

10.3. Rhodophyta - Red algae

Taxonomic overview of the species included in this guide. Taxa indicated with an asterisk have their type locality in Sri Lanka.

For the classification of twhe red algae we follow Schneider & Wynne (2007), except for the Ceramiaceae (sensu lato) where we follow the more recent paper by Choi *et al.* (2008) who propose a splitting of the family.

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Porphyra suborbiculata Kjellman 1897a: 10-13, pl. 1: figs 1-3, pl. 2: figs 5-9, pl. 5: figs 4-7

Fig. 126

REFERENCE: Tseng (1984: 48, fig. 3, p. 49).

TYPE LOCALITY: Goto-retto, Nagasaki Prefecture, Japan.

Description - Plants membranous, gregarious, greenish purple; attached by small rhizoids; blade monostromatic, ovate to reniform, 3-4 cm in diameter; margin undulate, with small, spinulose processes which are not in the same plane as the blade; presence of a minute basal stipe. Cells in surface view angular with rounded corners, isodiametric in transverse section, 28-35 µm in diameter, slightly higher than broad, containing a stellate plast with central pyrenoid. Plants monoecious, sori of deep red carpogonia and yellowish spermatangia in irregular patches (sori) arranged along the margin of the frond; after fertilisation 32 carpospores being produced per carpogonium

Ecology - Epilithic in the supralittoral fringe of rock outcrops exposed to extreme surf; only present in the wet season.

Distribution - Mentioned from scattered localities in the tropical Indian, Pacific and Atlantic Oceans and also from the Canary Islands.

Note - Four additional species of *Porphyra* are mentioned from Sri Lanka by Silva *et al.* (1996: 91-94): *P. ceylanica* J. Agardh, *P. laciniata* (Lightfoot) C. Agardh, *P. purpurea* (Roth) C. Agardh and *P. umbilicalis* (Linnaeus) Kützing.

Fig. 126. Porphyra suborbiculata. A. Group of thalli in situ; B. Detail of blade margin with tiny teeth.

NEMALIALES – Galaxauraceae

Actinotrichia Decaisne 1842: 118

Actinotrichia fragilis (Forsskål) Børgesen 1932: 6

Fig. 127

REFERENCES: Jaasund (1976: 65, fig. 131), Magruder & Hunt (1979: 57, fig. 2, p. 56), Cribb (1983: 25, pl. 8, fig. 1), Tseng (1984: 58, pl. 32, fig. 1), Verheij & Prud'homme van Reine (1993: 439, pl. 14, fig. 1), Lewmanomont & Ogawa (1995: 91, + fig.), Calumpong & Meñez (1997: 150, bottom fig. p. 93, top fig. p. 151), Trono (1997: 171, fig. 172), Abbott (1999: 64, figs 7A-C), Huisman (2000: 37, + figs), Payri *et al.* (2000: 160, bottom fig. p. 161), Littler & Littler (2003: 62, top fig. p. 63), Oliveira *et al.* (2005: 47, + fig), Huisman *et al.* (2007: 69, + figs), Ohba *et al.* (2007: 90, + figs), Skelton & South (2007: 16, figs 14-15, 780).

TYPE LOCALITY: Mokha, Yemen.

Description - Plants forming rigid, pinkish red to orangy, hemispherical plants of up to 5 cm in diameter, composed of intricated, calcified, cylindrical, stiff axes, repeatedly dichotomously branched in different planes, with wide axils; a single, centrally placed holdfast from where the branches start more or less radially; interdichotomies 0.5-3 cm long, diameter less than 1 mm, blunt apices; presence of typical verticils of tough, unbranched, pigmented hairs, perpendicularly placed on the branches, 0.5 mm long and verticils 0.5 mm apart.

Ecology - Horizontal rock, -2 m, sheltered part behind surf-exposed rock outcrops.

Distribution - Indian Ocean, tropical Pacific Ocean.

Note - With age, the verticils of hairs break off, leaving annular scars; the plant then becomes greyish and its general appearance is then similar to *Amphiroa fragilissima*.

Fig. 127. Actinotrichia fragilis.







Fig. 128

REFERENCES: Chou (1945: 39, pl. I, figs 1-6, pl. VI, fig. 1), Magruder & Hunt (1979: 67, lower fig. p. 66), Tseng (1984: 58, pl. 32, fig. 4), Abbott (1999: 67, fig. 7F), Payri *et al.* (2000: 164, top fig. p. 165), Skelton & South (2007: 21, fig. 17).

