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**MANGROVE PLANTS, SEA GRASSES AND BENTHIC ALGAE
AT SURIN ISLANDS, WEST COAST OF THAILAND**

by

Bo Christensen and Søren Wium-Andersen



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MANGROVE PLANTS, SEA GRASSES AND BENTHIC ALGAE AT SURIN ISLANDS, WEST COAST OF THAILAND

By BO CHRISTENSEN* and SØREN WIUM-ANDERSEN

Phuket Marine Biological Center

ABSTRACT

A collection of marine plants was made in April during an expedition to Surin Islands. Algae were collected by scuba diving down to a depth of 30 meters. The list of algae is only tentative. A total of 39 species of benthic algae were identified. Two Cyanophyceae, 14 Rhodophyceae, 4 Phaeopyceae and 19 Chlorophyceae. Further 2 species of seagrasses and 7 species of mangrove trees were recorded. Of the 39 recorded algae species 13 are new to Thailand.

I. INTRODUCTION

A joint expedition of terrestrial and marine biologists, organised by the Siam Society, visited the not very well known Surin Islands in the Andaman Sea for a period of 10 days during April 1976. The purpose of the expedition was to make preliminary descriptions of the fauna and flora of the islands and the surrounding sea.

Surin Islands is a group of small islands 50 km. off the west coast of peninsular Thailand just south of the Burmese border at 97° 50'E, 9° 25'N. The algae collection was made by scuba diving down to a depth of 30 meters. The list of species given is only tentative.

II. RESULTS

A list of mangrove plants, sea grasses and algae follows with references cited on species determinations and brief notes on biotopes.

It should be noted that seagrasses and algae collected at Surin Islands have been registered in the Phuket Marine Biological Center's reference collection, the registration numbers (Ph.) being given below.

MANGROVE PLANTS

Family AVICENNIACEAE

Avicennia marina (Forsk.) Vierh.

Ref : MacNae, 1968 : 112 (= *A. intermedia* Griff in Wyatt-Smith, 1954).

Few trees were found at the north island, north of the channel.

Family MELIACEAE

Xylocarpus moluccensis Roem.

Ref : Wyatt-Smith, 1960.

Few old trees in the big bay at the north island, on the beach.

Family SONNERATIACEAE

Sonneratia alba J. Smith.

Ref : Wyatt-Smith, 1953a.

Two small stands in the bay at the north island.

Sonneratia ovata Backer.

Ref : Wyatt-Smith, 1953a.

Few trees at the south-eastern bank of the bay at the north island.

Family RHIZOPHORACEAE

Bruguiera gymnorhiza Lamk.

Ref : Wyatt-Smith, 1953b.

Few trees in the bay at the north island where fresh water seeps out.

Rhizophora apiculata Bl.

Ref : Ding Hou, 1960.

Dominates the mangroves together with *R. mucronata*. Thin stands in the bay at the northern island and at the small bay at the north side of the channel.

* Present address: Solleroedgaardsvej 22, DK-2840 Holte, Denmark.

Rhizophora mucronata Lamk.

Ref : Ding Hou, 1960 ;

Mixed with *R. apiculata*.

SEA GRASSES

Family HYDROCHARITACEAE

Halophila ovalis (R. Br.) J.D. Hooker, 1860.

Ref : Dawson, 1954 : 376, fig. 1 d.

On muddy sand, 2 m. Ph. 56.

Thalassia hemprichii (Ehrenb.) Ascherson, 1875.

Ref : Dawson, 1954 : 377, fig. 2 g.

Sandy bottom between the islands, 1m. Ph. 57.

ALGAE.

Class CYANOPHYCEAE

Order NOSTOCALES

Family OSCILLATORIACEAE

Lyngbya majuscula Gomont, 1893.

Ref : Dawson, 1954 : 380, fig. 3 d.

Between corals. Ph. 26.

Symploca hypnoides Gomont, 1893.

Ref : Dawson, 1954 : 380, figs. 3 o, p.

On sandy bottom. Ph. 27.

This is a new record for Thailand.

Class RHODOPHYCEAE

order BANGIALES

Family BANGIACEAE

Porphyra sp.

Mangrove bay, on coral, 5 m. Ph. 28.

This genus has not previously been recorded from Thailand.

