

B-05: Occurrence of vesicular arbuscular mycorrhizal (VAM) fungi in some grasses and ferns

R R Premaratne, R M K Abeyagoonasekera
(Dept of Botany, Univ of Peradeniya)

Ten grasses and 10 ferns found within the University of Peradeniya premises were examined for the occurrence of Vesicular arbuscular mycorrhizal fungi. The percentage infection was determined to understand their mycorrhizal affinity.

Roots dissected from the selected grasses and ferns were stained and examined for the presence of VAM fungi using the method of Phillips and Hayman (1970) and the percentage infection for each plant was calculated.

Bothriocola pertusa, *Dactyloctenium aegyptium*, *Digitaria marginata*, *Eragrostis nigra*, *Eragrostis tenella*, *Setaria barbata*, *Setaria verticillata* and *Sporobolus diandrus* were found to be mycorrhizal while *Brachiaria paspaloids* and *Eleusine indica* were non mycorrhizal. Only two of the ferns sampled, *Blechnum* and *Nephrolepis* were found to be mycorrhizal while *Adiantum*, *Asplenium*, *Cyclosorus*, *Hemionitis*; *Lindsaea*, *Microsorium*, *Pteris* and *Quercifollia* did not show any mycorrhizal association.

80% of the grasses examined showed a high incidence of VAM fungi with mycorrhizal fungal spores being examined in most of the preparations. Only 20% of the ferns were mycorrhizal with a low percentage infection.