**Biodiversity of Iranian lichens, including a complete analysis of checklist data based on phytogeographical regions, biodiversity hotspots and conservation crtaria**

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The Iranian Plateau is one of the biodiversity hotspots and the land of a variety of climate zone of the Old World and serves as a bridge for migration of many vascular and cryptogamic plants and fungi species, connecting the eastern and western biota of Eurasia. Despite its outstanding species richness in plants (8,000 vascular plants) and 3000 (fungal species) there is no updated and comprehensive work available on lichens of Iran which could summarize the diversity and distribution pattern of species in this attractive region of the world. An evaluation of 310 pertinent literature references (1831-2020) and a vast number of recent collections from 31 different administrative provinces (ca. 60000 samples) resulted in a first overview of the future dimension of the lichen biota of Iran. Based on the checklist data, to date, 945 taxa (864 lichens and 79 lichenicolous and allied fungi) have been recorded from Iran. Of these, the occurrences of ca. 50 taxa still need future study and confirmed by new collections. Excluding doubtful species list, a comprehensive analysis of checklist data based on f three major phytogeographic regions (the Irano-Turanian, the Saharo-Sindian and the Euro-Siberian regions sensu White and Léonard) was prepared. The Irano-Turanian phytogeographical region harbors 50% of the Iranian lichens. Nearly three-quarters of the lichen species are restricted to mountain ranges in of Alborz, Ardabil, East and West, Azerbaijan, Golestan, Mazandaran and Gilan and North Khorasan with 600 taxa. In this checklist, the last accepted names are accompanied by full citation, synonymy list and its position in the fungal classification. Additional information including lifestyle, growth forms, know habitat ranges, known substrate, and the IUCN Red List categories and criteria (Not Evaluated, Data Deficient, Least Concern, Near Threatened, Vulnerable, Endangered, Critically Endangered, Extinct in the Wild and Extinct) applied for the first time.