

Preface

Lichens are symbiotic organisms formed by associations of a fungus and green algae or cyanobacteria. Lichens have a new anatomical, morphological and physiological properties which unlike organisms that they constitute. Lichens are used as food, dyes, perfume as well as in pharmaceutical industries since time immemorial.

*Works on antimicrobial and antioxidant properties lichen of have been performed by various workers worldwide. Hence our investigation is based on assessing antimicrobial and antioxidant efficiency five common lichens *Everniastrum* sp, *Ramalina hossei*, *Stereocaulon pomiferum*, *Parmotrema reticulatum* and *Usnea baileyi* from Darjeeling hills against seven bacteria and a fungus. Preliminary antimicrobial screening was preceded by determination of Minimum inhibitory concentration in nutrient agar (NA) medium. Four medicinal plants namely (*Berginia ciliata*, *Panax pseudoginseng*, *Urtica dioica* and *Sapindus mukrossi*) were combined and its synergistic antimicrobial and antioxidant efficacy was estimated. It may be assumed that the prevalence of antimicrobial and antioxidant activity of lichens from Darjeeling Hills may be due to the presence of different lichen compounds. Further studies on isolation of metabolites and their bioactivities are suggested in future line of investigation.*

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(Sujata Kalikotay)