TYPE LOCALITY: Isla Clarión, Islas Revillagigedo, Mexico.

Description - Plants isolated but growing in open populations; individual specimens more or less spherical, up to 10 cm in diameter; very well attached by a single discoid holdfast; all branches cylindrical, dichotomous in different planes, slightly calcified and rather supple, tomentose, extremely densely covered by supple, bordeaux-red filaments of uniform length (about 4 mm), resulting in a very woolly aspect when submerged.

Ecology - Epilithic in a mid intertidal rockpool, continuously wave-swept even at low tide; mostly on the vertical walls.

Distribution - Scattered locations in the tropical Indian, Pacific and Atlantic Oceans.

Notes - Some specimens of one collection are densely covered by the green alga *Cladophora socialis*. *G. filamentosa* is morphologically very similar to *G. fasciculata* Kjellman, but the latter has long and short filaments mixed and a ring of calcification in the axes, whereas the former exclusively bears long filaments and lacks the calcified ring.

A new record for Sri Lanka.

Fig. 128. Galaxaura filamentosa.



Fig. 129

REFERENCES: Abbott (1999: 68, figs 8A-E), Littler & Littler (2003: 66, top and middle figs p. 67), De Clerck *et al.* (2005b: 140, fig. 103), Oliveira *et al.* (2005: 50, + fig.), Huisman *et al.* (2007: 71, + figs).

TYPE LOCALITY: Jamaica.

Description - Thallus erect, up to 8 cm high, forming dense, stiff, pinkish to orangy, hemispherical tufts, composed of radially arranged, dichotomously branched, unsegmented, cylindrical axes; axes heavily calcified and brittle, certainly in fully grown specimens, 1-2 mm in diameter with truncated apices; a single attachment point. Gametophytes are glabrous, sometimes with a hirsute basis which then becomes brownish red; apices mostly bleached and with a typical fine transverse striation or annulations. Tetrasporophytes completely covered by rather stiff hairs, evenly and densely placed or verticillate, resulting in darker (more brownish) plants. The internal structure is composed of a central filamentous medulla and a cortex composed of 3-4 layers of large, rounded cells in the gametophytes, the two innermost cortex layers are colourless; sporophytes without the pseudoparenchymatous cortex but with radially arranged, contiguous assimilatory filaments.

Ecology - Subtidal, epilithic in lagoons from -30 cm down to a few meter.

Distribution - Tropical seas.

Note - The Australian representatives of the genera *Galaxaura* and *Tricleocarpa* were studied anatomically by Huisman & Borowitzka (1990). More recent molecular conclusions were published in Huisman *et al.* (2004).

Fig. 129. Galaxaura rugosa. A. Fully grown specimen; B. Part of a juvenile specimen.



Dermonema virens (J. Agardh) Pedroche et Ávila Ortíz 1996: 77 Figs 9E; 13E; 42A; 130

REFERENCES: Durairatnam (1961: 47-48, pl. 28, fig. 1, as *D. frappieri*), Tseng (1984: 50, pl. 28, fig. 4, as *D. frappieri*), Payri *et al.* (2000: 158, top figs p. 159).

TYPE LOCALITY: San Agustín, Oaxaca, Mexico.

Description - Thallus erect, 5 (-7) cm high, brownish-red, becoming orangy or even greenish towards the apices upon ageing; soft and lubricous and rubbery in texture; gregarious, fixed by a large discoid holdfast; base stipitate, bearing axes which are laxly or densely, repeatedly dichotomous and more or less radially arranged; the dichotomies are perpendicular on each other, and more dense towards the periphery, resulting in a (hemi-)spherical habit; the branches cylindrical and gradually decreasing in diameter towards the apices, about 2 mm in diameter near the base. Medulla composed of loosely interwoven filaments, surrounded by a cylinder of peripheral thick-walled cells.

Ecology - High intertidal on surf-exposed rocky outcrops. Very abundant in the wet season, forming a monospecific zone; almost disappearing in the dry season.

Distribution - Scattered localities in the Indian Ocean, widespread in the western tropical Pacific Ocean and Mexico.

Note - Used as food in China. Svedelius (1939) richly illustrates this taxon (as *D. gracile* Weber-van Bosse).

Fig. 130. Dermonema virens. A. A monospecific vegetation; B. Detail of a thallus.

