



# Little Cayman Algae Identification

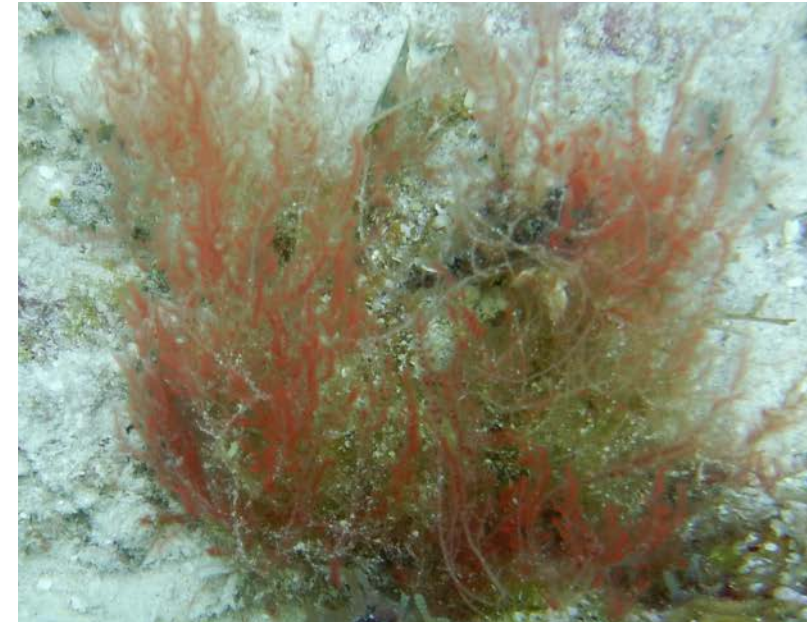
# Marine Algae



**Ochrophyta**  
Brown Algae



**Chlorophyta**  
Green Algae



**Rhodophyta**  
Red Algae

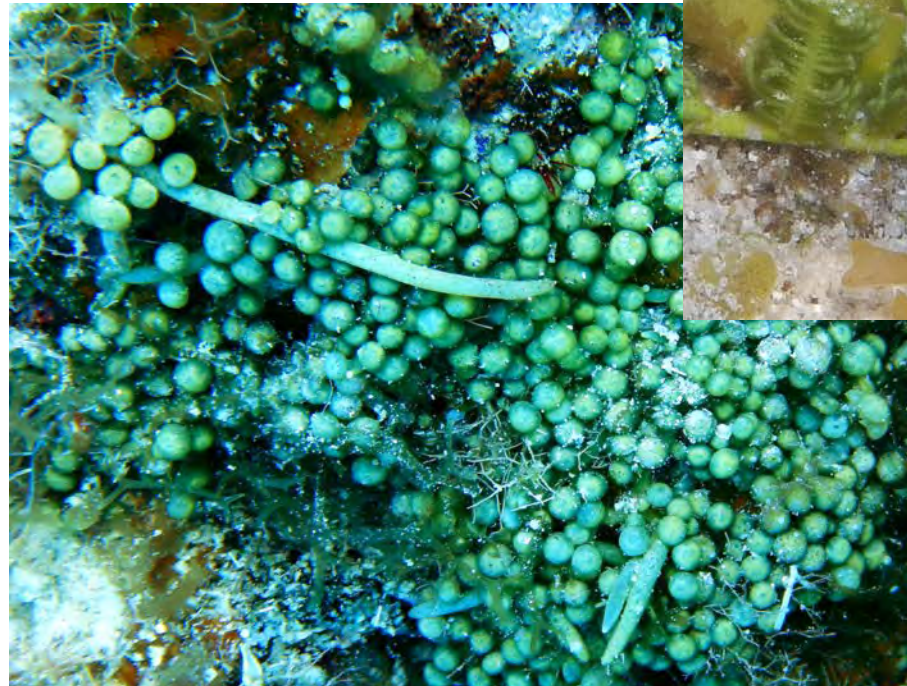
- Chlorophyll pigment causes GREEN coloration
- Ranges in colour from pale mint green to bright green, yellowish-green, brownish-green and dark green
- Wide range of morphologies
- Many are calcareous

- Tropical habitat, abundant in shallow reef but also found deeper
- Attached to the substratum with a single holdfast
- Calcified



# Caulerpa

- Horizontal long stolon anchored by numerous rhizoids
- Diverse morphology
- Apical growth
- Size: 1 to 16cm



## Mermaid's Fans

- Stiff, broad, fan-shaped blades attached to single stalk
- Heavily calcified
- Grows in sandy bottoms
- Colour: Whiteish green to dark green
- Size: 2.5 to 10 cm



