

***Corynespora* sp.- An ethnomedicinal plant from north western Tarai forest of Uttar Pradesh - A new report**

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Abstract

During survey of medicinal plants of Dudwa Tiger reserve, Kheri Lakhimpur, the hot spot of plant diversity in north western tarai forest region of Uttar Pradesh, on November 25, 2006 the authors collected two important ethnomedicinal plants i.e. *Terminalia tomentosa* and *Mallotus phillipinsis* suffering from foliar blight disease. On detailed examination of fungus it was identified as *corynespora* sp. infected leaves having irregular, greyish white spots on lower surface, brown on upper surface. Microscopic examination of the infected part revealed the presence of solitary, 1-s distoseptate, obclavate, dark, brown, paler towards the apex, smooth, 16-30*6-8 millimicron conidia.

Keywords: *Corynespora* sp., *Terminalia tomentosa*, *Mallotus phillipinsis*

Introduction

The north western belt of U.P. is the hot spot showing great plant diversity as well as fungal diversity. A survey trip was organized for Dudwa Tiger Reserve, Kheri Lakhimpur on 25th November, 2006 for collection of ethnomedicinal plants and foliar fungi infecting the medicinal plants. During the disease survey we collected two important ethnomedicinal plants i.e. *Terminalia tomentosa* and *Mallotus phillipinsis* suffering from foliar blight disease. The infected leaves showed irregular, greyish white spots on lower surface, brown on upper surface. Both the ethnomedicinal plants have great therapeutics as their bark possess diuretic, cardiotoxic properties and given in spleen enlargement.

Materials and Method

The collected specimens were pressed and dried by routine herbarium technique as described by Jain and Rao (1978). Infected leaves were collected, hand cut section and scrap mount were prepared of infected parts in lactophenol and cotton blue as described by Jamal *et al.* (2003).

Results and Discussion

The slide were examined and fungus was identified. Microscopic examination of the infected part revealed the presence of solitary, 1-5 distoseptate, obclavate, dark brown, paler towards the apex, smooth, 16-30* 6-8 millimicron conidia. The fungus was later confirmed as *Corynespora* sp. by Prof. Kamal, Emeret Professor in Botany, D.D.U. University of Gorakhpur, Gorakhpur (U.P.).

Corynespora sp. was recorded on *Terminalia tomentosa* and *Mallotus phillipinsis*. The fungus causes foliar blight disease on the plants in which leaves are badly damaged. The leaves provide a suitable habitat for the growth and development of fungal pathogens by providing ample surface area and nutrient supply. The fungal pathogen damage the photosynthetic elements of living leaves. Leaf spot reduces the photosynthetic area of leaf and productivity of host, leaf inhabiting fungi interfere with the physiology of the host and host as well as pathogen both produce toxins which may cause degradation in the quality of

bark which is ethnomedicinally important. When leaf is damaged, the ethnomedicinal properties are lost so attention must be paid towards the conservation of *Terminalia tomentosa* and *Mallotus philippensis*.

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References

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