

B5_010_PA: LICHEN FAMILY GRAPHIDACEAE IN MANGROVE FOREST OF PRACHUAP KHIRI KHAN AND PHETCHABURI PROVINCES

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Abstract: Lichen is a composite organism consisting of fungus and algae and/or cyanobacteria functioning in a symbiotic association. Thailand has high diversity of lichens with about 1,300 species however, most of which were reported from northern and northeastern parts. *Graphidaceae* is the largest family of tropical crustose lichens and it is one of the most common inhabitants in mangrove forests. The objective of this study was to explore the diversity of lichen family Graphidaceae in mangrove forests of Prachuap Khiri Khan and Phetchaburi provinces. One hundred and thirty-six specimens were collected from barks of 20 species of mangrove phorophytes during 29–30 March 2019. The morphological and anatomical features of thalli and ascoma were examined with dissecting binocular microscope and light microscope. The secondary compounds were characterized by spot test and thin layer chromatography. All the specimens were identified as 15 species in 7 genera; *Diorygma* Eschw., *Dyplolabia* A. Massal., *Glyphis* Ach., *Graphis* Adans., *Leucodecton* A. Massal., *Phaeographis* Müll. Arg. and *Sarcographa* Fée. The genus *Graphis* showed the highest species diversity with 8 species. It was followed by genus *Phaeographis* (2 spp.) and the rest genera with one species each were recorded. *Graphis sundarbanensis* Jagad. Ram & G.P. Sinha, *Graphis crebra* Vain. and *Graphis analoga* Nyl. were the common lichens. The *Excoecaria agallocha* L., *Bruguiera parviflora* Roxb. and *Rhizophora apiculata* Blume were found as the most preferred phorophyte as they housed 6, 5 and 4 species of lichens, respectively.