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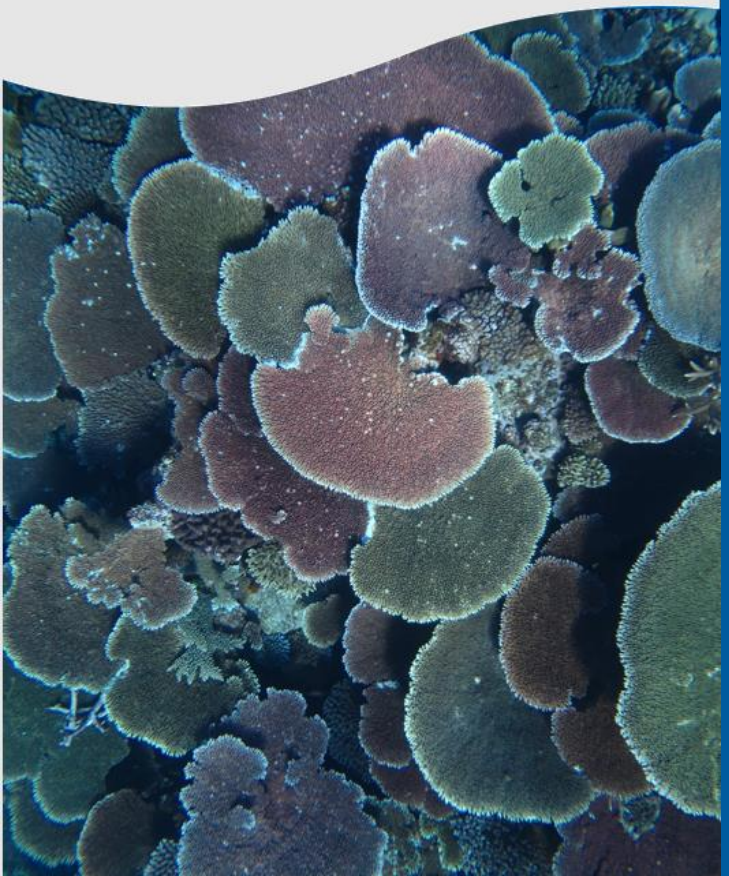
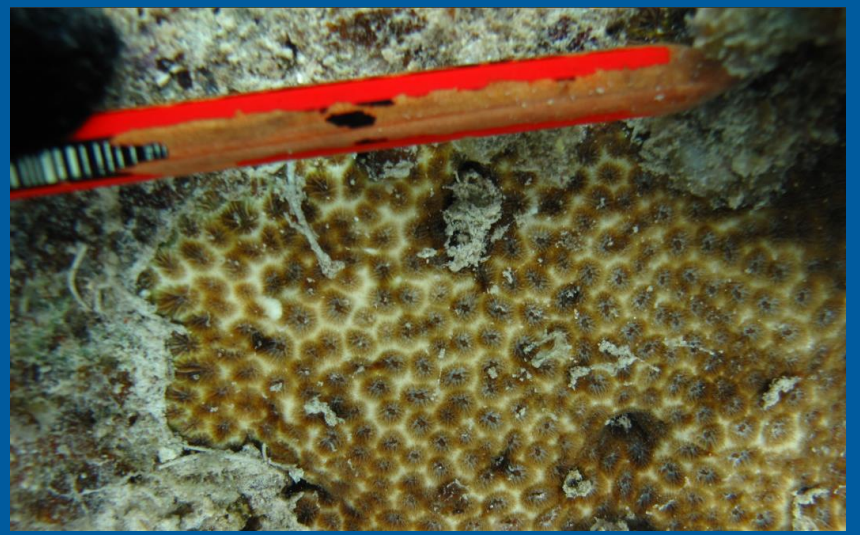
ReefCloud



- Look at the size of the corallites, look at things around the coral you are familiar with, strands of turf algae, tentacles from a feather star etc
- Shared walls or separate?
- Colours
- Don't zoom in for too long
- Practice, practice, practice. Take pictures underwater, try and identify back on land, try and add scale, use your pencil or finger if needed



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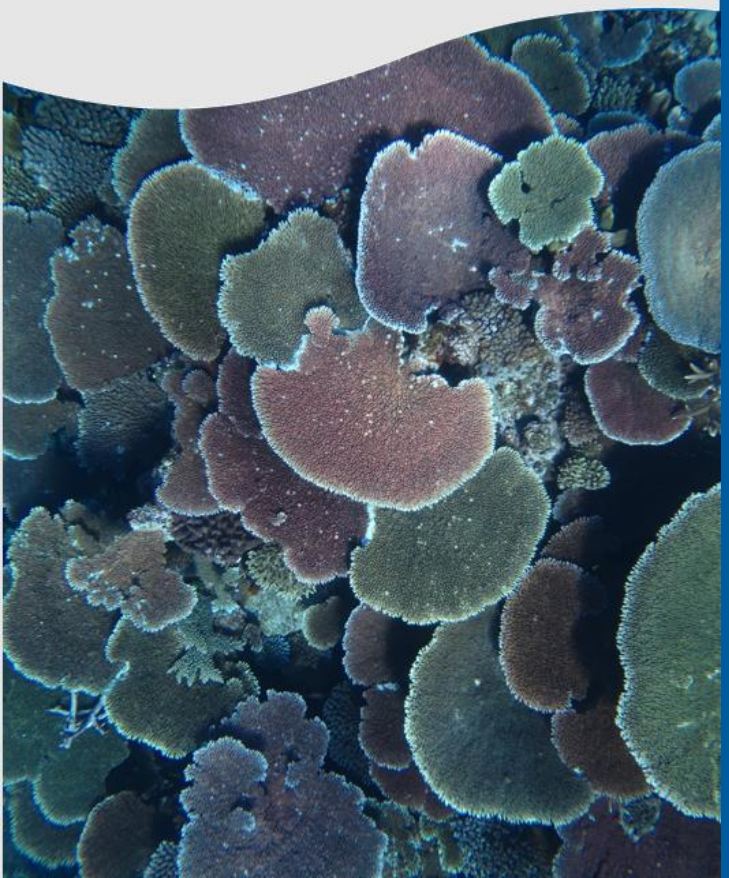

How to use this tool:

Step 1: Look at the image of the coral and try to identify it

Step 2: Once you are confident you have an answer, move to the next page to see the answer

