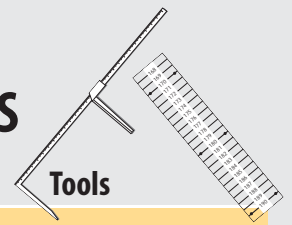


IDENTIFICATION CARDS FOR MARINE INVERTEBRATE SURVEYS IN THE PACIFIC ISLANDS



Measurements

Tools

Bivalves

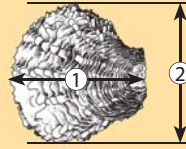
Giant clam



Longest length

Caliper
Ruler

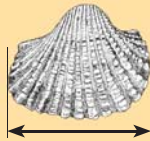
Oyster



1: Distance from hinge to opposite edge
2: Shell width

Caliper
Ruler

Ark shell
(*Anadara* sp.)



Shell width

Caliper
Ruler

Penguin's wing
(*Pteria penguin*)



Umbo-ventral length

Caliper
Ruler

Gastropods

Sea hare



Total length

Caliper
Ruler

Trochus



Basal diameter (measure across the base of the shell)

Caliper
Ruler

Cone shell



Total length

Caliper
Ruler

Triton shell



Total length

Caliper
Ruler

Strombus shell



Total length

Caliper
Ruler

Conch shell
(*Lambis chiragra*)



Total length (end of shell to end of furthest spike)

Caliper
Ruler

Turban snail
(*Turbo setosus*)



Longest width (end of apex to end of outer edge of whorl opening)

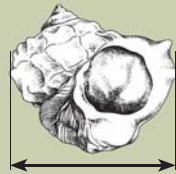
Caliper
Ruler

Measurements

Tools

Gastropods

Green snail



Longest width

Caliper
Ruler

Cowry shell



Total length

Caliper
Ruler

Cerith
(*Cerithium* sp.)

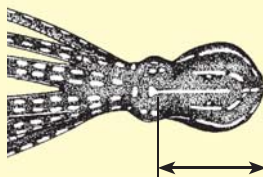


Total length

Caliper
Ruler

Cephalopods

Octopus

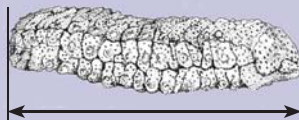


Mantle height

Ruler

Echinoderms

Sea cucumber



Length

Ruler

Sea urchin

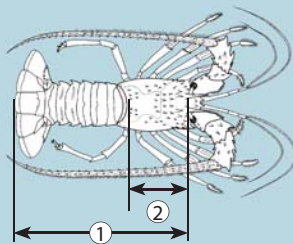


Length without spines

Caliper
Ruler

Crustaceans

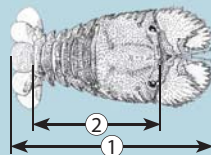
Spiny lobster



1: Length from front edge of carapace to rear edge of telson
2: Carapace length

Caliper
Ruler

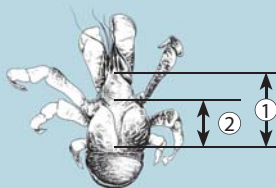
Slipper lobster



1: Total length
2: Length from eyeline to front of telson

Caliper
Ruler

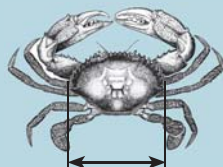
Coconut crab



1: Cephalo-thoracic length (CL)
2: Thoracic length (TL)