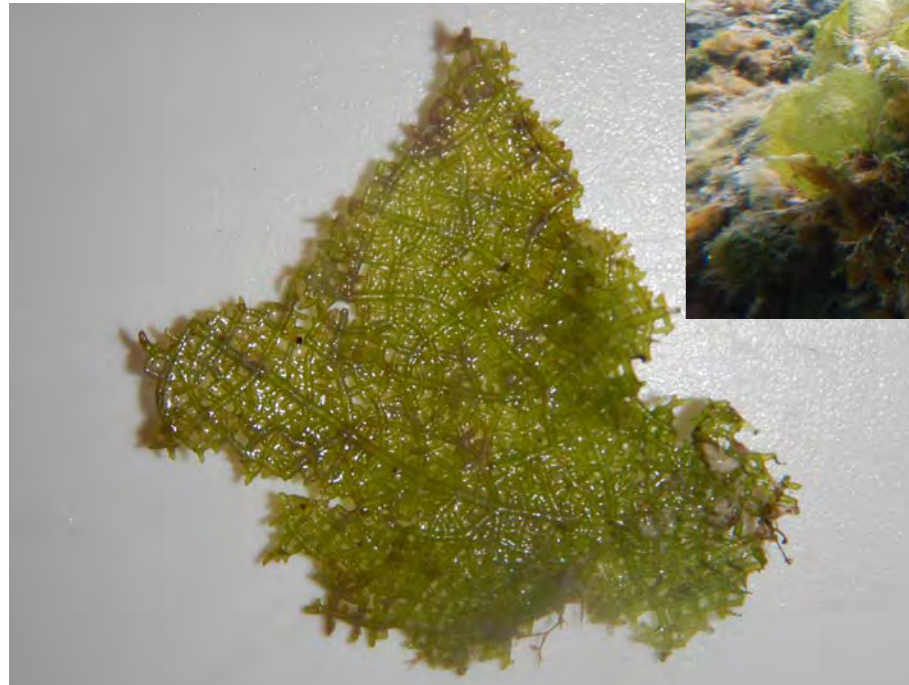
## Mermaid's Tea Cup

- Round saucer shaped caps on long thin stalks
- Grow in protected areas of the reef on sand flats
- Size: 0.5 to 3cm



## Network Algae

- Tight network of long, large filaments
- Grows in open areas of reefs
- Size: 1 to 5 cm





- Tightly packed bundle of bristle-like filaments
- Filaments merge into heavy, short stalk anchored in sand
- Found in sandy protected areas
- Colour: dark green to grey-green
- Size: 5 to 8cm