Step 3: Repeat

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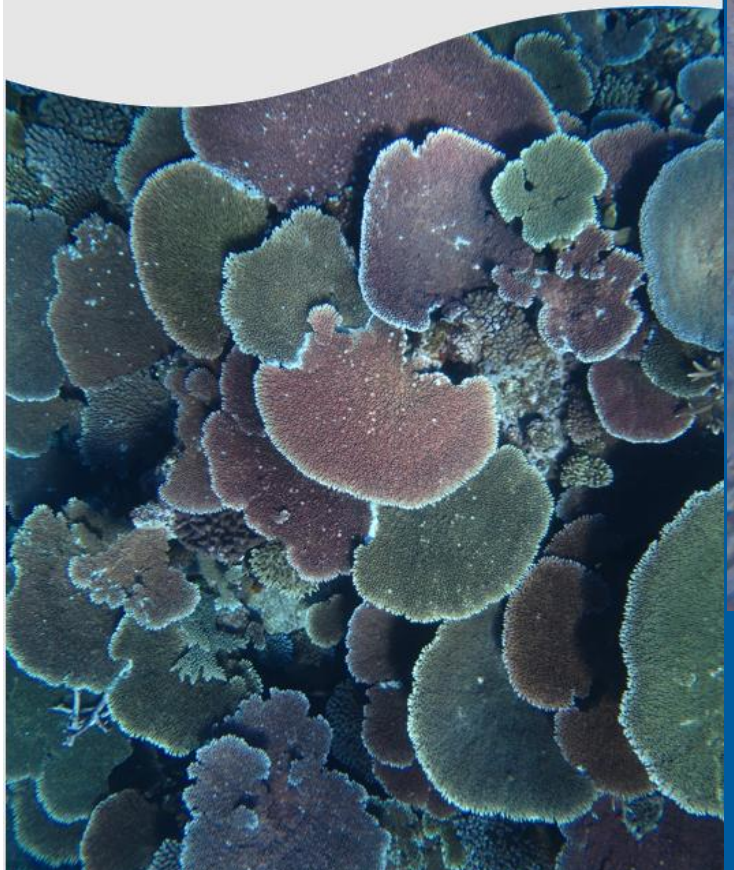

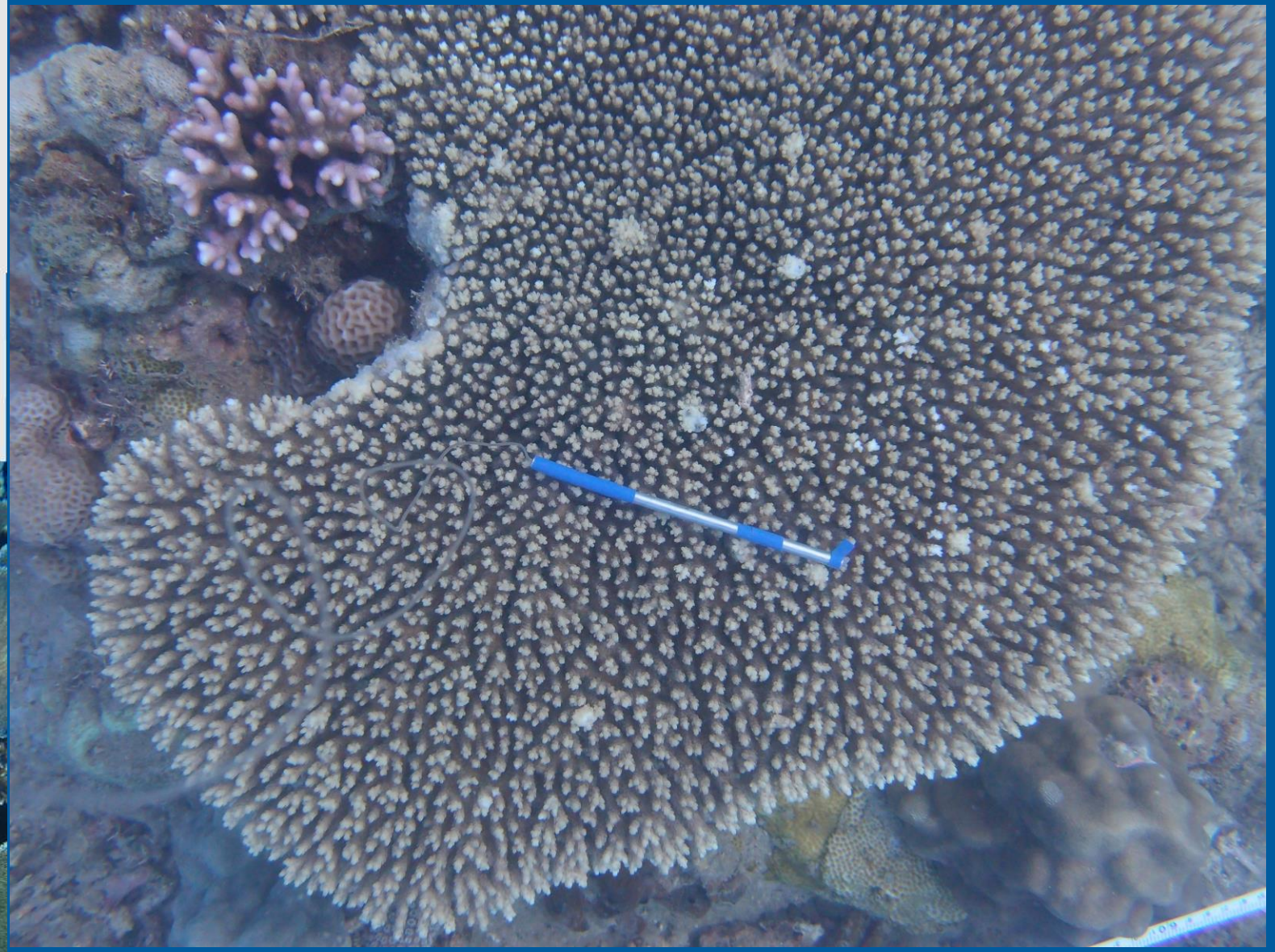

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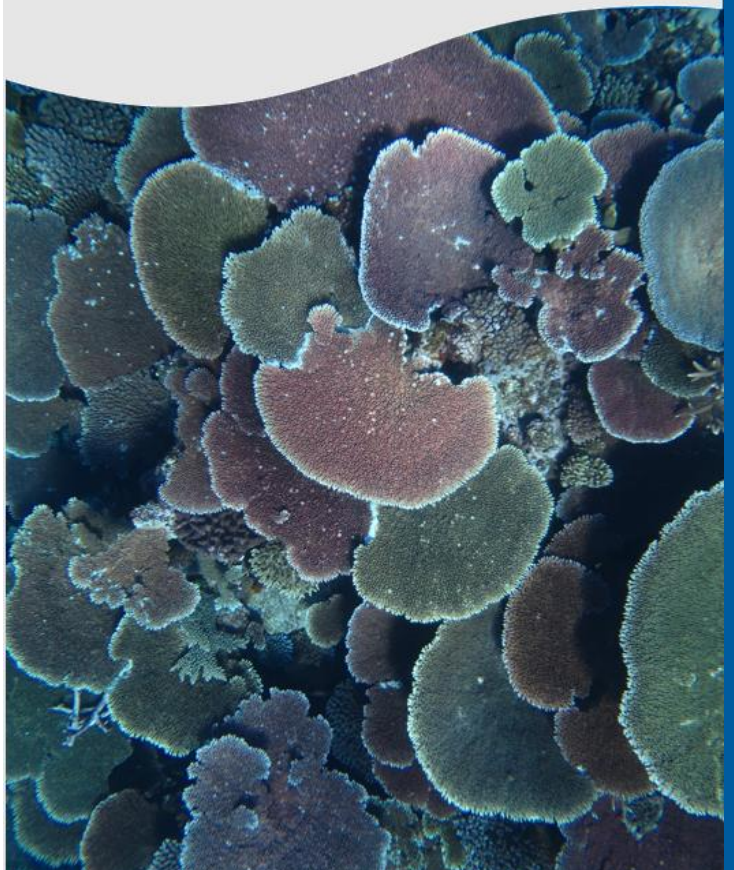

