

**MORPHOLOGICAL AND ANATOMICAL CHARACTERISTICS OF DISCOLICHENS  
AT PHU LUANG WILDLIFE SANCTUARY (PLWS), LOEI PROVINCE**

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In the period between August 2005 and June 2010 discolichens were collected from tree bark and rocks at Phu Luang Wildlife Sanctuary (PLWS). The specimens were collected in seven types of forest growth, viz., coniferous, Dry Dipterocarp and Dry Evergreen Forests in addition to Lower Montane Rain Forest, Lower Montane Scrub, Mixed Deciduous Forest, and Tropical Rain Forest. Subsequent to collection, the discolichens were identified on the basis of morphological and anatomical characteristics. Characteristically, the members of this group of lichens are disc-shaped with colored apothecia. The apothecial margins also contain algae (lecanorine apothecium) or algae are absent (lecideine apothecium and biatorine apothecium). In respect to the ascospores of the discolichens examined, they were found to be variable in size, shape and type, with the type being from simple, transversely septate or muriform. It was also found that chemical characteristics were very important, particularly at the family and genus level. In terms of taxonomic identification, they were found to be classifiable under the rubrics of eleven families and fifteen genera. The fifteen genera to which they belonged were *Bacidia*, *Bellemerea*, *Brigantiaea*, *Caloplaca*, *Catillochroma*, *Haematomma*, *Lecanora*, *Lecidella*, *Letrouitia*, *Malmidea*, *Maronina*, *Megalospora*, *Micarea*, *Ramboldia* and *Vainionor*. Finally, a total of fifty species were identified.