Taxonomic novelties in the fungal family Hygrophoraceae from Western North America & the Hawaiian Islands

Lauren A. Ré

University of Wisconsin-La Crosse, Department of Biology

Fungi in the family Hygrophoraceae (Basidiomycota) are widely known for their often vibrant coloration, diverse ecological roles, and conservation significance. Despite their showy nature, the extent of their global diversity has yet to be catalogued. Over the last 10 years, collaborative efforts between academic and community scientists have contributed extensive, high-quality vouchered collections and DNA sequences of this family. These contributions have extended known biogeographic ranges and elucidated phylogenetic relationships. This project highlights several species that are hypothesized to be new to science, particularly in Western North America. Additionally, we will recombine three species of *Hygrocybe*, commonly known as Waxy Caps, in segregate genera based on new morphological and molecular data. These three species are rare and endemic to the Hawaiian Islands with two listed as endangered by the International Union for Conservation of Nature (IUCN). This work aims to provide critical data about these species, informing land management and conservation agencies while engaging local communities.