Acropora
-Axial corallites
-This is in its tabulate form

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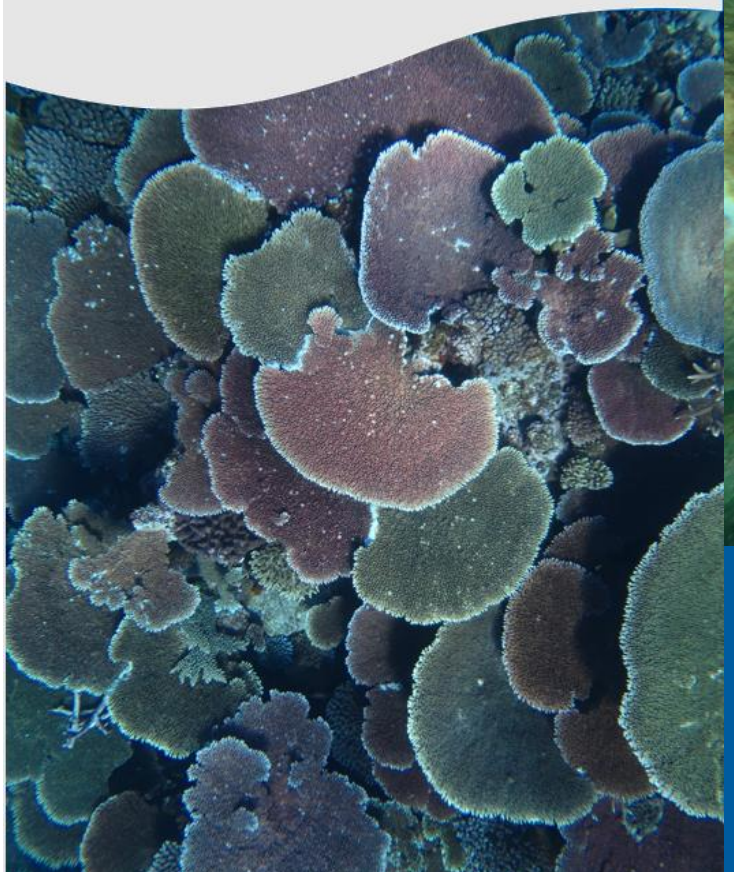

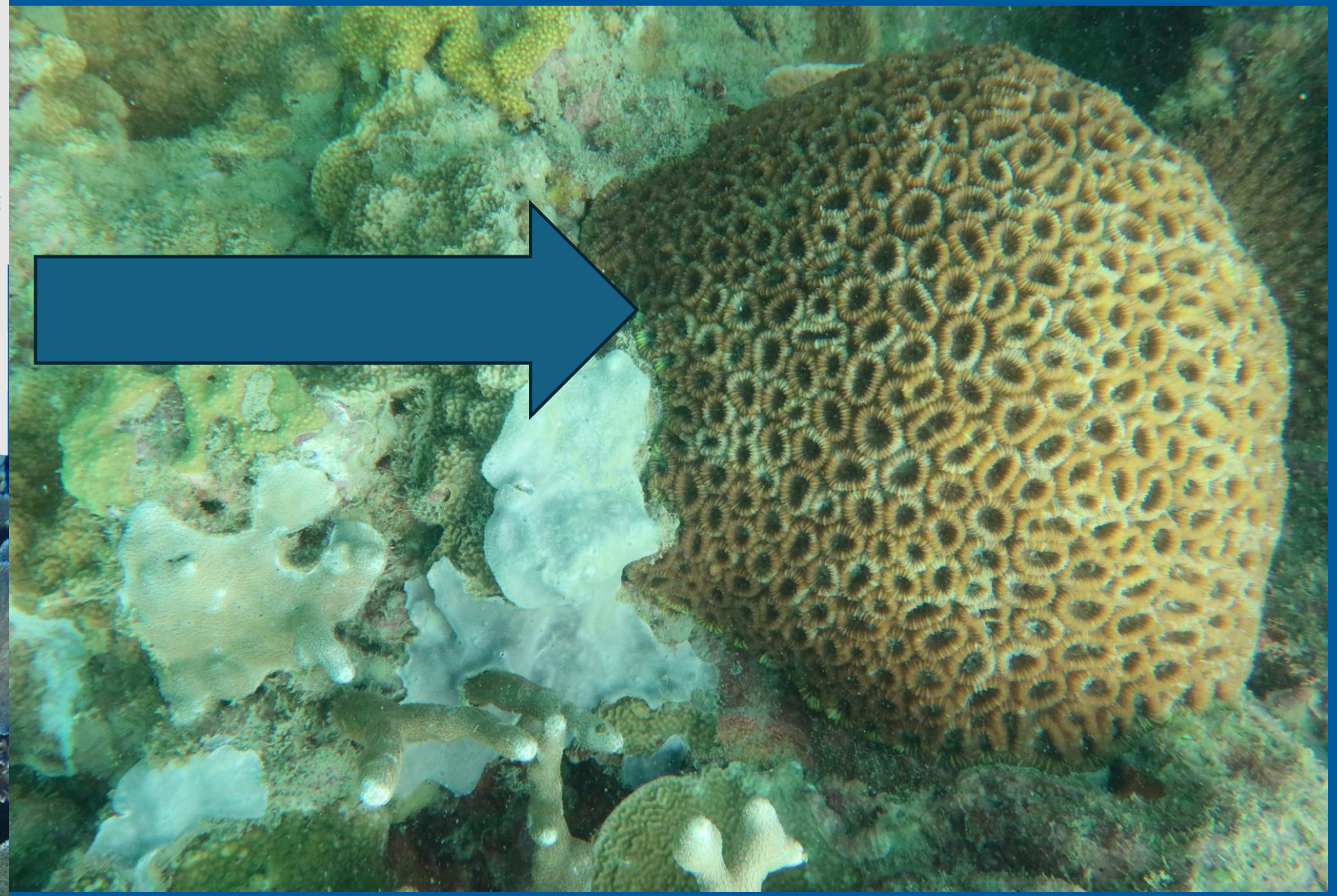

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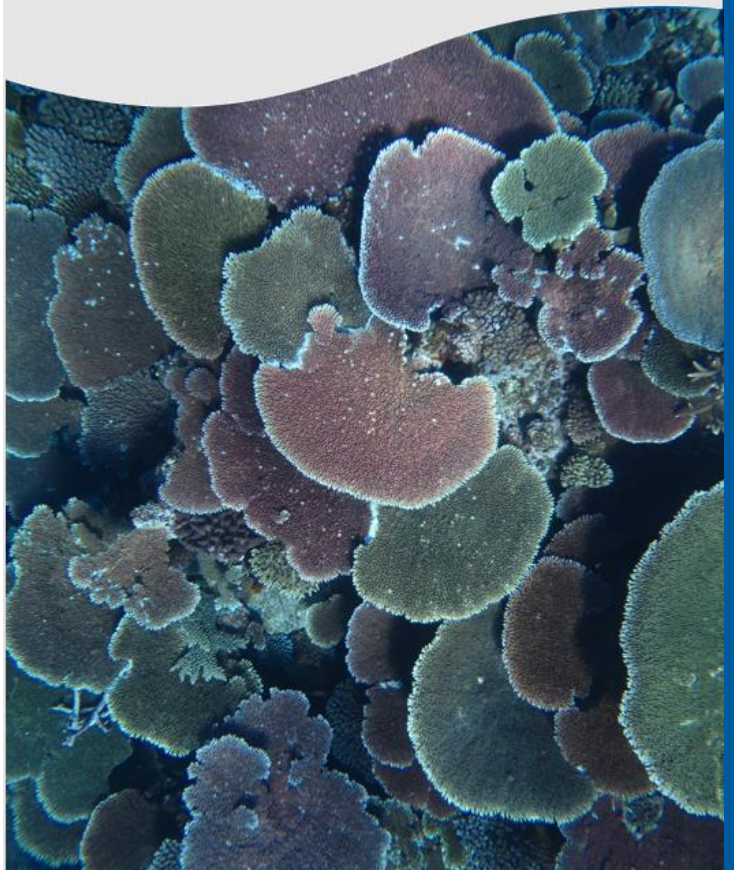

