PHUKET MARINE BIOLOGICAL CENTER
Phuket, Thailand

RESEARCH BULLETIN NO. 14

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

by
Bo Christensen and Søren Wium-Andersen

PUBLISHED BY THE CENTER
Phuket, 1977
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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 Phaeophyceae 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 7° 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.
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.

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 gymnorrhiza 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: Solleroedgaardsej 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.

Symplola 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 BANGIAEAE

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 CORALLINAECES

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 NEMASTOMATAECES

Titanophora pulchra Dawson, 1954.
Ref: Dawson, 1954 : 433, fig. 45.
Between Acroporae, 5 m. Ph. 32.
This is a new record for Thailand.

Family HYPNEAEACEAE

Hypnea esperi Bory, 1829.
Ref: Dawson, 1954 : 436, figs. 46 h-j.
between coral, 10 m. Ph. 33.

Hypnea sp.
Forming mats between Acroporae, 5-10 m.
Ph.34.

Order CERAMIALES

Family DASYACEAE

Dasysa 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) Børjesen, 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 DICOTYOTALES

Family DICOTYOTACEAE

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.

Padinxa 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 VALONIAEEAE

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) Børjesen, 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 penna* 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 gbbei* O.C. Schmidt, 1923.
On coral, in channel between islands, 0-2 m. Ph. 20/2.

*Chlorodesmis hildenbrandii* 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

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. *peluta* (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 Børgeesen, 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.: Børgeesen, 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-Laubsch, 1895.
Ref.: Egerod, 1975 : 62, figs. 34, 35.
On the underside of coral block, 0-1 m. Ph. 54.

*Acetabularia parvula* Solms-Laubsch, 1895.
Ref.: Egerod, 1975 : 63, figs. 36-38.
On the underside of coral block, 0-1 m. Ph. 2/2.

REFERENCES


*(Manuscript received November 20, 1976)*