

### Theme 3: Biodiversity – Terrestrial, Aquatic

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## THE IMPORTANCE OF BIO- FERTILIZERS AND STUDY OF THEIR APPLICATION IN MEDICINALLY IMPORTANT PLANTS

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The medicinal plants constitute a source of raw material for approximately 25% of the prescribed drugs which play an important role in the field of health care. Unscientific exploitation of natural vegetation has led to a large scale denudation and reduction in - population of medicinal plants. The loss of genetic diversity in the gene pool of these medicinal plants is the most serious environmental problem -mankind facing today. Hence, the main aim of the present study is conservation of certain medicinal plants by *ex-situ* conservation method and - improvement of the soil fertility by the application of eco friendly biofertilizers (*Glomus mosseae* and *Glomus fasciculatum* ). Medicinal plants selected for the present investigations are *Andrographis paniculata*, *Costus pictus*, *Gymnema* and *Adhatoda* for their various pharmacological properties and also for their active principles. Pot trial experiments were conducted to study the responses of these medicinal plants to AM fungi association (bio fertilizers). Results envisaged that the total yield in terms of fresh and dry biomass production has been increased. Different yield attributes viz., height, number of branches have been found to be varying with treatments with the result being highest in the case of application of bio-fertilizers has been found to be varied with treatments, being highest in the application of bio-fertilizers.