**ECOLOGICAL REVISION ON THE LICHENICOLOUS FUNGI OF KOREA, WITH A NEW SPECIES *Hydropisphaera phaeophysciicola* AND THREE NEW RECORDS**

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Lichenicolous fungi (LF) were unfascinated to mycologists and lichen taxonomists in the past. Studying the fungi is one of the most arduous tasks in collaboration of all morphological, anatomical, and molecular analyses, as well as detection of the fungi in the field. Difficulty in getting a nice hand-section due to their tiny size and little biomass of the fungi discourage microscopic and molecular works, respectively. This study comprehended all lichenicolous fungi records in Korea, and statistical analyses revealed significant positive relationships between the LF genera *Lichenochora*, *Lichenostigma*, *Rinodina* and *Taeniolella*, and the hosts *Heterodermia*, *Phaeophyscia* and *Pyxine* in the order Caliciales on barks in mid-elevated inlands, and between the LF genera *Endococcus*, *Lichenostigma*, and *Muellerella*, and the hosts *Aspicilia*, *Ochrolechia* and *Pertusaria* in the order Pertusariales on rocks in low-elevated areas of islands. *Hydropisphaera phaeophysciicola* Lee & Hur ad int. is described as a new lichenicolous fungus supported by morphological and molecular analyses. Three lichenicolous fungi, *Muellerella lichenicola*, *Stigmidium microspilum*, and *Vouauxiomyces santessonii* are introduced new to Korea. A surrogate key is provided to assist in the identification of all 31 taxa of *Hydropisphaera* in the world.