From the Shadows to the Spotlight: Unveiling Nepal's hidden kingdom of mushrooms and lichens through digitization

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Abstract

The digitization of herbarium collections has brought forth a transformative journey, transitioning Nepal's hidden kingdom of mushrooms and lichens from the shadows into the spotlight. Through a collaborative work within the framework of Global Biodiversity Information Facility's Biodiversity Information Fund for Asia (GBIF-BIFA), involving the herbaria (KATH: Nepal's National Herbarium and Plant Laboratories and TUCH: Natural History Museum, Tribhuvan University, Nepal), and the research institute, Global Institute for Interdisciplinary Studies (GIIS), a successful unveiling of Nepal's mycological treasures has been achieved through digital means. A comprehensive digitization effort has resulted in the complete digitization of 3,971 mushroom specimens and 2,462 lichen specimens, illuminating a wealth of information for researchers, citizen scientists, and the general public. GBIF and the online database maintained by Nepal's National Herbarium and Plant Laboratories, Department of Plant Resources, serve as the gateway to this work (KATH 2021). Prior to this work, the specimens resided in the shadows, lacking the recognition they deserved. Through meticulous collection management, sorting, curation, and labeling, their secrets were unveiled, and their stories brought to our fingertips. These previously obscured specimens now possess registered individual catalogue numbers, allowing the quantification of Nepal's fungal wealth within the participating institutions. This project serves as a testament to the vital role of capturing available field-level data, preserving specimens, and harnessing the power of digitization to showcase Nepal's mycological and lichenological wonders to a global audience. Meanwhile, it has also emphasized the significance of sharing this knowledge and fostering appreciation for the overlooked world of mushrooms and lichens.

Keywords

fungi, GBIF, herbaria, Himalayas, occurrence

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Conflicts of interest

The authors have declared that no competing interests exist.

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