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ANATOMY OF SYMBIOTIC FUNGAL ENDOPHYTES in

Psilotum nudum (L.) **P. Beauv**

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ABSTRACT

A study was undertaken to identify the presence of fungal endophyte in fern plant, *Psilotum nudum*. Being the only living species of a once populated division, *P. nudum* is the most primitive vascular plant. Cross section of stipe and rhizoid parts was done to observe the presence of endophyte within parenchyma cells. Samples of *P. nudum* were collected at different sites in Bangi. Anatomical study showed *P. nudum* has percentage of infected cells highest in rhizoid parenchyma cortex (22.2%) and lowest in the apical area (3.1%). Eleven fungal endophyte isolates were successfully isolated and identified from *P. nudum* with *Aspergillus* was found to be the major genus.

Is *Aspergillus* a host-specific endophyte? The present study shows the compatibility of *P. nudum* parenchyma cells as a host to fungal endophyte.

Keywords: Endophyte; anatomy; *Psilotum nudum*; parenchyma