Order NEMALIALES

Family CHAETANGIACEAE

Galaxaura vietnamensis Dawson, 1954.

Ref : Dawson, 1954 : 417, figs. 28 c, d, 29 a.

On the reef, 5 m. Ph. 29.

This is a new record from Thailand.

Family GELIDIACEAE

Gelidium crinale (Turner) Lamouroux, 1825.

Ref : Dawson, 1954 : 420, fig. 31 d.

On coral, 3 m. Ph. 30.

Order CRYPTONEMALIALES

Family CORALLINACEAE

Lithophyllum sp.

Reef edge, 15 m. Ph. 55.

Amphiroa foliacea Lamouroux, 1824.

Ref : Dawson, 1954 : 430, fig. 40 c.

Reef edge, 10 m. Ph. 31.

This is a new record for Thailand.

Order GIGARTINALES

Family NEMASTOMATAACEAE

Titanophora pulchra Dawson, 1954.

Ref : Dawson, 1954 : 433, fig. 45.

Between Acroporas, 5 m. Ph. 32.

This is a new record for Thailand.

Family HYPNEAECEAE

Hypnea esperi Bory, 1829.

Ref : Dawson, 1954 : 436, figs. 46 h-j.

between coral, 10 m. Ph. 33.

Hypnea sp.

Forming mats between Acroporas, 5-10 m.

Ph.34.

Order CERAMIALES

Family DASYACEAE

Dasya pedicellata (Ag.) C. Agardh, 1824.

Ref : Dawson, 1954 : 451, fig. 56 j.

Reef edge, 5-15 m. Ph. 35.

This is a new record for Thailand.

Dasyopsis pilosa Weber van Bosse, 1923.
Ref : Dawson, 1954 : 451, figs. 56 f, 57.
Channel between islands, 2 m. Ph. 36.
This is a new record for Thailand.

Family RHODOMELACEAE

Lophosiphonia villum (J. Agardh) Setchell and Gardner, 1903.

Ref : Dawson, 1954 : 451, figs. 58 f, g.
On dead coral, 10 m. Ph. 37.
This is a new record for Thailand.

Tolypocladia glomerulata (Ag.) Schmitz, 1896-97.

Ref : Dawson, 1954 : 452, figs. 59 b, c.
On dead coral, 5-15 m. Ph. 38.

Acanthophora spicifera (Vahl) Børgesen, 1910.

Ref : Dawson, 1954 : 456, figs. 61a, b.
On coral in channel between islands, 2-5 m.
Ph. 39.

Laurencia corymbosa J. Agardh.

Ref : Dawson, 1954 : 458, fig. 61 f.
Among coral in channel between islands, 2-5 m.
Ph. 40.

Class PHAEOPHYCEAE

Order DICTYOTALES

Family DICTYOTACEAE

Dictyota dichotoma (Huds.) Lamouroux, 1809.

Ref : Dawson, 1954 : 401, fig. 15; Egerod, 1974 :
149 fig. 75-79.
Big bay on north island, 5 m. Ph. 41.

Padixna tenuis Bory, 1827.

Ref : Egerod, 1974 : 150, fig. 84.
Reef edge, 5 m. Ph. 42.

Pocockiella variegata (Lamouroux) Papenfuss,
1943.

Ref : Dawson, 1954 : 400, fig. 14 k; Trono,
1969 : 32, pl. 2 figs. 3-5.
Forming crust on dead coral, 5-10 m. Ph. 43.
This is a new record for Thailand.

Order FUCALES

Family SARGASSACEAE

Turbinaria ornata (Turner) J. Agardh, 1848.

Ref : Dawson, 1954 : 405, fig. 21; Egerod,
1974 : 152, figs. 90-92.
Channel between islands, 2 m. Ph. 44.

Class CHLOROPHYCEAE

Order SIPHONOCLADALES

Family ANADYOMENACEAE

Anadyomene wrightii Gray, 1866.

Ref : Dawson, 1954 : 390, fig. 9 e.
On dead coral, 5-15 m. Ph. 45.
This is a new record for Thailand.

Family VALONIACEAE

Valonia ventricosa J. Agardh, 1887.

Ref : Dawson, 1954 : 388, fig. 8 e ; Egerod,
1975 : 45, fig. 11.
On coral, big bay on north island. Ph. 17/1.

