

diving in the Andaman Sea. The surveys showed that the average percent covers of *Dendronephthya* spp. were significantly different among study sites. The highest coverage of *Dendronephthya* spp. was observed at West of Eden (2.62 ± 0.09% mean ± SE) while the lowest one was recorded at Ao Faiwab (0.06 ± 0.005% mean ± SE). The *Dendronephthya* spp. were distributed in a depth range of 15-20 meters and usually found on rocky substrate and dead corals. Temporal variation was also observed among years. Generally, a significant decrease in percent cover of soft coral was occurred in 2012-2013. Available substrate was one of important factors controlling distribution patterns and abundance of *Dendronephthya* spp. while temporal variation could be influenced by various factors of both natural and human activities. This research could enhance more understandings on the distribution patterns of soft corals which could be further applied for sustainable tourism in coral reefs. (full paper available)

H_H0029: HOW OLD ARE THOSE CONSPICIOUS LICHENS INHABIT THE TROPICAL RAIN FOREST AT KHAO YAI NATIONAL PARK, THAILAND

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Abstract: How old are those lichens commonly inhabit tropical rain forest (TRF) is frequently inquired. Long term monitoring of some lichen thalli normally found in the TRF at Khao Yai National Park, Thailand during 2004-2012 were performed. Lichens represented the foliose and crustose groups were selected, which were *Coccocarpia palmicola*, and *Fissurina* sp.1 consisting of 41 and 54 thalli respectively. The thallus diameters ranged from 0.36 – 13.87 cm. During the first three years all thalli had increasing diameters. Thereafter some thalli began disintegrated or died resulting in declining growth. However, models growth curves of these lichens were developed from relationship between diameter differences of thalli, all size classes, during the first year of observation. The nonlinear regression of *C. palmicola* was $\text{Diameter}_{\text{year}(n+1)} = (1.2279 \times \text{Diameter}_{\text{year}(n)}) / (1 + 0.0149 \times \text{Diameter}_{\text{year}(n)})$, $r^2 = 0.97$, $P < 0.0001$). The largest thallus found was 15 cm in diameter, it could be no less than 40 years old. Whilst, the crustose lichen *Fissurina* sp.1 had $\text{Diameter}_{\text{year}(n+1)} = (1.0739 \times \text{Diameter}_{\text{year}(n)}) / (1 + 0.0040 \times \text{Diameter}_{\text{year}(n)})$, $r^2 = 0.99$, $P < 0.0001$). Its largest thallus of 18 cm diameter could reach the age of 100 years old. The lichen growth models enable us to estimate age of thallus and growth phase of each lichen species, which leads to several applications for conservation and sustainable utilization. (abstract only)

H_H0031: LICHENS FAMILY PHYSCIACEAE ASCOMYCOTA IN MANGROVE FOREST AT CHANTABURI AND TRAT PROVINCES

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Abstract: The lichen five hundred and seventy-two specimens from Chantaburi and Trat provinces of family physciaceae were collected during November 2013 to May 2014 and taxonomic identified to eight genera and twenty-seven species. The high diversity was sixteen species on *Rhizophora apiculata* Blume and thirteen species on *Excoecaria agallocha* L. whereas *Dirinaria picta* (Sw.) Clem. & Shear. and *Physcia undulata* Moberg were commonly found. (full paper available)