NEMALIALES – Liagoraceae

Liagora J.V. Lamouroux 1812: 185

Liagora ceranoides J.V. Lamouroux 1816: 239

Fig. 131

REFERENCES: Tseng (1984: 54, pl. 30, fig. 1), Lewmanomont & Ogawa (1995: 130, + fig.), Cribb (1996: 103, middle fig. p. 102), Calumpong & Meñez (1997: 153, + fig.), Trono (1997: 166, fig. 104), Abbott (1999: 84, figs 13I-M), Payri *et al.* (2000: 158, bottom figs p. 159), Littler & Littler (2003: 58, bottom fig. p. 59), De Clerck *et al.* (2005b: 142, fig. 105), Oliveira *et al.* (2005: 52, + fig. p. 53), Huisman *et al.* (2007: 63, + figs), Skelton & South (2007: 24, figs 22-23).

TYPE LOCALITY: St. Thomas, Virgin Islands.

Description - Plants solitary, but growing in open populations, erect, 4-7 cm high, with a lobed, subspherical appearance, extremely supple, lubricous-slippery, pinkish white *in situ* (the branches are more whitish as a result of stronger calcification, the tips more pinkish), becoming greyish upon drying; a single, discoid holdfast; all axes cylindrical, of similar diameter (1 mm) all over the thallus; wide-angled dichotomous branching dense from the basis onwards (interdichotomies about 5 mm at the basis, 2 mm towards the periphery of the thallus), in different planes; older plants presenting basal branches with a rough surface and provided with short unbranched or singly dichotomous proliferations all over the thallus, obscuring the original dichotomous branching of the main axes; apical branchlets frequently recurved, apices rounded to blunt. Medullary filaments of uniform diameter throughout, bearing cortical, assimilatory filaments forming fascicles, nearly moniliform except the basal cells which are subcylindrical; terminal cells often with hairs. Spermatangia stalked, in small clusters on the outer cortical cells. Hemispherical cystocarp with well-developed involucral filaments.

Ecology - Subtidal, on coral rubble in sand-covered reef channels, at 3 m depth.

Distribution - Pantropical.

Fig. 131. Liagora ceranoides. A. Small specimen in situ; B. Detail.



Gelidium J.V. Lamouroux 1813: 128

Figs 18A; 132

Over 130 taxa are currently recognized worldwide, although many are in need of re-assessment. The genus is characterised by bilocular cystocarps with evenly developed locules (on both surfaces of the blades), but the infrequency of reproductive plants means that most specimens can only provisionally be identified, based on morphological characters. On the other hand, it is known that vegetative characters vary greatly with ecological parameters. Their variability is so big that it is even difficult to separate *Gelidium* from related genera. In the absence of reproductive structures in type material, this genus might still be one of the most confused ones in the red algae.

Freshwater *et al.* (1995) and Shimada *et al.* (1999) have shown a clustering of species into several monophyletic clades, many of which correspond to specific geographical regions.

Based on data from literature, Silva *et al.* (1996) mention four species from Sri Lanka: *Gelidium amansii* (J.V. Lamouroux) J.V. Lamouroux, *G. corneum* (Hudson) J.V. Lamouroux, *G. micropterum* Kützing, *G. pusillum* (Stackhouse) Le Jolis. *G. heteroplatos* Børgesen, mentioned by Durairatnam (1961: 50) has been transferred to the genus *Pterocladia*. It is not to be excluded that more species of *Gelidium* are present on the island.

Representatives of *Gelidium* in Sri Lanka are generally small to tiny, gregarious plants (rarely up to 2 cm high) with cylindrical prostrate axes, very well attached to the substratum by groups of rhizoids; erect plants cartilaginous, supple but tough, partly cylindrical (towards the basis) or completely compressed, variously branched, mostly distichously in one plane; a single, lens-shaped apical cell. In transverse section the axes show small, thick-walled rhizines among the pseudoparenchymatous cells of the medulla. Cruciately divided terasporangia in sori occupying the central part of lateral branchlets.

Figs 132A-E. Gelidium spp.