Dipsastrea

– Separate walls

- Often has irregular shaped corallites

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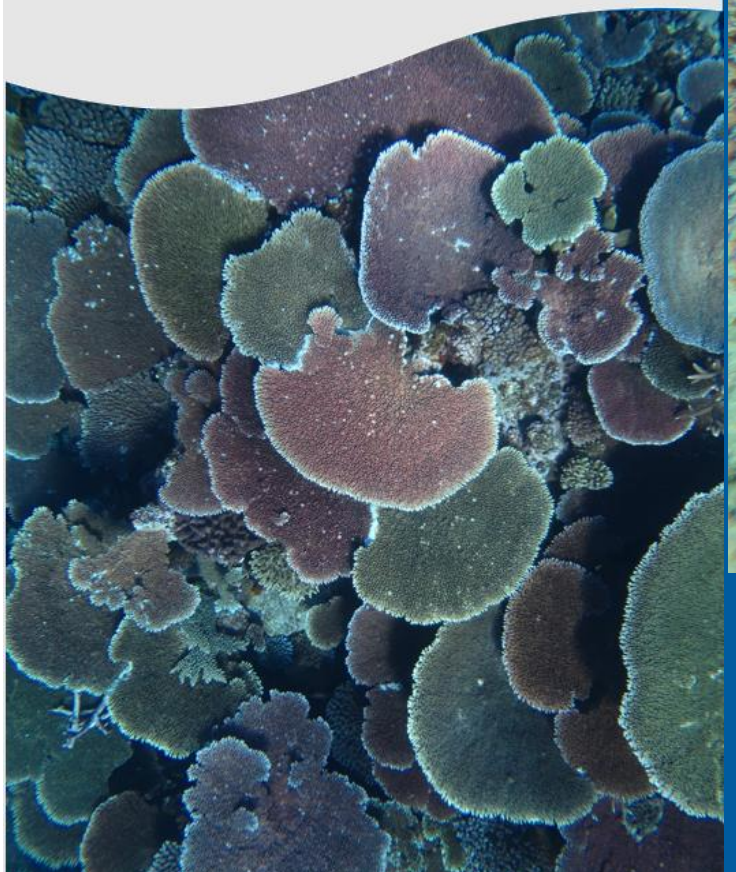