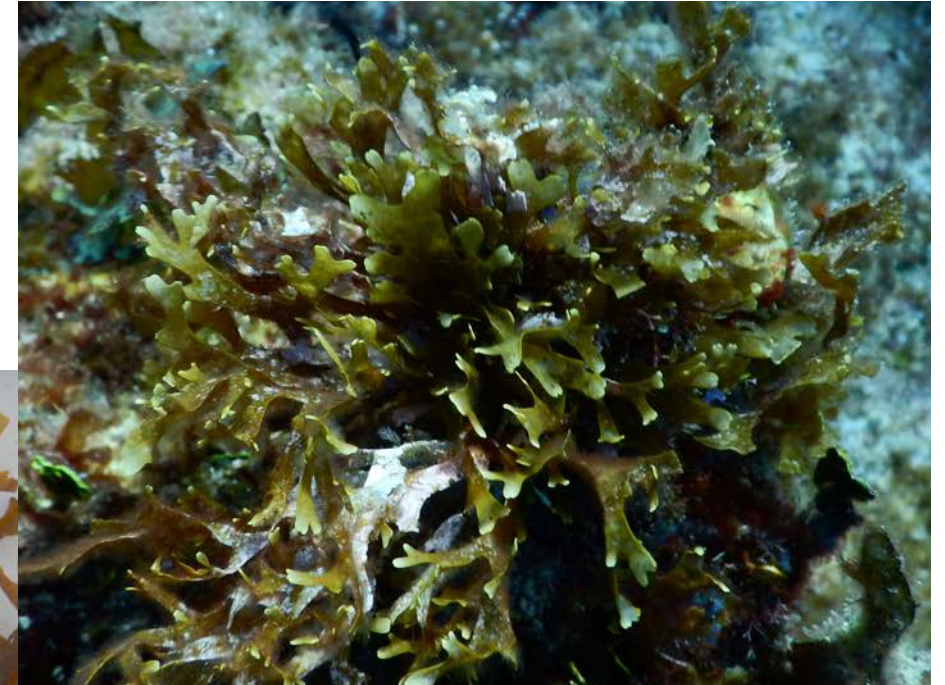
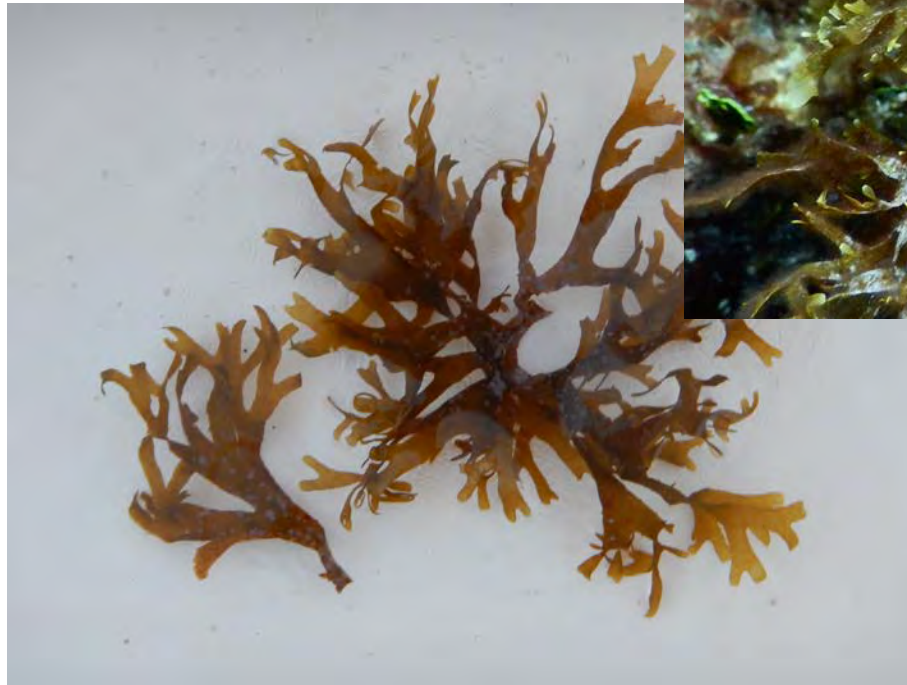


# Phaeophyta - Brown Algae

- Fucoxanthin pigment causes BROWN colouration
- Ranges in colour from white to yellow-brown, green-brown and dark brown
- Two of the best know algae are both brown: kelp and sargassum
- Most common phyla on Caribbean reefs

## Branched Algae

- Y-shaped endpoints
- Grows in mats
- Colour: light to medium brown and/or green to blue-green
- Size: 10 to 20 cm



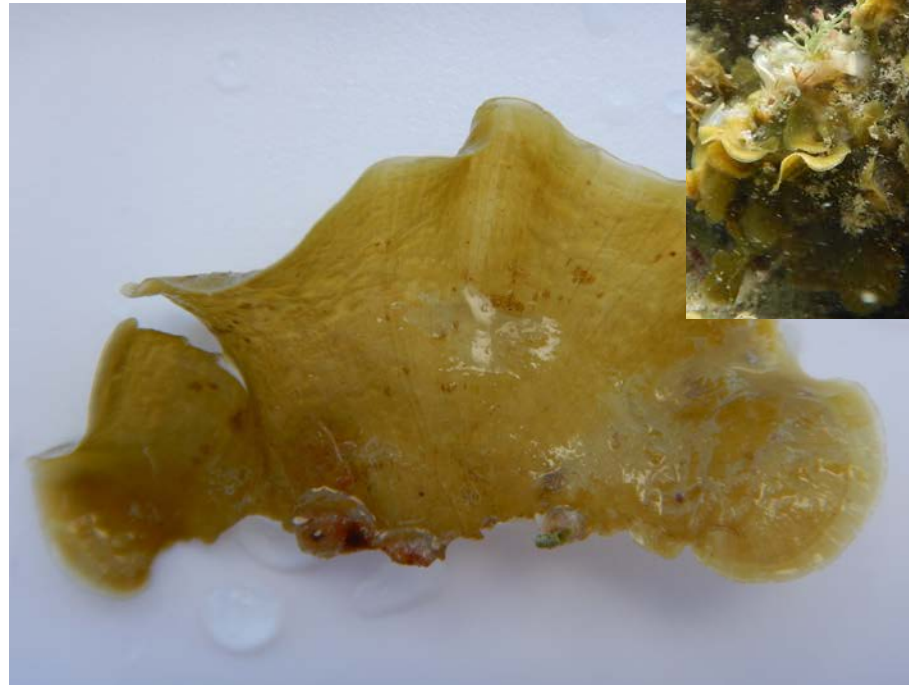
## Leafy Flat Blade Algae

- Bushy shape formed by flat, squared-off blades
- Concentrically banded in a wide range of colours
- Abundant in shallow water
- Grows on rocky substrate
- Colour: yellow, yellow-green, green, brown-green and brown
- Size: 7 to 40 cm



