

## Evaluation of ant nest microenvironment from Darjeeling Himalaya

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Ants, the potent ecosystem engineers are capable of managing its own ecosystems by influencing the physico-chemical features of soil and thereby controlling soil microbial community. Ants collected foods, food residues and excreta are the important sources of nutrients for those microorganisms in nest area. Present studies on ant nest soil samples collected from south-west Darjeeling Himalaya area revealed that microbial load of nest soil were remarkably higher in number compare to that of the surrounding area irrespective of ant genus. From twenty nests samples only three different ant genera, viz, *Solenopsis*, *Monomorium* and *Componotus* have been identified as the members of family Formicidae. The nest soils were of mostly neutral range pH, with high moisture content and appeared chemically rich in organic carbon, nitrogenous compounds and available phosphorus. As Darjeeling Himalayan soil faces a constant demand for nutrients specially for nitrogen and phosphorus, ant-left nest soil can meet that following proper agro-ecological management practices.

**Key words:** Ant-nest microbes, Darjeeling Himalayan soil, Himalayan ant

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