

## ABSTRACT

Mycorrhization Helper Bacteria (MHB) are responsible to help the plant roots and fungal strains to form mutualistic associations. These release some special metabolites which facilitate this phenomena of mutualism. In the present investigation, survey of Green spot, Nathia Gali was conducted during Sep 2014. Soil samples from random plots were collected from rhizosphere of *Abies pindrow* (Royle ex D. Don) Royle. The soil samples were analyzed for their chemical contents. A total of 56 mycorrhizal helping bacterial (MHB) strains were successfully isolated and characterized. A few isolated MHB strains were further analyzed for secondary metabolites e.g. auxin production. The maximum auxin was produced by *Staphylococcus succinus* strain Ap-55. The 16s rRNA genes from selected strains were amplified and sequenced. These strains include *Bacillus licheniformis* strain Ap-03, *Alcaligenes faecalis* strain Ap-40, *Alcaligenes faecalis* strain Ap-41 and *Staphylococcus succinus* strain Ap-55. The sequences of these strains were further used for phylogenetic analysis.