## Encrusting Fan Leaf Algae

- Thin, fan-shaped encrusting blades with shingle-like layering
- Grows in most reef environments
- Color: dark brown to tan
- Size: 2.5 to 10 cm



## White Scroll Algae

- Dense large clumps of semicircular leafy blades
- Blades are irregularly split and branched
- Concentrically banded
- Colour: white to to grayish white, tan and light yellowish brown
- Size: 5 to 15cm



# *Turbinaria*

- Erect central column with branches bearing clumps of triangular, cone-shaped blades with saucer-like tips
- Colour: Brown, often with dark speckles
- Size: 10 to 30cm



# Sargassum

- Spherical gas filled floats attached to stalk for all species with the exception of *Sargassum hystrix*
- Long oval-shaped blades
- Can be free floating





# Sargassum



- Phycoerythrin pigment and carotenoids cause RED colouration
- Ranges in colour from pale pink to lavender, purple, brown-red and dark burgundy red
- Most diverse algae with over 4000 tropical species
- Abundant but often unnoticed

## Pink Bush Algae

- Tall bushy algae
- Small branches extended in a single plane
- Colour: light pink
- Size: 10 to 20cm



## Tubular Thicket Algae

- Thick segments branch to form dense domes attached by single holdfast
- Smooth tubular segments with flexible joints
- Colonizes rocky and sandy bottoms
- Color: red to orange



## Twig Alga

- Branched structure that grows in tangled, small clumps
- Heavily calcified
- Fills small cracks and holes in rocky substrate generally in protected and shaded areas
- Color: whitish with light red to pink tinting

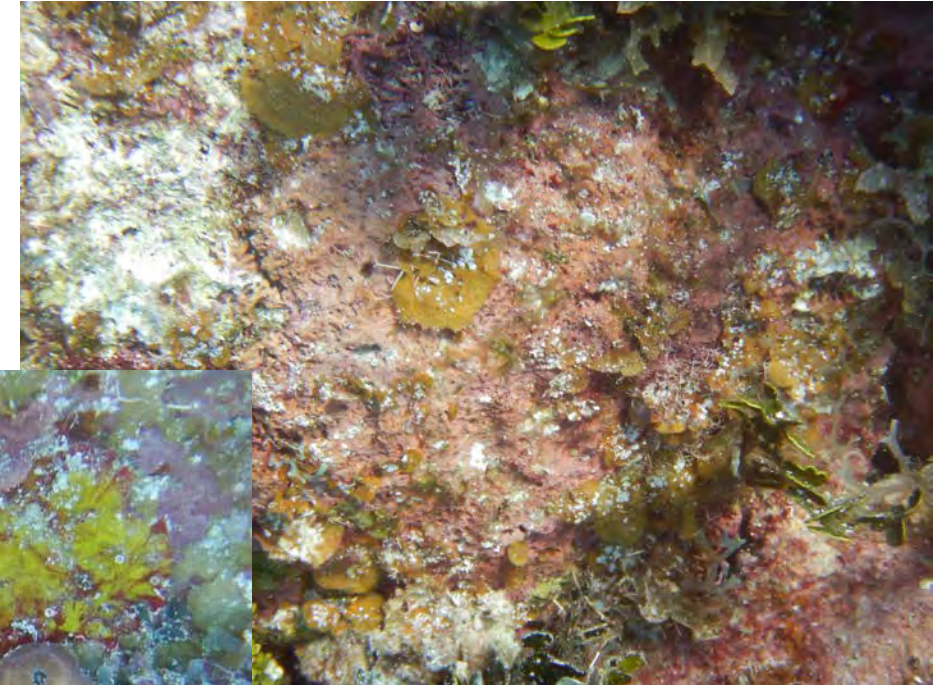


- Branching algae that arises singly or in tufts from an entangles base.
- Forms dense strands in shallow areas such as lagoons
- undefended
- Color: whitish with light red to pink tinting



# Crustose Coralline Algae

- Number of species in several genera
- Heavily calcified
- Encrusts rocky, limestone substrate or forms thin plates
- Very important in coral recruitment
- Colour: pinkish grey, lavender, pink and red



## Turf Algae

- Short <5mm long filaments
- Fuzzy coating on reef
- Mixed species composition
- Harbours detritus and invertebrates
- Major food source for many herbivores