Caliper
Ruler

Mangrove crab



Carapace width

Ruler

BIVALVES

Arcidae



Anadara antiquata



Arca ventricosa



Fragum fragum

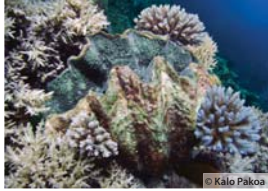


Fragum unedo



Fulvia laevigata

Cardiidae



Hippopus hippopus



Hippopus porcellanus



Lyrocardium lyratum



Tridacna crocea



Tridacna derasa



Tridacna gigas



Tridacna maxima



Tridacna squamosa



Tridacna tevoroa



Vasticardium angulatum

Carditidae



Vasticardium elongatum



Vasticardium flavum



Beguina semiorbicularata



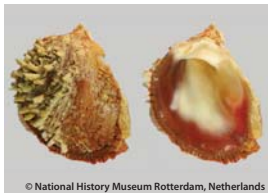
Chama croceata



Chama macerophylla

Chamidae

Donacidae



Chama pacifica



Donax cuneatus



Donax faba



Hyotissa hyotis



Codakia punctata

Gryphaeidae

Lucinidae

Mesodesmatidae

Mytilidae



Codakia tigrina



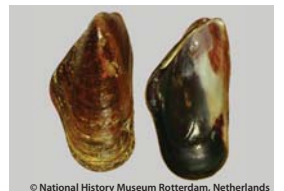
Fimbria fimbriata



Atactodea striata



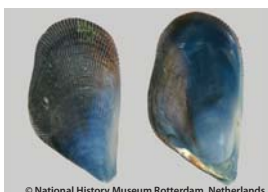
Lithophaga spp.



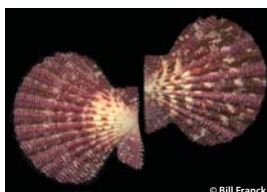
Modiolus auriculatus

Pectinidae

Pinnidae



Septifer bilocularis



Chlamys spp.



Atrina vexillum



Pinna bicolor



Pinna muricata

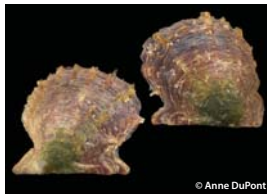
BIVALVES

Psammobiidae



© National History Museum Rotterdam, Netherlands
Asaphis violascens

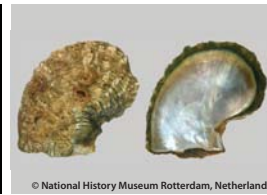
Pteriidae



© Anne DuPont
Pinctada imbricata



© Mary Buckstel
Pinctada margaritifera

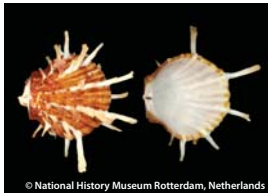


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Pinctada maxima

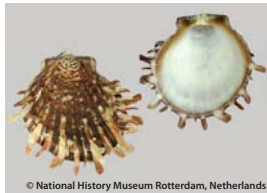


© Jan Messersmith
Pteria penguin

Spondylidae



© National History Museum Rotterdam, Netherlands
Spondylus sinensis



© National History Museum Rotterdam, Netherlands
Spondylus squamosus



© National History Museum Rotterdam, Netherlands
Spondylus varius

Tellinidae



© Pierre Peries
Tellina palatum



© National History Museum Rotterdam, Netherlands
Tellina scobinata

Veneridae



© Pierre Peries
Gafrarium pectinatum



© Shells passion
Lioconcha annettae



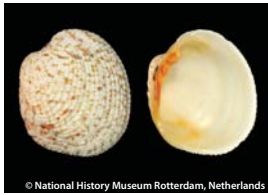
© Pierre Peries
Lioconcha castrensis



© National History Museum Rotterdam, Netherlands
Lioconcha fastigiata



© National History Museum Rotterdam, Netherlands
Periglypta puerpera



© National History Museum Rotterdam, Netherlands
Periglypta reticulata



© Pierre Peries
Pitar hebraeus



© Femorale.com
Pitar prora



© Ellen Bulger
Tapes literatus



© National History Museum Rotterdam, Netherlands
Timoclea marica

CRUSTACEANS

Calappidae



© Ria Tan, Wildsingapore

Calappa spp.