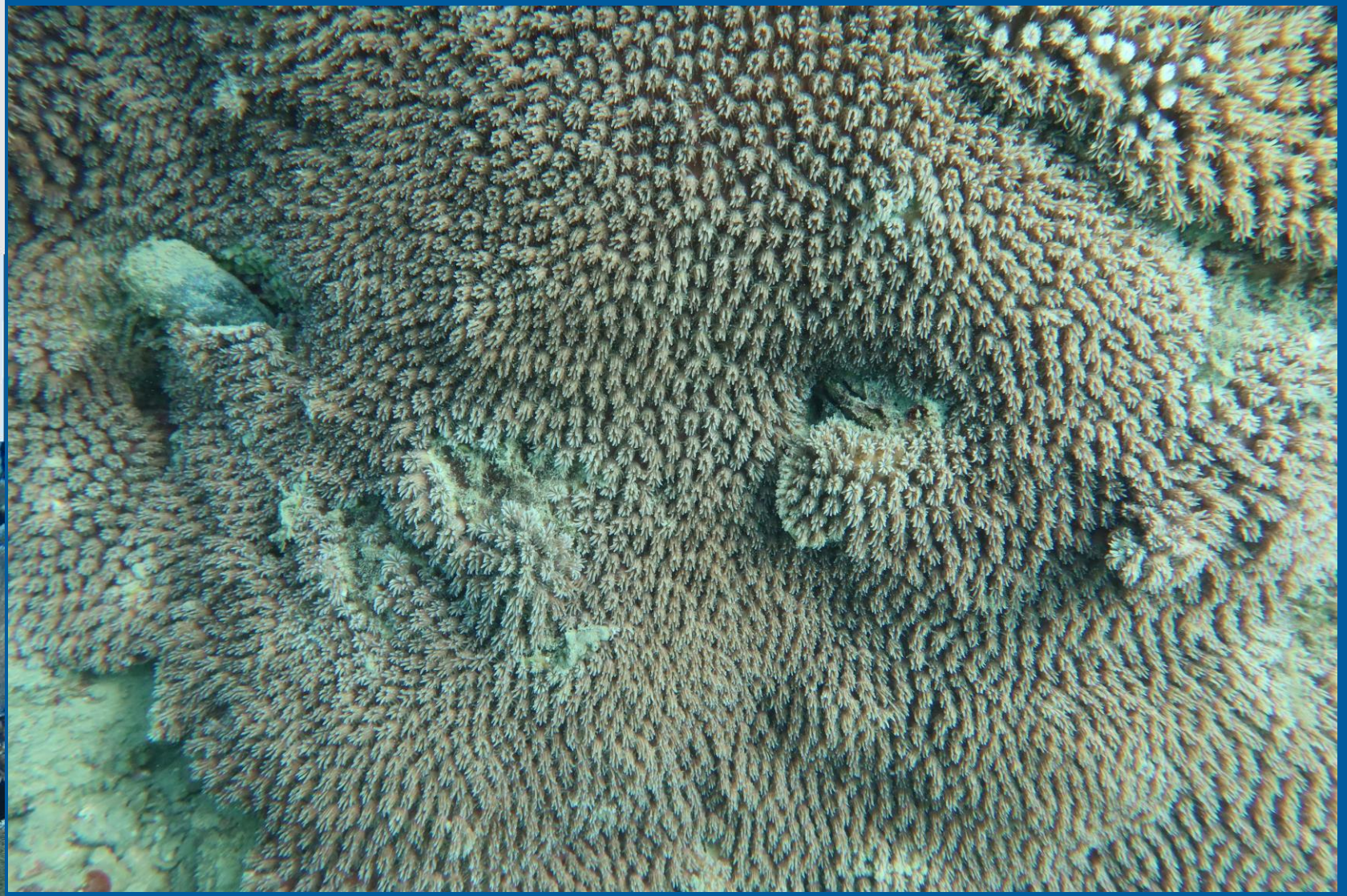

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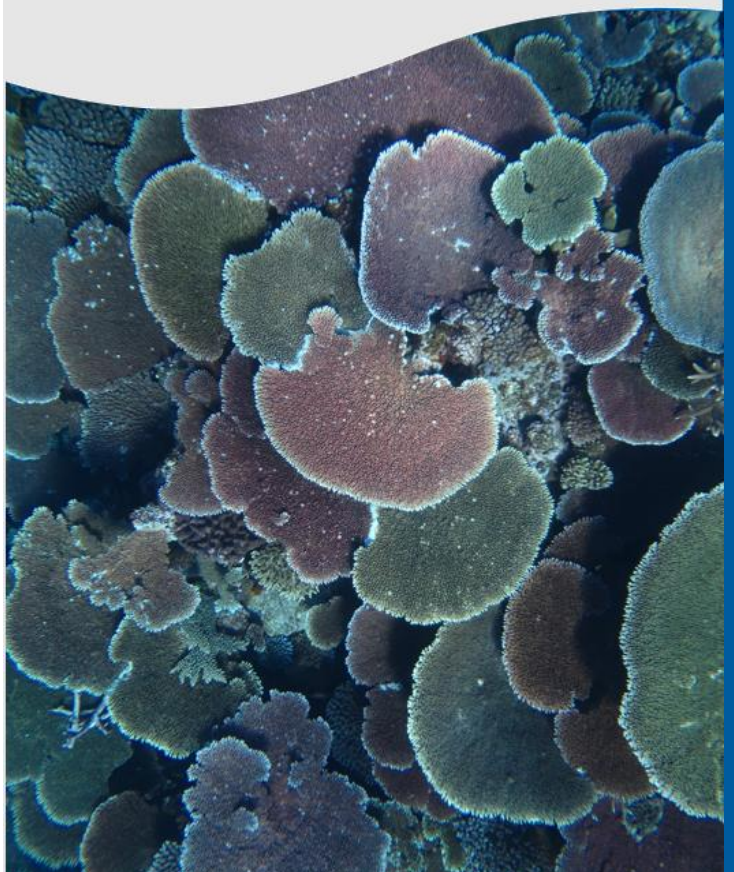

Galaxea

- Separate walls with blades
- Skeleton forms blades (reminds me of twinkling stars you'd see in the galaxy)

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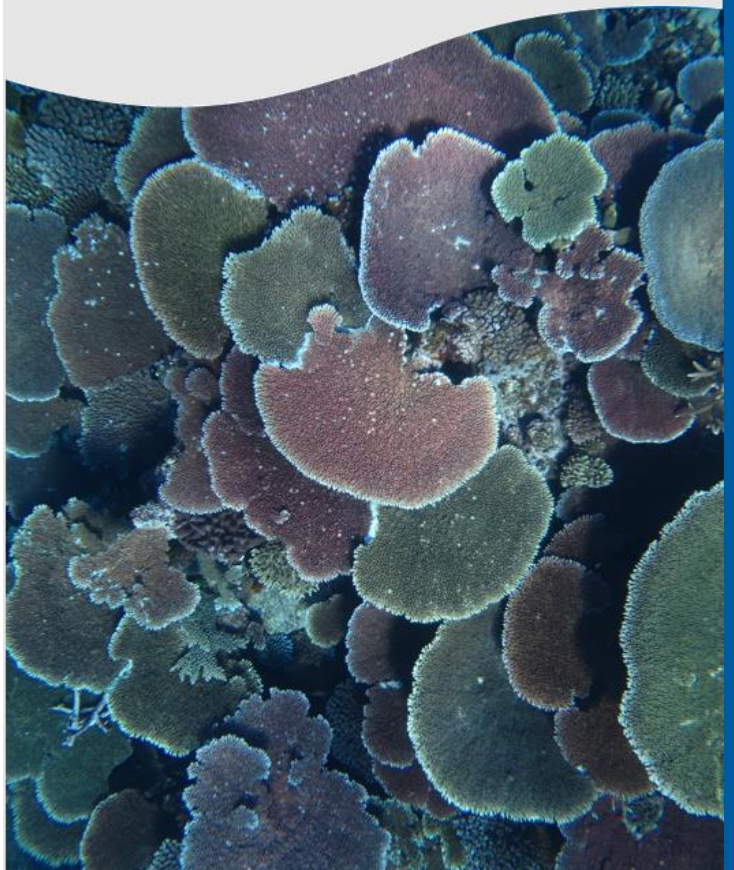

