

Diversity and Distribution of Lichens in Balochistan, Pakistan: an Overview

Abdul Nasir Khalid

University of the Punjab, Pakistan

Purpose: In order to explore lichen diversity in Balochistan province, current study is carried out. Lichens are symbiotic phenotype of lichenized fungi and play important role in soil formation, nutrient entrapment and mineral recycling. Balochistan is largest province of Pakistan in terms of area but least explored for lichen diversity. Most part of Balochistan is semi arid and vegetation is scarce.

Methods: Recently, two sites, Ziarat and Mastung, Balochistan were selected to study lichen flora of this region. During visit of these areas, 40 specimens were collected from rocks and studied using morpho-anatomical and molecular analyses.

Results and Conclusions: From boulders near roadside to rocks in deserts, interesting and diverse lichen communities were observed indicating presence of rich diversity of this group of fungi present but hidden in Balochistan. Lichen communities present in this area are different from those observed in other parts of the country, especially Swat from where 26% of total lichen flora of Pakistan is reported. These lichens belong to families Acarosporaceae, caliciaceae, candellariaceae, lecanoraceae, Megasporaceae, Teloschisteacea and Verrucariaceae. Among these, 10 lichen species are new to science and 6 are new records for Pakistan. Genus *Rinodinella* is first time reported from Pakistan while all 40 lichens are new records for Balochistan as before this study, only 9 lichens are reported from this province. More extensive surveys are required to fully explore lichen flora and evaluate its ecological role.