Carpiliidae



© Ria Tan, Wildsingapore

Carpilius maculatus

Coenobitidae



© WJ Chen

Birgus latro

Diogenidae



© Marc Proudfoot

Coenobita perlatus



© Ria Tan, Wildsingapore

Dardanus spp.

Eriphiidae



© Crusta, Joseph Poupin

Eriphia sebana

Gecarcinidae



© Yuji

Cardisoma spp.



© B. Navez

Cardisoma spp.

Grapsidae



© Nicolas Clerton

Metopograpsus messor

Lysiosquillidae



© Silke Baron

Lysiosquillina maculata

Ocypodidae



© Drew Avery

Ocypode ceratophthalmus

Odontodactylidae



© Jens Petersen

Odontodactylus scyllarus

Palaemonidae



© Jarek Tuszynski

Macrobrachium rosenbergii

Palinuridae



© Chan Tin-Yam

Panulirus femoristriga



© Crusta, Joseph Poupin

Panulirus homarus

CRUSTACEANS

Palinuridae



© Crusta, Joseph Poupin

Panulirus longipes



© Crusta, Norbert Verneau

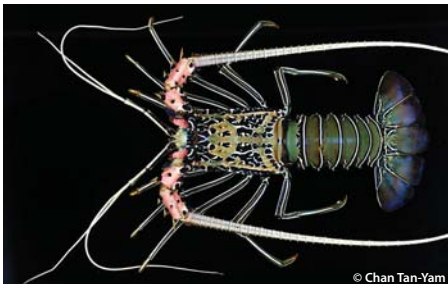
Panulirus ornatus



© Crusta, Joseph Poupin

Panulirus penicillatus

Penaeidae



© Chan Tan-Yam

Panulirus versicolor



© Crusta, Joseph Poupin

Penaeus monodon

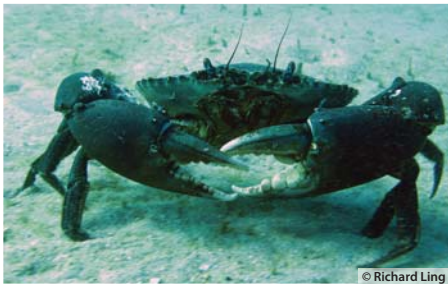
Portunidae



© Simon Pu

Scylla paramamosain

Scyllaridae



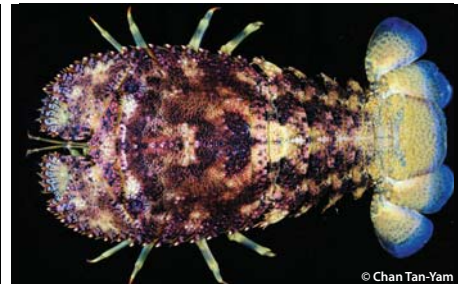
© Richard Ling

Scylla serrata



© Crusta, Joseph Poupin

Thalamita crenata



© Chan Tan-Yam

Parribacus antarcticus



© Crusta, Richer De Forges

Parribacus caledonicus



© Crusta, Joseph Poupin

Parribacus holthuisi



© Crusta, Joseph Poupin

Parribacus scarlatinus

Sesarmidae



© Denis Riek

Parasesarma erythodactyla

Thalassinidae



© Ria Tan, Wildsingapore

Thalassina anomala

Xanthidae



© Bernard Dupont

Etisus splendidus

ECHINODERMS – SEA CUCUMBERS

Actinopyga



Actinopyga caerulea

© Kim Friedman



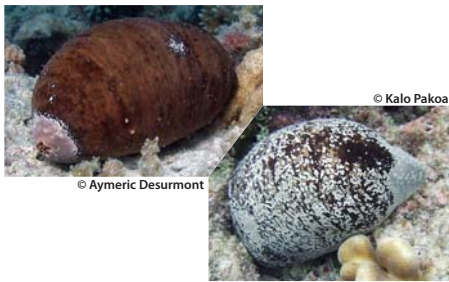
Actinopyga echinites / Deepwater redfish

