

Objectives

Lichens response to rising temperature and high ultraviolet radiance due to on-going climate change:

- **Monitor lichen community composition at high altitude and alpine regions of Garhwal Himalayas to document and map locations with reference to climatic and geographical variations**
- **Correlate lichen diversity changes with meteorological data and anthropogenic pressure (pollutant profiles) to evaluate the possible impact of climate change on lichen diversity**
- **Variation in secondary metabolite profiles within different lichen general and species with rising temperature and UV radiance**
- **Open top chamber (OTC) experiment to observe influence of temperature rise on secondary metabolite biosynthesis**
- **Corroborate lichen biomonitoring data with meteorological and anthropogenic data to establish the utility of lichen biomonitoring data in predicting climate change.**