

**A NEW COMBINATION OF *CERCOSPORA ALLIED* COMPLEX FROM SAGAR (M.P.) INDIA****\*S. A. FIRDOUSI AND TANVEER A. KHAN**Department of Botany,  
H. J. Thim College of Arts and Science,  
Mehrun, JALGAON (MAHARASHTRA) INDIA

\*Corresponding Author

Email : Shakeeltalk@gmail.com

**Received** : 5.2.16; **Accepted** : 18.3.16**ABSTRACT**

A fungal specimen was collected on *Chloroxylon swietenia* D.C. (Rutaceae). Gopalpura (South Forest Division) Sagar, M.P. After microscopic studies, it was identified as *Pseudocercospora*, as it has fully generic characters of *Pseudocercospora*. The same taxa was described earlier as *Cercospora chloroxylliae*. The fungi is having all characters of *Pseudocercospora*, as it has obconocotruncate base, unthickened scars and colored conidia. It has no generic characters of *Cercospora*. To avoid mycological jumbling it has been transferred into *Pseudocercospora chloroxylliae* com.nov.

Figure : 1 (a-c)

References : 10

Table : 00

KEY WORDS :Corecopora, Fungi, Sagar

**Introduction**

The *Cercospora* allied complex belongs the class fungi imperfecti living parasitically or saprophytically. They are anamorphic forms having different telomorph. *Cercospora* is an important form which has been described earlier by different mycologists, later on, mycologists segregated and reclassified the *Cercospora* genus. The, *Cercospora* has been gradually transformed into other genera, like *Pseudocercospora* and *Pseudocercosporidium*, etc to avoid mycological jumbling. Subsequent workers<sup>1,2,5,7</sup>, divided the *Cercospora*-complex into smaller, more morphologically similar units based on a combination of characters including conidiomatal structure (sporodochia, synnemata), mycelium (presence or absence of superficial mycelium and texture thereof), conidiophores (arrangement, branching, pigmentation and ornamentation), conidiogenous cells (placement, proliferation and scar type) and conidia (formation, shape, septation, ornamentation, pigmentation and catenulation).

**Material and Methods**

- 1 In order to collect Phytopathogenic fungi, a frequent survey was made in the forest of Sagar, Madhya Pradesh, India.
- 2 A leaf spot disease of *Chloroxylon swietenia* D.C.(Rutaceae) collected from the forest of Sagar, Madhya Pradesh, India.
- 3 The symptomology and other information such as place of collection, locality, local names of the plant and date of collections were noted.
- 4 The sample was kept in the polythene bag and brought in the laboratory.
5. In the laboratory, host name was confirmed with the help of herbarium, Dept. of Botany, H.S. Gaur Central University, Sagar, M.P., India
6. To study the fungi scarp mount was done in the cotton blue and lactiphenol. Then camera lucida drawing was done in microscope and identified with the help of monographs and, reference books .
7. The specimen was deposited in Deptt of Botany. Dr. H. S. Gour Central University, Sagar