© Steve Purcell



Actinopyga flammea / Spiky deepwater redfish

© Poasi Ngaluafe



Actinopyga lecanora / Stonefish

© Kalo Pakoa

© Aymeric Desurmont



Actinopyga mauritiana / Surf redfish

© Steve Purcell

© Kalo Pakoa



Actinopyga miliaris / Hairy blackfish

© Pierre Laboute



Actinopyga palauensis / Deepwater blackfish

© Steve Purcell



Actinopyga sp. / Hairy greyfish

© Kalo Pakoa



Actinopyga spinea / Burying blackfish

© Steve Purcell

Bohadschia



Bohadschia argus / Leopardfish

© Steve Purcell



Bohadschia argus / Leopardfish

© Kalo Pakoa



Bohadschia similis / Chalkfish

© Steve Purcell



Bohadschia vitiensis / Brown sandfish

© Steve Purcell



Bohadschia vitiensis / Brown sandfish

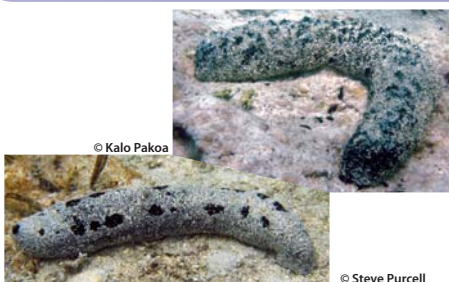
© Kalo Pakoa



Bohadschia vitiensis / Brown sandfish

© Kalo Pakoa

Holothuria



Holothuria atra / Lollyfish - Reef lollyfish

© Kalo Pakoa

© Steve Purcell



Holothuria coluber / Snakefish

© Steve Purcell



Holothuria coronopertusa

© Kalo Pakoa

ECHINODERMS – SEA CUCUMBERS



Holothuria edulis / Pinkfish



Holothuria flavomaculata / Red snakefish



Holothuria fuscogilva / White teatfish



Holothuria fuscopunctata / Elephant trunkfish

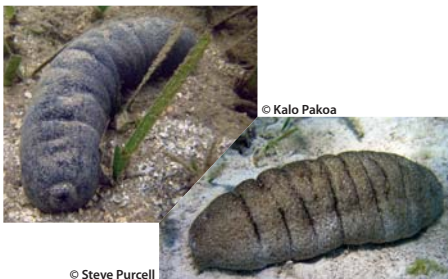


Holothuria lessoni / Golden sandfish



Holothuria leucospilota / White threadfish

Pearsoothuria



Holothuria scabra / Sandfish



Holothuria whitmaei / Black teatfish



Pearsonothuria graeffei / Flowerfish

Stichopus



Stichopus chloronotus / Greenfish



Stichopus herrmanni / Curryfish



Stichopus horrens / Dragonfish



Stichopus horrens / Dragonfish



Stichopus vastus / Brown curryfish

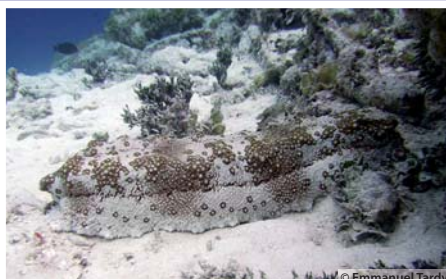


Stichopus vastus / Brown curryfish

Thelenota



Thelenota ananas / Prickly redfish



Thelenota anax / Amberfish



Thelenota rubralineata / Lemonfish

ECHINODERMS – SEA STARS

Acanthasteridae



Acanthaster planci

Asteropseidae



Valvaster striatus

Comasteridae



Comaster nobilis

Goniasteridae



Anchitosa queenslandensis



Fromia monilis

Ophidiasteridae



Linckia laevigata



Linckia laevigata



Linckia multifora



Nardoa novaecaledoniae

Ophiothrichidae



Ophiothrix spp.

