Botany Department, Marathwada University, Aurangabad.

Authors express their thanks to Dr. S. T. Tilak for his help in confirmation of the fungus.

Reference.

Sideris, C. P. 1932. Taxonomic studies in the family Pythiceae: II Pythium. *Mycologia*: **24**, 14—61.

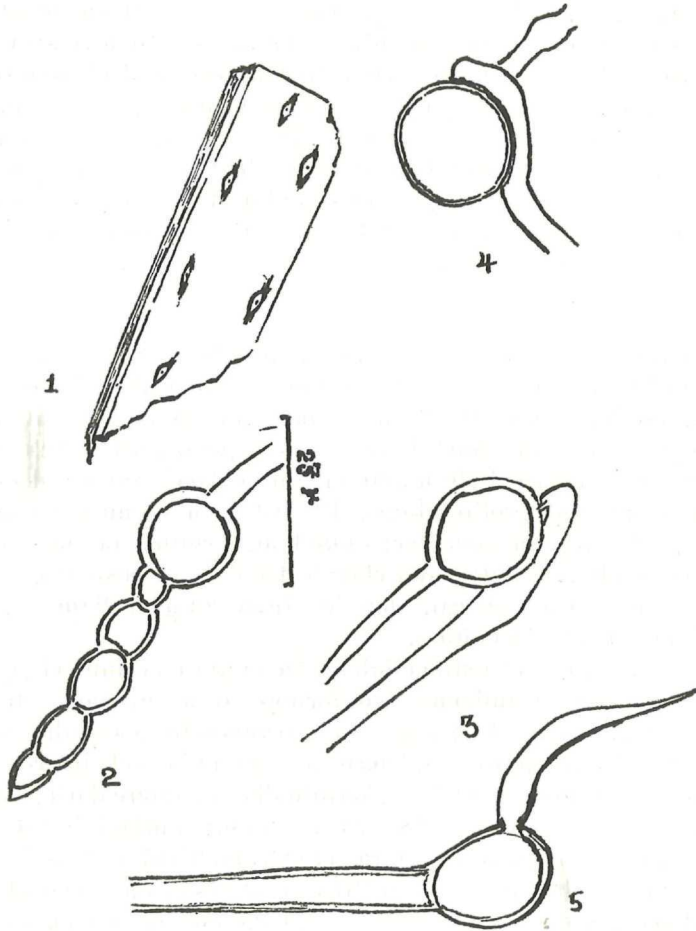


Fig. 1. A part of Maize leaf showing spots. — Fig. 2. Sporangial proliferation. — Fig. 3. Oogonium with clavate antheridium. — Fig. 4. An oospore with antheridium still clinging to it. — Fig. 5. Germinating conidium.

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Zeitschrift/Journal: [Sydowia](#)

Jahr/Year: 1964/1965

Band/Volume: [18](#)

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Artikel/Article: [A new Species of Phythium. 33-34](#)