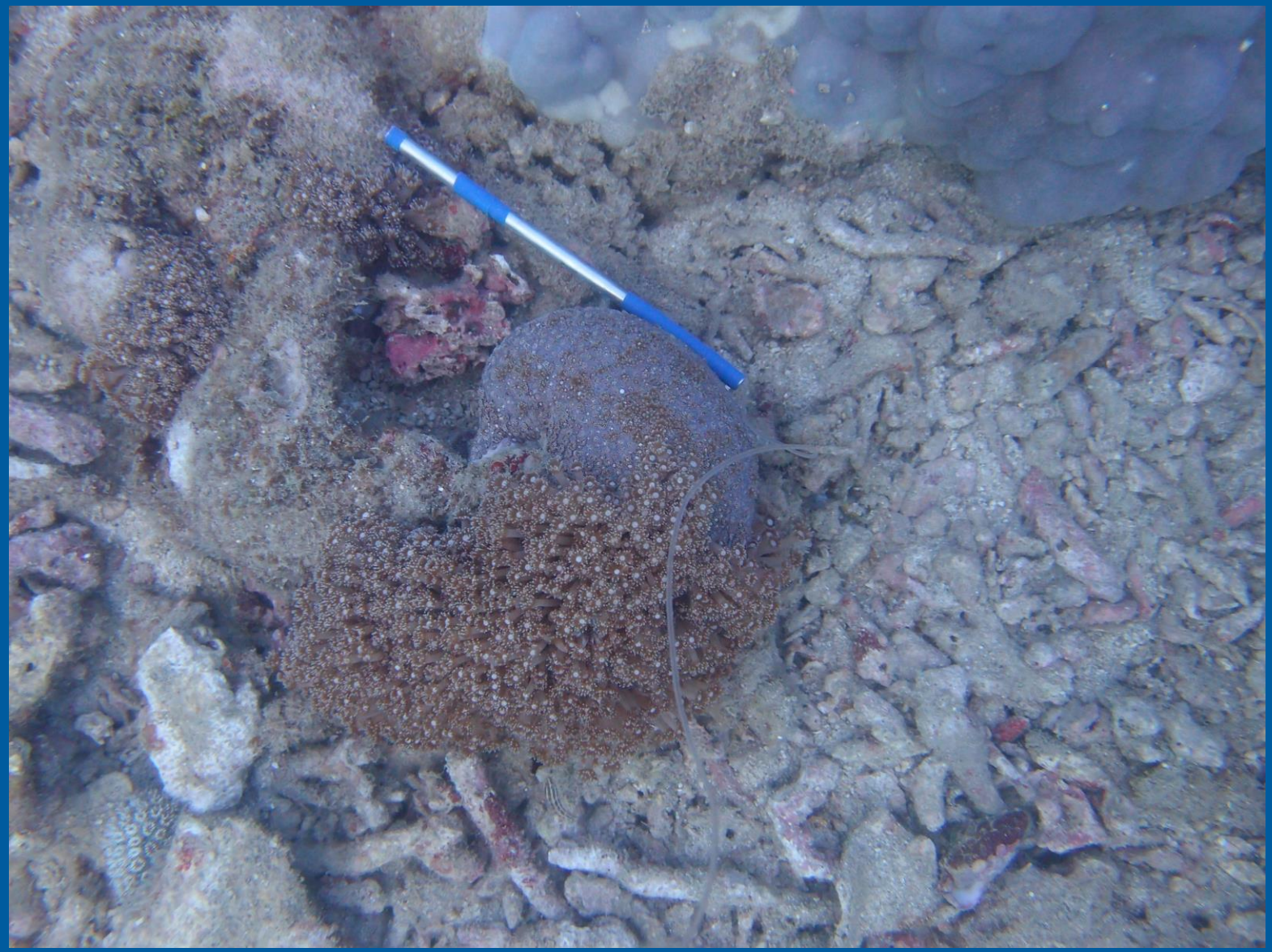

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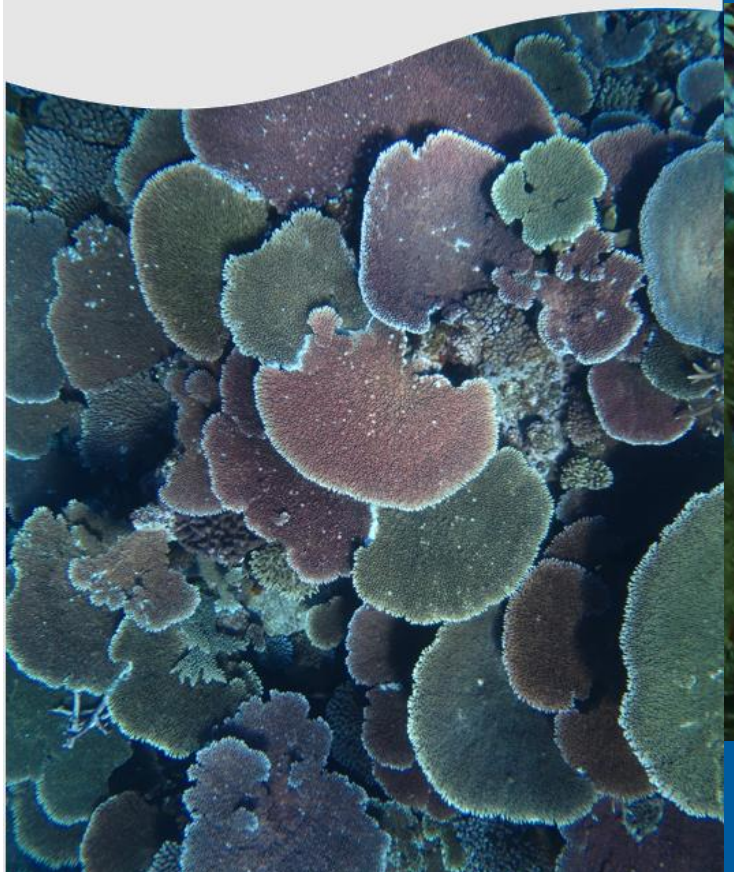
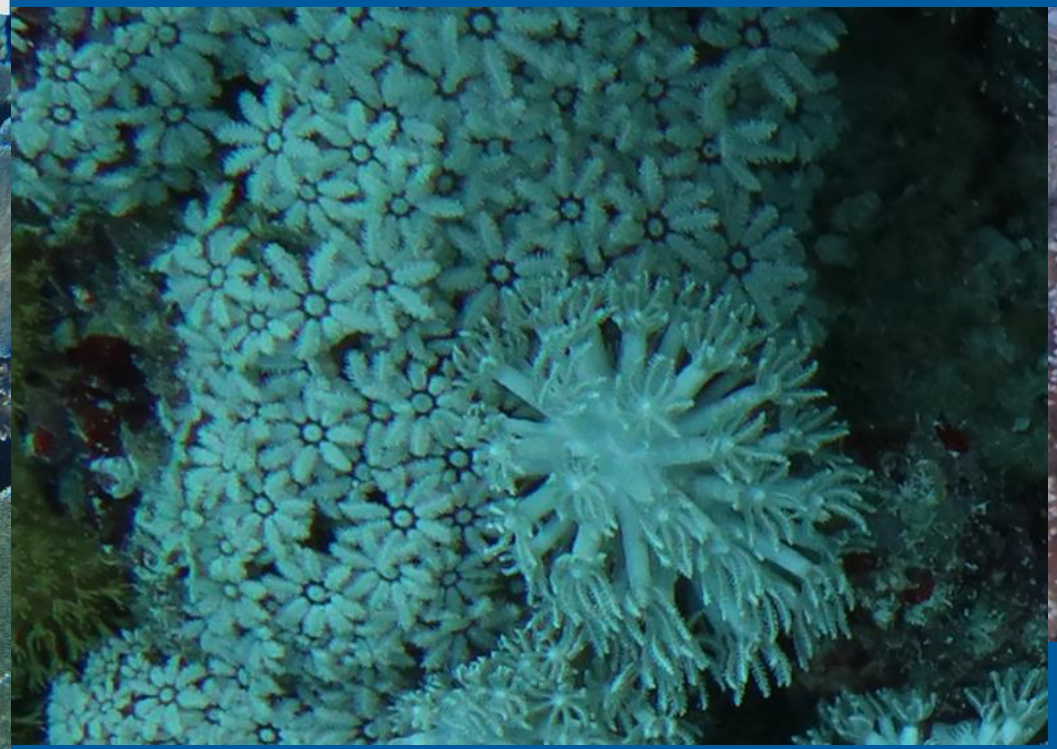
Goniopora

-Large extended daytime polyps

-24 tentacles per polyp

-Can be confused with Tubipora musica (Organ pipe Coral) seen below or some soft corals such as the Xenidae in the image. If you count the tentacles on the Tubipora there are only 8 versus 24 on Goniopora





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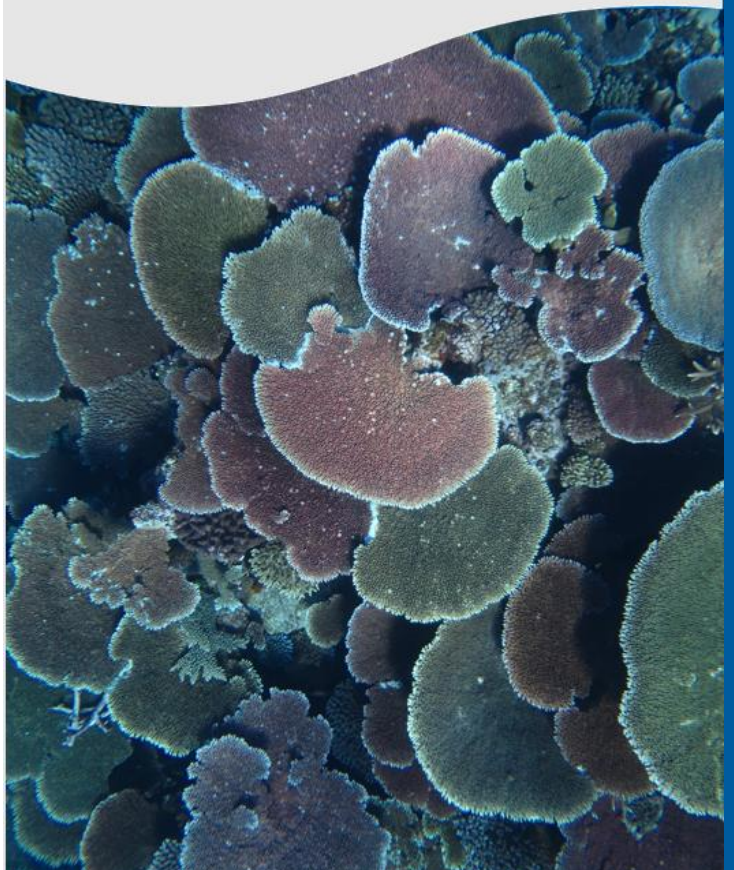