Oreasteridae



Choriaster granulatus

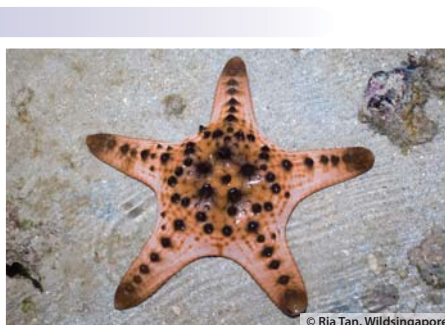


Culcita novaeguineae

Protoreasteridae



Protoreaster nodosus



Protoreaster nodosus

Tropiometridae



Tropiometra afra

ECHINODERMS – SEA URCHINS

Cidaridae



Phyllacanthus imperialis

Diadematidae



Diadema savignyi



Diadema setosum

Echinometridae



Echinothrix calamaris



Echinothrix diadema



Echinometra mathaei



Echinostrephus aciculatus



Heterocentrotus mamillatus



Heterocentrotus trigonarius

Paraseleniidae



Parasalenia gratiosa

Strongylocentrotidae



Strongylocentrotus purpuratus

Temnopleuridae



Mespilia globulus

Toxopneustidae



Salmacis belli



Toxopneustes pileolus



Tripneustes gratilla

GASTROPODS

Bursidae



Tutufa bubo

© Richard Parker



Tutufa rubeta

© Shadowshador



Cassis cornuta

© Shadowshador



Cerithium nodulosum

© David Beales, University of Hawaii Museum Consortium



Conus leopardus

© H.-R. Siegel, Musée d'histoire naturelle Fribourg, Suisse

Coralliophilidae



Conus litteratus

© H.-R. Siegel, Musée d'histoire naturelle Fribourg, Suisse



Conus marmoreus

© David Beales, University of Hawaii Museum Consortium



Conus miles

© David Beales, University of Hawaii Museum Consortium



Conus vexillum

© David Beales, University of Hawaii Museum Consortium



Coralliophila violacea

© Shadowshador

Cypraeidae



Cypraea annulus

© David Beales, University of Hawaii Museum Consortium



Cypraea caputserpentis

© David Beales, University of Hawaii Museum Consortium



Cypraea tigris

© Pierre Peries



Latirolagena smaragdula

© Jacksonville Shell Club



Pleuroploca filamentosa

© Shadowshador

Fascioliariidae

Mitridae



Pleuroploca trapezium

© Shadowshador



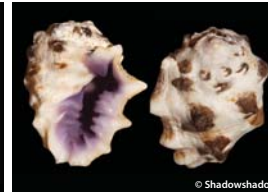
Mitra mitra

© David Beales, University of Hawaii Museum Consortium



Chicoreus ramosus

© Shadowshador



Drupa morum

© Shadowshador



Drupa rubusidaeus

© Shadowshador

Muricidae



Morula granulata

© David Beales, University of Hawaii Museum Consortium



Morula uva

© David Beales, University of Hawaii Museum Consortium



Nassa francolina

© Richard Parker



Nassa sarta

© David Beales, University of Hawaii Museum Consortium



Reishia armigera

© Richard Parker

Nassariidae



Thais aculeata

© Pierre Peries



Thais bitubercularis

© Pierre Peries



Thais intermedia

© David Beales, University of Hawaii Museum Consortium



Thais tuberosa

© Shadowshador



Nassarius spp.