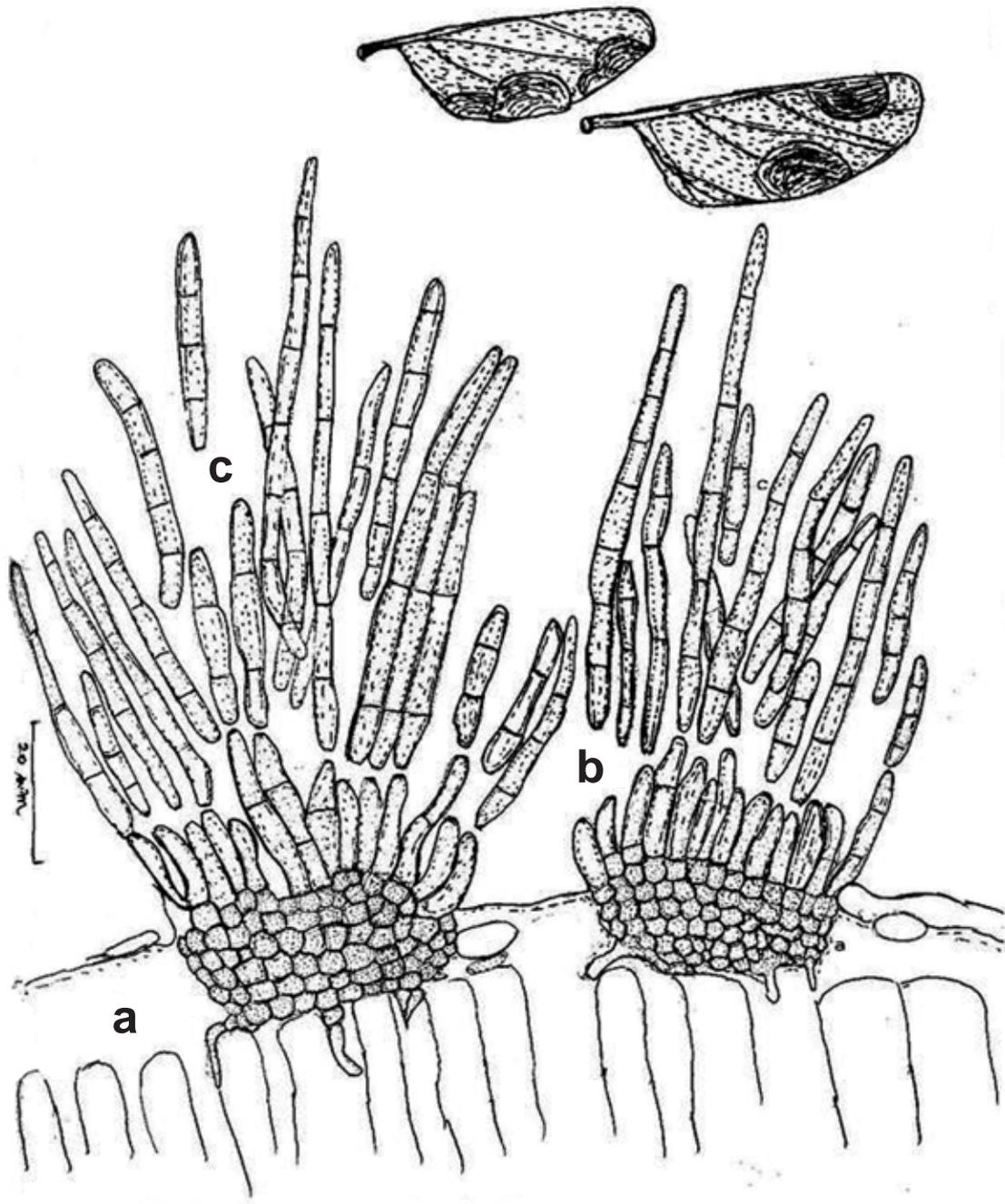


Fig. 1 : *Pseudocercospora chloroxyliae* com. nov.  
a. Stroma b. Conidiosphore c. Conidia

(M.P.) Holotype FV-26)

8. Camera Lucida drawings were made.

### Result and Discussion

#### Symptom of this disease:

The early symptom starts on the young shoot and the plant in July with the start of rainy season. The young shoot buds and leaves are affected.

#### *Pseudocercospora chloroxylliae*

The infection spots are amphigenous, irregular, coalescing in due course. light brown necrotic, colonies hyphophyllous in the distinct innumerable small dots. black, mycelium of hyphae immersed, narrow, septate, and branched; stroma well developed, subepidermal, pseudoparenchymatous, mid to dark olivaceous, 12-35µm; conidiophores caespitose acronematous. mononematous. erect, septate, unbranched, smooth, light, olivaceous, 6-20x2.4-4µm, conidiogenous cells, interegated, terminal, polyblastic, conidia simple. solitary, cylidric, light

olivaceous. acropleuogenous, smooth walled, 15-70x3-4µm. apices rounded. base is obconico-truncate and hila unthickened.

On living leaves of *Chloroxylon swietenia* D.C. (Rutaceae) January 11990, Gopalpura (South Forest Division sagar M.P) leg, S. A. Firdousi F.V.-26 Holotypus

This species was described as *Cercospora chloroxylliae* with irregular and amphigenous spots, brown conidiophores and subhyaline conidia<sup>9</sup>. The diseases symptom, shape, size and colour of stroma, conidiophores and conidia are almost identical with the species described here.

The present collection has all characters of Genus *Pseudocercospora* i.e. obconocotruncate base, unthickened scars and coloured conodia.

A number of species of *Cercospora* have been transferred to *Pseudocercospora*<sup>1,2,4-8,10</sup>

Similarly, this taxa is transferred in new combination, *Pseudocercospora chloroxylliae* com.nov.

### References

1. BRAUN, U. (1995) A Monograph of *Cercosporiella*, *Ramularia* and allied genera, Phytopathonic, *Hyphomycetes*, **40** IHW-Verlag, Eching, Germany.
2. BRAUN, U. (1998) A Monograph of *Cercosporiella*, *Ramularia* and allied genera, Phytopathonic, *Hyphomycetes*, **78**, IHW-Verlag, Eching, Germany.
3. CHUPP, C. (1954) A Monograph of the Fungus Genus *Cercospora*, Taxonomy and phylogeny, Ithaka, New York .
4. DEIGHTEN, F.C. (1976) Studies on *Cercospora* and allied genera vi *Pseudocercospora*. Spog; Pantsporacif. and Cercosposeptoria. *Peter, Mycol. Pap.*, **140**:1-156.
5. DEIGHTEN, F.C. (1979) Studies on *Cercospora* and allied genera.VII, Newspecies and redisposition, *Mycol. Pap.*, **144**; 56
6. DEIGHTEN, F. C. (1981) *Pseudocercospora perconosporoidia*. (pat & Har.) Com.Nov. a little known species from Chad., *Trans. Brit. Myco. Soc.*, **71** : 200-202.
7. DEIGHTEN, F.C. (1987) New species of *Pseudocercospora* and *Mycovellosiella* and new combination into *Pseudocercospora* and *Phaeoramularia*. *Trans. Br. Myco. Soc.* **88** (3) 365-391.
8. KHAN, A. Z. AND SHAMSI, S. (1989) *Cercospora* from Bangladesh. II, *Bangladesh J. Bot.* , **12** : 105-118.
9. RAMAKRISHNAN AND REDDY (1957) Notes on fungi. *Proc. Ind. Sci.*, **45**:176-180.
10. VERMA, R.K., KHAN, M.K. AND KAMAL (1989) Newspecies and new combination in *Pseudocercospora*. *Myco, Res.*, **92** (3):347-353.