

Some Lichenes Identified by ITS Markers from AkdağlarMehmet Gökhan HALICI¹, Tuba ÜZÜM¹, Mithat GÜLLÜ¹¹Erciyes University, Faculty of Science, Department of Biology, Kayseri, Turkey
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Aim of the study: This study was aimed to investigate some lichenized fungi that spread in Akdağlar with anatomical, morphological and molecular methods.

Material and Methods: *Candelleriella cf. vitellin*, *Rhizocarpon cf. geographicum*, *Bellemeria alpina*, *Aspicilia viridescens* species were studied. Some lichen species belonging to Akdağlar were gathered by field study. After the morphological and anatomical examination of the lichen samples, DNA isolation was performed by using Qiagen DNeasy plant mini kit. Phylogenetic analysis of lichen samples was performed using the Mega 6 (Molecular Evolutionary Genetic Analysis) software program.

Results and Discussion: After morphological and anatomical examinations of lichen samples were made, lichen samples were identified using identification keys. Morphological and anatomical observations were confirmed by molecular methods. Phylogenetic trees were formed by phylogenetic analyzes. The species we have identified are compared to those from the genbank. In this way, evolutionary relationships between species were determined.

Key words: Lichens, ITS, PCR, Phylogenetic analysis, Akdağlar.