Gelidiella acerosa (Forsskål) J. Feldmann et G. Hamel 1934: 533

Figs 10C; 133

REFERENCES: Tseng (1984: 64, pl. 35, fig. 4), Lewmanomont & Ogawa (1995: 105, + fig.), Cribb (1996: 83, bottom fig. p. 82), Calumpong & Meñez (1997: 170, + fig.), Trono (1997: 179, fig. 113), Abbott (1999: 202, figs 53A-C), Huisman (2000: 42, + figs), Payri *et al.* (2000: 170, top fig. p. 171), Littler & Littler (2003: 56, top fig. p. 57), De Clerck *et al.* (2005b: 156, fig. 121), Oliveira *et al.* (2005: 59, + fig.), Huisman *et al.* (2007: 107, + figs).

TYPE LOCALITY: Mokha, Yemen.

Description - Plants growing from a stoloniferous holdfast, uprights 4-7 cm long, forming tufts or clumps of tough and wiry, flexible axes, brownish-black in shaded places to greenish-straw-coloured when directly exposed to sunlight; attached by peg-like haptera or terminating in multicellular rhizoids; erect axes cylindrical, certainly in the basal parts to compressed in the upper parts; to 1 mm in diameter, most often pinnately and distichously branched, more rarely radially or unilaterally branched; main axes frequently recurved, arcuate; pinnae short, 2-6 mm long, perpendicularly placed on the rachis and gradually shorter towards the branch apices; branches sometimes anastomosing, predominantly in the prostrate parts; apices acute, hairs often present. Internal structure consisting of a cortex of small, ovoid, darkly-pigmented cells, centrally grading into larger, irregularly-shaped, thin-walled medullary cells; rhizines consistently absent. Tetrasporangial sori yellowish, borne in expanded apices of lateral branchlets.

Ecology - Epilithic in shallow pools close to low water level, exposed to continuous surf; locally abundant.

Distribution - Pantropical.

Fig. 133. Gelidiella acerosa. A. Prostrate growth form; B. Erect growth form.

GELIDIALES - Pterocladiaceae

Pterocladiella Santelices et Hommersand 1997

Pterocladiella caerulescens (Kützing) Santelices et Hommersand1997: 118Figs 10A, B; 134

REFERENCES: Abbott (1999: 197, fig. 51E), Payri *et al.* (2000: 168, bottom fig. p. 169), De Clerck *et al.* (2005b: 150, fig. 113), Huisman *et al.* (2007: 110, + figs), Skelton & South (2007: 28).

TYPE LOCALITY: Wagap, New Caledonia.

Description - Plants gregarious, erect, 3-5 cm high, composed of a stoloniferous holdfast and lanceolate uprights, bordeaux-red; attached by peg-like rhizoidal attachments; erect axes densely placed on the stolons, subcylindrical proximally, flattened and ligulate distally, up to 5 cm high and 1-1.5 mm wide, simple to irregularly bipinnate; pinnae upwardly directed, more or less in a single plane, lanceolate to ligulate, with obtuse or emarginated apices. In transverse section, internal structure consisting of a darkly pigmented outer cortex grading into larger, angular inner cortical cells; medulla consisting of thick-walled filaments; refractive rhizines concentrated in the medulla, scattered in the inner cortex.

Ecology - Epilithic on horizontal substratum at low water level, continuously wave-swept even at low tide; locally in extensive monospecific populations.

Distribution - Pantropical.

Fig. 134. Pterocladiella caerulescens.





Figs 10D; 23D; 135

REFERENCES: Durairatnam (1961: 59, pl. 14, fig.6, as *G. crassa*), Tseng (1984: 104, pl. 55, fig. 3), Calumpong & Meñez (1997: 179, + fig.), Huisman (2000: 95, + figs), De Clerck *et al.* (2005b: 158, fig. 123), Oliveira *et al.* (2005: 60, + figs p. 36, 61).

TYPE LOCALITY: Wagap, New Caledonia.

Description - Plants gregarious, decumbent, up to 10 cm tall, succulent, stiff cartilaginous and brittle, bright to dark pinkish red, sometimes greenish proximally; attached by a discoid holdfast giving rise to 1-2 arched uprights; axes cylindrical, 2-3 mm in diameter, decumbent, 4-6 times (sub)dichotomously branched, parallel to the substratum; branching angle 45-90°; branches mostly arcuate and slightly basally constricted, sometimes forming secundary attachment points at their broadly rounded apices. Internal structure consisting of 1-2 layers of small, pigmented outer cortical cells surrounding a large-celled medulla with cells of up to 300 µm in diameter; medullary cells decreasing in size toward the periphery, polygonal to spherical; cortex of proximal axes considerably thicker.