© Shadowshador

Naticidae

Neritidae



Mammilla melanostoma

© David Beales, University of Hawaii Museum Consortium



Polinices mammilla

© Shadowshador



Nerita albicilla

© Pierre Peries



Nerita plicata

© David Beales, University of Hawaii Museum Consortium



Nerita polita

© Udo Schmidt

GASTROPODS

Olividae



Oliva caerulea



Oliva miniacea

Ovulidae



Ovula ovum

Potamididae



Telescopium telescopium



Terebralia palustris

Ranellidae



Charonia tritonis

Seraphsidae



Terebellum terebellum

Strombidae



Lambis chiragra



Lambis crocata



Lambis lambis



Lambis millepeda



Lambis scorpius



Lambis truncata



Strombus chrysostrabus



Strombus gibberulus



Strombus latissimus



Strombus luhuanus



Strombus mutabilis



Strombus thersites



Tectus niloticus

Tegulidae



Tectus pyramis



Terebra dimidiata



Terebra maculata



Tonna perdix



Trochus maculatus

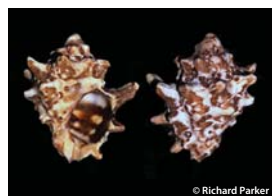
Terebridae

Tonnidae

Trochidae

Turbinellidae

Turbinidae



Vasum ceramicum



Vasum turbinellus



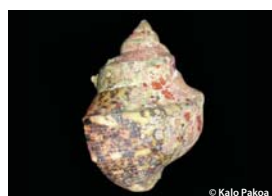
Astralium rhodostomum



Turbo argyrostomus



Turbo chrysostrabus



Turbo crassus



Turbo marmoratus



Turbo petholatus



Turbo setosus



Dendropoma maximum

Vermetidae

ALGAE AND SEAGRASS

Caulerpaceae



Caulerpa bikinensis



Caulerpa pickeringii



Caulerpa racemosa



Caulerpa serrulata



Caulerpa sertularioides



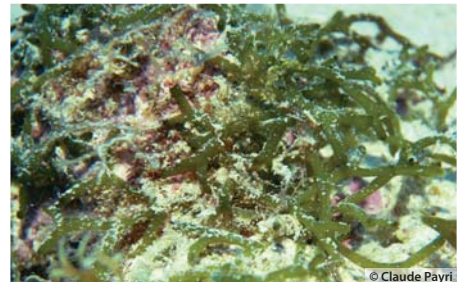
Caulerpa seuratii



Caulerpa taxifolia



Caulerpa urvilleana



Codium edule

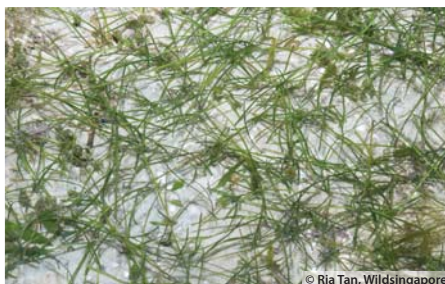
Codiaceae

Corallinaceae



Jania tenella

Cymodoceaceae



Halodule uninervis



Syngodium isoetifolium

Dictyotaceae



Dictyota acutiloba



Padina australis



Padina sanctae-crucis

ALGAE AND SEAGRASS

Galaxauraceae



Galaxaura rugosa

© Derek Keats

Gracilariaceae



Gracilaria salicornia

© Ria Tan, Wildsingapore

Halimedaceae



Halimeda opuntia

© Claude Payri

Hydrocharitaceae



Halimeda taenicola

© Claude Payri



Enhalus acoroides

© Ria Tan, Wildsingapore



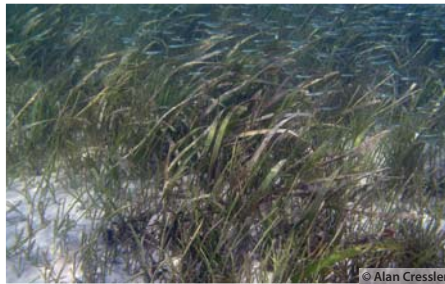
Halophila ovalis

© Ria Tan, Wildsingapore



Thalassia hemprichii

© Ria Tan, Wildsingapore



Thalassia testudinum

© Alan Cressler



Lyngbya spp.