Dictyosphaeria versluysii Weber van Bosse, 1905.

Ref : Dawson, 1954 : 388, figs. 8 k, l; Egerod,
1974 : 140, fig. 31.
On coral in channel between islands, 0-1 m.
Ph. 46.

Dictyosphaeria cavernosa (Forskål) Børgesen, 1932.

Ref : Dawson, 1954 : 388, fig. 8 c ; Egerod,
1974 : 140, fig. 30.
On dead coral in channel between islands, 0-1
m. Ph. 15/1.

Family BOODLEACEAE

Struvea anastomosans (Harv.) Piccone & Grunnet
(ex Piccone), 1884.

Ref : Dawson, 1954 : 390, fig. 8 g , Egerod.
1975 : 50, fig. 15.
On dead coral in channel between islands, 0-1
m. Ph. 47.

Order CAULERPALES

Family BRYOPSIDACEAE

Bryopsis pennata Lamouroux 1809.

Ref : Dawson, 1954 : 392, fig. 11 b.

On dead coral, 2-5 m.

This is a new record for Thailand.

Family CODIACEAE

Codium gebbei O.C. Schmidt, 1923.

Ref : Dawson, 1954 : 395, fig. 13 k; Egerod, 1975 : 59, figs. 25-26.

On coral, in channel between islands, 0-2 m. Ph. 20/2.

Chlorodesmis hildenbrandtii A. & E. S. Gepp, 1911.

Ref : Dawson, 1954 : 394, figs. 11 f, g; Egerod, 1974 : 143, figs. 44-49.

Mats on dead coral, 1-5 m. Ph. 4/4.

Family CAULERPACEAE

Caulerpa microphysa (Weber van Bosse) Feldmann, 1955.

Ref : Egerod, 1974 : 143, figs. 42-43.

Mangrove bay, 5-10 m. Ph. 50.

Caulerpa mexicana Sonder ex Kützing, 1849.

Ref : Egerod, 1974 : 141 fig. 37-39; Egerod, 1975 : 55, fig. 23.

On dead coral, mangrove bay, 5-10 m. Ph. 23/1.

Caulerpa racemosa var. *macrophysa* (Kützing) Taylor, 1928.

Ref : Dawson, 1954 : 393, fig. 10 c; Egerod, 1974 : 142, figs. 39, 40.

Mangrove bay, 5-10 m. Ph. 24/3.

Caulerpa racemosa var. *peltata* (Lamouroux) Eubank, 1946.

Ref : Eubank, 1946 : 421, figs. 2 r, s.

On dead coral, mangrove bay, 5-10 m. Ph. 25/2.

Caulerpa serrulata (Forskål) J. Agardh amend Børgesen, 1932.

Ref : Dawson, 1954 : 393, fig. 10 a.

On dead coral, reef edge, 10 m. Ph. 51.

This is a new record for Thailand.

Family UDOTEACEAE

Avrainvillea amadelpha (Montagne) Gepp.

Ref : Børgesen, 1948 : 33, figs. 14, 15.

Channel between islands, 0-2 m. Ph. 49.

This is a new record for Thailand.

Halimeda opuntia (L.) Lamouroux, 1816.

Ref : Dawson, 1974 : 395, fig. 12 ; Egerod, 1974 : 147, figs. 59-61.

Reef edge, 5 m. Ph. 7/4.

Halimeda macroloba Decaisne, 1841.

Ref : Egerod, 1974 : 148, figs. 64-68; Egerod, 1975 : 61, fig. 33.

Reef edge, 5-10 m. Ph. 6/2.

Halimeda sp.

Reef edge, 5-15 m. Ph. 52.

Udotea javensis (Montagne) A. & E.S. Gepp 1904.

Ref : Dawson, 1954 : 395, figs. 13 b, c; Egerod, 1975 : 58, figs. 28, 29.

Mangrove bay, 5-10 m. Ph. 53.

Order DASYCLADALES

Family DASYCLADACEAE

Acetabularia exigua Solms-Laubach, 1895.

Ref : Egerod, 1975 : 62, figs. 34, 35.

On the underside of coral block, 0-1 m. Ph. 54.

Acetabularia parvula Solms-Laubach, 1895.

Ref : Egerod, 1975 : 63, figs. 36-38.

On the underside of coral block, 0-1 m. Ph. 2/2.

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