Ecology - Epilithic, on surf-exposed rocks at about low tide level, extremely well-developed in surf channels.

Distribution - Widespread throughout the Indian Ocean and western Pacific Ocean.

Note - A much used synonym of this species is G. crassa Harvey ex J. Agardh.

Fig. 135. Gracilaria canaliculata.



Figs 9C; 21F, G; 41F; 45E; 136

REFERENCES: Jaasund (1976: 83, fig. 168), Moorjani & Simpson (1988: 29, pl. 59d), De Clerck *et al.* (2004: 3027, fig. 1), De Clerck *et al.* (2005b: 160, fig. 124), Oliveira *et al.* (2005: 61, + fig.).

TYPE LOCALITY: Sri Lanka.

Description - Plants gregarious, erect, 10 (-15) cm long, cartilaginous but flexible, varying from darkpurple to bright red or creamy, frequently darker in the branch axils; attached by means of a discoid holdfast from which the erect plants develop, as well as numerous stolonoidal structures; axes markedly compressed, linear, strap-like, up to 4 mm wide in the widest specimens, only 2 mm in narrower growth forms, being narrower just above the dichotomies, with smooth margins and obtuse apices, frequently branched up to 6 orders in a single plane; branching originally (sub)dichotomous, with narrow branching angles; numerous specimens bear isolated, marginal, spur-like (recurved) proliferations. Internal structure consisting of 1-3 layers of pigmented outer cortical cells surrounding a large-celled medulla with cells up to 100 µm in diameter; medullary cells decreasing in size toward the periphery, polygonal to spherical. Cystocarps numerous but isolated, hemispherical, markedly extruding on the surface of the straps.

Ecology - Extremely abundant on surf-exposed, horizontal beach rock platforms at about low tide level, where it can form large monospecific populations, but also observed in harbours.

Distribution - Widespread throughout the Indian Ocean, also mentioned from Korea and Peru (Pacific Ocean).

Fig. 136. Gracilaria corticata. A. Sterile plants; B. Specimens with numerous cystocarps.



Gracilaria corticata (J. Agardh) J. Agardh var. *ramalinoides* J. Agardh 1852: 602-603 Fig. 137

REFERENCE: Durairatnam (1961: 63, pl. XXX, fig. 2).

TYPE LOCALITY: India.

Description - Plants similar in habit and colour as *G. corticata*, but the axes narrower (1-2 mm), and more rigid, the distal parts of older specimens becoming more irregular as a result of palmate to cervicorn branching towards the apices; these apical branches are subcylindrical and as a result, these plants have a more "spiny" aspect than the typical variety. Fertile (cystocarpic) specimens also present numerous lateral proliferations (in the same plane as the original branching), resulting in a very dense aspect; cystocarps (mostly) produced on the adaxial side of these incurved proliferations but also present on the margins of the main axes.

Ecology - Similar to the typical variety, but less abundant; not observed in sheltered habitats (harbours).

Distribution - India, Kenya, Madagascar, Sri Lanka, Tanzania.

Fig. 137. Gracilaria corticata var. ramalinoides.

Gracilaria hikkaduwensis Durairatnam 1962: 15, fig. 6

Fig. 138

TYPE LOCALITY: Hikkaduwa, Sri Lanka.

Description - Plants isolated or in small groups, growing in open populations, erect, rather stiff cartilaginous but flexible, straplike, upper parts typically greenish and as such easily recognizable in the field but some specimens completely creamy coloured; attachment by a disc; some specimens with a marked cylindrical stipe, 3-4 mm long; basal stolonoidal structures (illustrated by Durairatnam, but not mentioned in his description) sometimes present; blades 4-5 (-7) cm high, straps cuneate, up to 3-4 (-5) mm wide just under the dichotomy, markedly undulated; branching subdichotomous to irregular, becoming extremely irregular and dense in older specimens as a result of the numerous proliferations; apices more or less toothed.

Ecology - Epilithic, horizontal substratum, just above low water mark, continuously wave-swept, frequently among *G. corticata*.

Distribution - Kenya, Mauritius, Sri Lanka.

Note - The morphology of our specimens agrees well with the original description and illustration of Durairatnam (1962, fig. 6) as well as with his specimen deposited in Peradeniya. It also agrees with Harvey's specimen (1857, n°96), deposited in Sydney, distributed as *Rhodymenia purpurascens* in his Ceylon exsiccata. According to Silva *et al.* (1996: 177), *Gracilaria srilankia* (Chang & B Xia) Withell, Millar & Kraft would be the correct name of Harvey's specimen. Further study should make clear if *G. hikkaduwensis* and *G. srilankia* are the same or different taxa.

