A NEW RECORD OF CERCOSPORA FROM INDIA

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ABSTRACT
The present paper describes one new record of Foliicolous fungus, namely Cercospora volkameriae (Collected on Clerodendron indicum). It has distinctive morphological features, being true mycelial are characterized by anamorphic producing vermiform conidia directly on the hyphae or special type of stalks (Conidiophores) derived from the vegetative hyphae but the conidia are never produced in the organised fruiting bodies. This record was gathered from the North-Eastern Uttar Pradesh, India.

Key Words: Cercospora, Foliicolous, Phytopathogenic, Anamorphic, Taxonomy

INTRODUCTION
Terai region comprises North-Eastern part of Uttar Pradesh, India. That are rich in semi-deciduous forest and has rich phanerogamic vegetation. They are recognized as a hotspot biodiversity place next to Western Ghats. Our studies on fungal diversity have led to the several description of novel fungi from this region. During exploration of fungal diversity in Terai belt of North Eastern Uttar Pradesh. Several leaf spots fungi were collected for taxonomic study. An interesting this form genus was circumscribed by well developed coloured conidiophores, integrated, terminal to intercalary, sympodial, polyblastic, geniculate or more or less sinous conidiogenous cells bearing thickened conidial scars, acicular, hyaline conidia with truncate base bearing rim like thickened hila. Based on its distinct features. Critical review and comparative morpho-taxonomic features like length and diammension of conidiophores, number of conidia, septation and width of conidial filaments. This taxon is described in detail as a new record to science.

MATERIAL AND METHODS
After collection from type locality, specimens were brought to the laboratory in separate paper bags. Microscopic characteristics were observed using leaf sections made with razor blade. A binocular olympus light microscope using oil emmersion (45X). Morphological descriptions are based on slide preparations mounted in cotton blue from infected area leaves. Measurments were made 20 conidia, hila and conidiophore line drawings were prepared at a magnification of 45X. The material examined is deposited in the Herbarium Cryptogamiae Indiae Orientalis (HCIO). India Agricultural Research Institute, New Delhi, India and Isotype was retained in the Departmental Herbarium of Botany, DDU Gorakhpur University.

RESULTS AND DISCUSSION

Taxonomic description
Cercospora volkameriae Speg., Revista Mus.La Plata 15:47.1908.
Infection spots amphigenous, sub circular to irregular, blackish to dark brown on upper surface, light brown onlower surface, 1-7 mm in diam. Colonies amphiphilous, effuse. Mycelium of hyphae internal, branched, septate, hyaline. Stromata poorly develop, pseudoparenchymatous, immersed, dark olivaceous, 14-24.5 μm. Conidiogenous cells integrated, terminal to intercalary, tip swollen. Conidiophore singly or in groups of 1-8, macronematous, mononematous, straight to curved, rarely branched, geniculate, cylindrical, scar distinct, dark brown, 25- 151.5 x 4.5-6μm. Conidia solitary, dry, hyaline, obclavato cylindric, erect, curved, 1-30 transversely septate, subacute, 23-293.5 x 3-5 μm.
Distribution- United state of America, only known from the type collection.  

Type- On living leaves of *Clerodendron indicum* Vent. (Verbenaceae), H.D. Bhartiya, Feb. 1997; Siddharthnagar (U.P.) India; GPU Herb. No. 8051, HCIO 42900. 

It is evident from the literature that, four *Cercospora* species have been earlier recorded on the same host genus, but on different species. Of these, *Cercospora apii f. clerodendri* Sorber and Martinez has been invalid due to lack of latin diagnosis. *C. koshotoensis* Yomoto has been recombined into another generic segregates as *Ps. koshotoensis* Yomoto and Deighton. While *C. clerodendricola* Sawada has become synonym of *C.clerodendri* Miyake which later on was recombined into another generic segregates as *Ps.clerodendri* (Miyake) Deighton. Three new records of *Cercospora* viz. *C.indicum, C.speciosum* and *C.thomsoniae* have been described by Sobers and Martinez on same host genus but on different species. But only *Cercospora volkameriae* Speg. remains exist-ing in its original form.  

**CONCLUSION** 

The morphological features of present fungus is similar to those of *C.volkameriae* Speg. to which it conspecific. It was originally reported on same species of host genus. However, there is some variation from the present one conidiophores size which can be attributed to environmental factors. Therefore, it is assigned a new recorded for India.
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REFERENCES


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