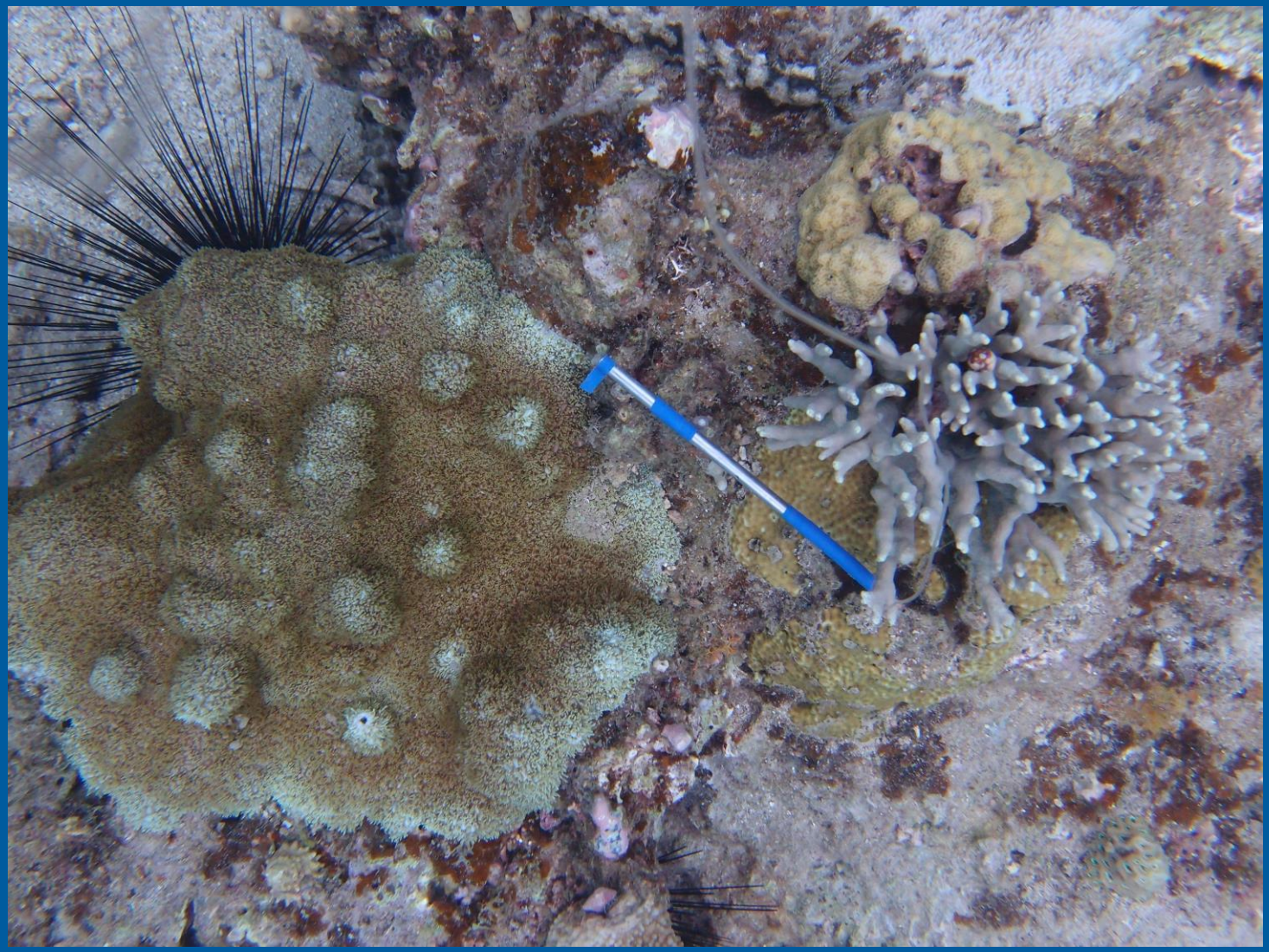

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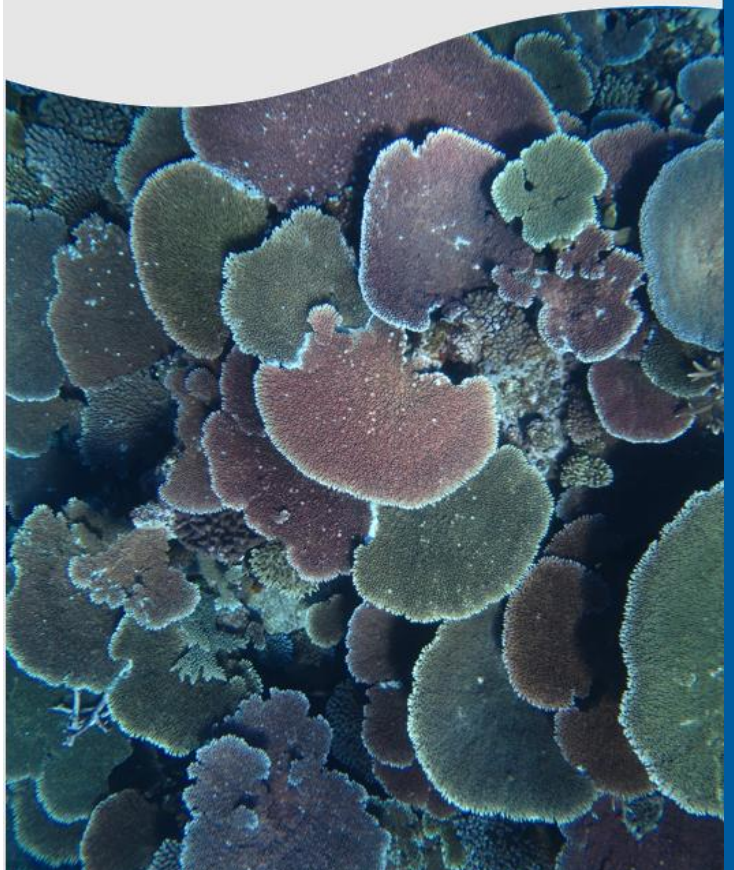

Hydnophora

Has tentacles growing up around the hydnophores (little mounds in the skeleton) as seen below

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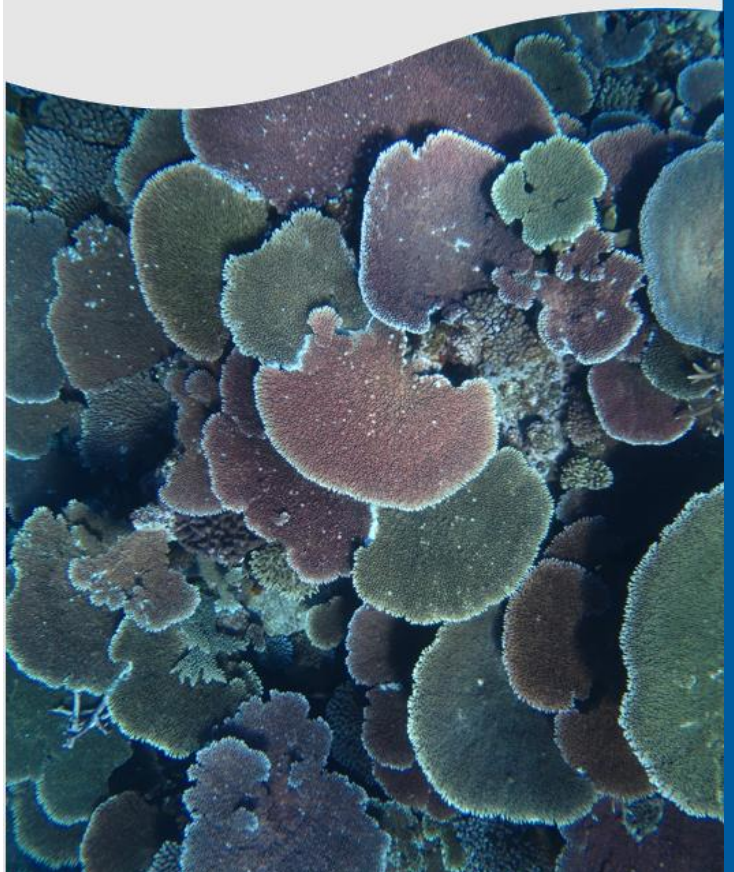

