



Diversity of Endophytic Fungi in Few Lianas of West Medinipur, South-West, India

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Abstract: Four woody lianas were selected for isolation and study of endophytic fungi and its diversity from three forest areas of West Medinipur district. Aerial tissues (leaf, petiole and bark) were assessed for isolation of endophytes. A total of 173 plant segments out of 225 were inhabited by fungi and 229 endophytic fungi were isolated. The isolated fungi belong to 31 genera, with few sterile mycelia. Among all isolated endophytes - *Fusarium* sp., *Penicillium* sp., *Pestalotiopsis* sp., *Aspergillus* sp., *Nigrospora* sp. were most common. In *Bauhinia* sp., maximal endophytic fungi (36.68%) were observed. Five fungal species were identified by molecular method using ITS-rDNA sequence by NFCCI, Pune. Isolated endophytic fungi were *Lasiodiplodia* sp., *Acrocylindrium* sp., *Arthrinium* sp. and *Aspergillus* sp. Simpson's diversity was maximum in *Bauhinia* sp. (0.8926). Diverse group of endophytic fungi were in *Bauhinia* sp. and *Celastrus* sp.

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