Fig. 138. Gracilaria hikkaduwensis.





Fig. 139

REFERENCES: Magruder & Hunt (1974: 73, middle fig. p. 72), Jaasund (1976: 85, fig. 171), Tseng (1984: 108, pl. 57, fig. 1), Lewmanomont & Ogawa (1995: 116, + fig.), Cribb (1996: 87, middle fig. p. 86), Calumpong & Meñez (1997: 177, + fig. p. 178), Trono (1997: 217, fig. 139), Abbott (1999: 214, figs 59D-H), Littler & Littler (2003: 100, middle fig. p. 101), De Clerck *et al.* (2005b: 162, fig. 126), Oliveira *et al.* (2005: 62, + fig. p. 63), Huisman *et al.* (2007: 114, + figs), Ohba *et al.* (2007: 93, + figs).

TYPE LOCALITY: Probably Manila, Philippines.

Description - Plants mainly prostrate, up to 10 cm long, succulent, stiff cartilaginous and brittle, orangy to yellowish green; attachment by numerous, small discoid holdfasts; axes cylindrical, 1.5-2 mm in diameter, with a few, irregularly placed constrictions; apices straight or downwardly bent, rounded; branching (sub) dichotomous to irregular with wide branching angles.

Ecology - Epilithic on horizontal substratum close to low water level and locally growing in extensive populations, even in places which are continuously trampled by fishermen and tourists.

Distribution - Widespread in the tropical Indo-Pacific.

Note - Abbott (1999: 216) mentions that this species is used as food in Hawai'i, when there is shortage of cultured *Gracilaria* species.

Fig. 139. Gracilaria salicornia.

BONNEMAISONIALES – Bonnemaisoniaceae Asparagopsis Montagne in Barker-Webb et Berthelot 1840: xv

Asparagopsis taxiformis (Delile) Trevisan 1845: 45

Figs 23B; 45J; 140

REFERENCES: Tseng (1984: 64, pl. 35, fig. 3), Cribb (1996: 69, bottom fig. p. 68), Calumpong & Meñez (1997: 161, + fig. p. 162), Trono (1997: 169, fig. 106), Abbott (1999: 174, figs 43A-D), Huisman (2000: 47, + figs), Payri *et al.* (2000: 160, top fig. p. 161), Littler & Littler (2003: 68, middle fig. p. 69), De Clerck *et al.* (2005b: 164, fig. 128, 129), Oliveira *et al.* (2005: 64, + figs p. 65), Huisman *et al.* (2007: 83, + figs).

TYPE LOCALITY: Alexandria, Egypt.

Description - *Gametophytic plants* erect, gregarious, forming extensive greyish pink patches, mostly 2-4, but up to 11 cm high; attached to the substratum by cylindrical, irregularly branched stolons, 1.5-2 mm in diameter; uprights plumose with a single percurrent axis forming densely branched determinate branches in all directions, with the basal part often denuded and stalk-like; in larger specimens indeterminate side branches can be present in the upper, plumose part; branchlets divided to several orders, the divisions becoming progressively finer so plants are soft and silky. *Tetrasporangial plants* (*Falkenbergia*' stage) forming isolated pinkish-red tufts, 1-3 cm in diameter, consisting of radially placed, finely branched polysiphonous filaments, 30-40 µm in diameter, composed of a central axial filament surrounded by 3 pericentral cells; each of these cells containing a single, markedly refringent, iodine containing cell inclusion; segments at maturity 65-80 µm long. Tetrasporangia one per segment in short series, 35-40 µm in diameter, tetrahedrally divided.

Ecology - Gametophyte: Mostly epilithic in the subtidal (-3/-4 m) where it locally forms extensive vegetations together with *Portieria hornemannii*. More rarely observed in the infralittoral fringe. Tetrasporophyte: often entangled among other algae or attached to algal turf in intertidal pools and the shallow subtidal.

Distribution - Pantropical and warm temperate regions.

Note - When taken out of the water, the plants have a very strong iodine smell. Abbott (1999: 175) mentions that this species probably is the most favoured (and expensive) seaweed food for Hawaiians.

Fig. 140. Asparagopsis taxiformis. Gametophytes among Halimeda.