A25. Mangrove associated algae from the coastlines of Malaysia, South-East Asia

Jelveh Sohrabipour[1, 2,3]
Phang Siew Moi[1,2]
Lim Phaik Eem[1,2]
Reza Rabiei[1,2,3]

[1]*Institute of Biological Sciences, Faculty of Science, University of Malaya, 50603 Kuala Lumpur, Malaysia*

[2]*Institute of Ocean and Earth Sciences (IOES), University of Malaya, 50603 Kuala Lumpur, Malaysia*
[3]*Agriculture and Natural Resources Research Center of Hoprmozgan, Iran*

Mangrove tree as salt- tolerant plants play an important ecological role in coastal regions of tropical and subtropical regions of the world. The mangrove forest habitat support many socio-economically important organisms. The organisms of this ecosystem are constantly under extreme physiological stress caused by tidal fluctuations. In spite of these extremely variable conditions, mangrove trees can support and be colonized by some benthic marine algae on their roots and pneumatophores. The rise and fall of the tide causing high diurnal changes in salinity and temperature, is an important factor that affects the water content of the thallus of mangrove associated algae. Therefore the capability of these algae to tolerate these extreme ecological conditions enables their colonization in mangrove. Some of the associated algae with mangrove trees in the coastlines of Malaysia were collected and identified based on morphological and molecular analyses. The most abundant species on the roots of mangroves were red algae, *Catenella impuda* and *Bostrychia tenella* based on morphological studies. Other species include *Caloglossa leprieuri, Heterosiphonia crispella, Cattenella caespitosa, Bostrychia radicans, Caulacanthus ustulatus, Centrocears clavulatum, Ceramium upolense, Polysiphonia howi, Gracilaria salicornia, G. changii,* and *G.edulis*. The most abundant green algae were *Enteromorpha clathrata Chaetomorpha linum, Chatomorpha minima, Cladophoropsis liebtruthii and Phyllodictyon anastomonans*. Based on molecular analysis, two new species of Gelidiales include one new *Gelidium* and one new *Parviphycus* were identified from Malaysian mangrove habitats.