© Bradley Moore

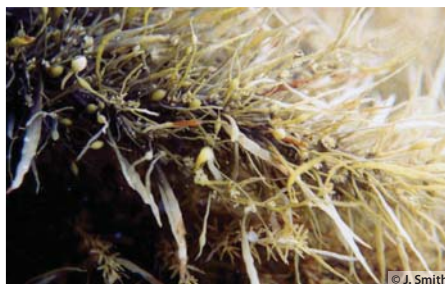
Oscillatoriaceae

Sargassaceae



Sargassum aquifolium

© Jeffrey Low



Sargassum obtusifolium

© J. Smith



Sargassum spinuligerum

© Claude Payri

Udoteaceae



Turbinaria ornata

© Claude Payri



Chlorodesmis fastigiata

© Rainer Leidner

Valoniaceae

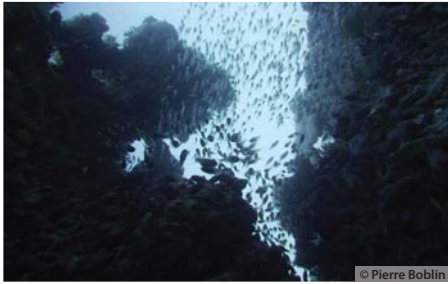


Valonia aegagropila

© Sarah Faulwetter

TYPES OF HABITAT

Topography / Complexity



High topography



Low topography / Low complexity

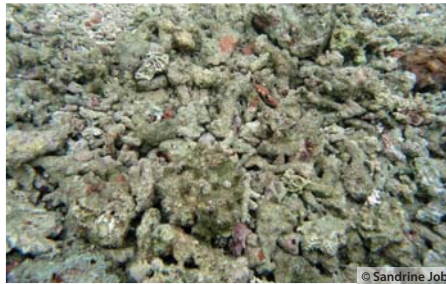


High complexity

Type of substrate



Rubble



Consolidated rubble



Pavement



Sand



Silt

Corals



Live coral



Soft coral



Encrusting coral



Dead coral



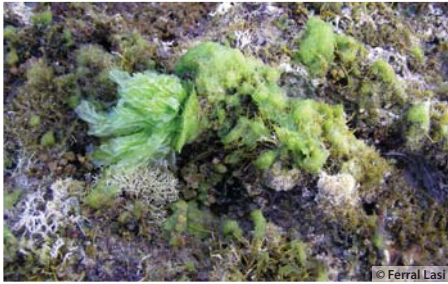
Bleaching coral



Crown-of-thorns feeding scar

TYPES OF HABITAT

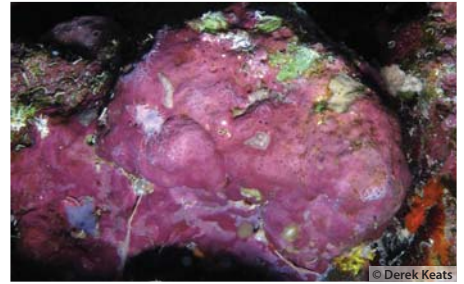
Others



Algae



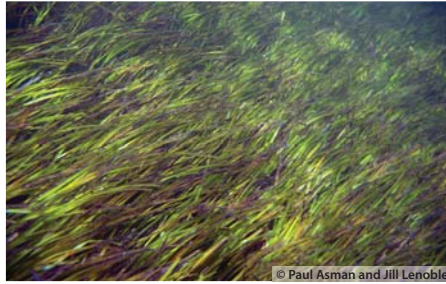
Coralline algae



Crustose coralline algae (CCA)



Fungids / Mushroom coral



Seagrass



Sponge

Prepared by the Coastal Fisheries Science and Management and the Fisheries Information Sections of the Secretariat of the Pacific Community.

Produced with the financial support of the European Union, through the SciCOFISH Project. The contents of this publication are the sole responsibility of SPC and can in no way be taken to reflect the views of the European Union.

Printed by Stredder Print Ltd, New Zealand.