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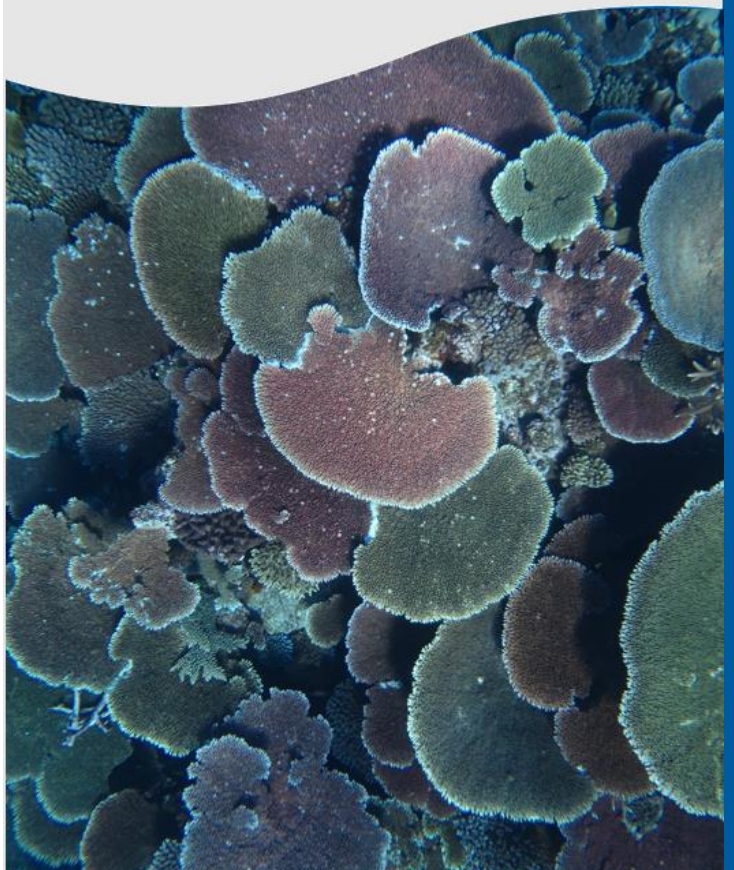
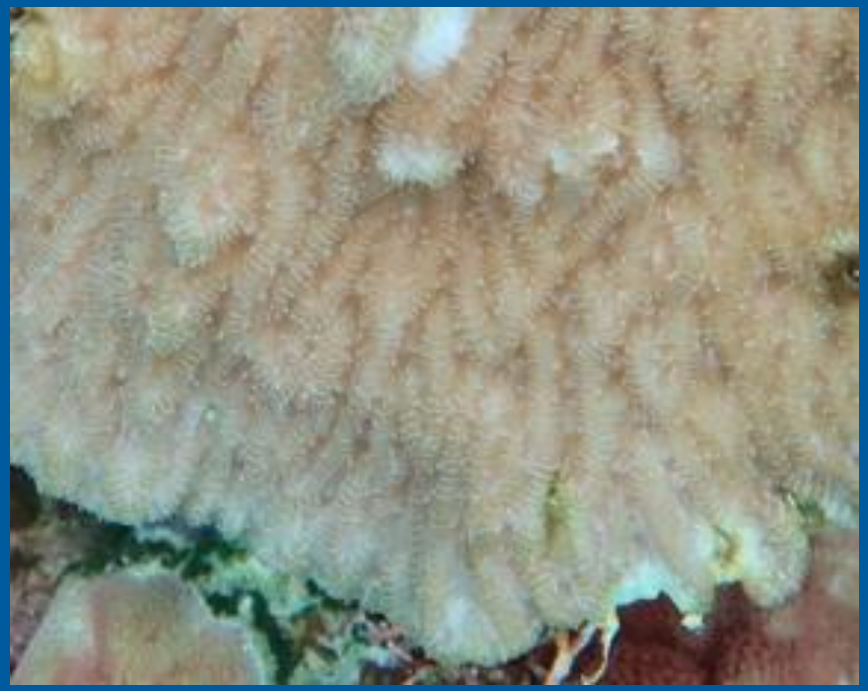


Merulina

- Valleys travel out towards the margins of the colony



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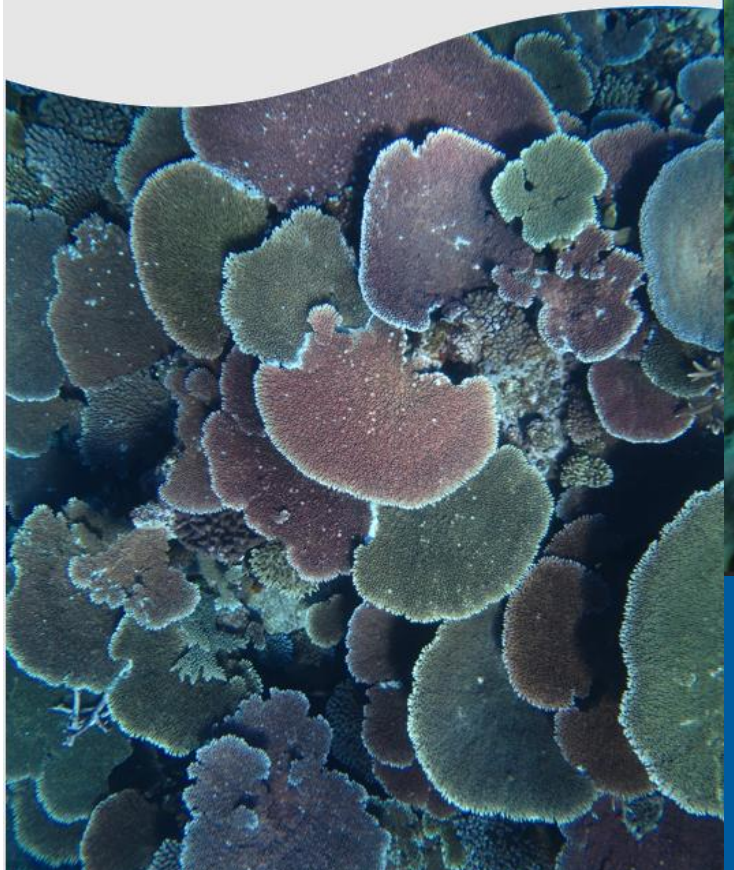

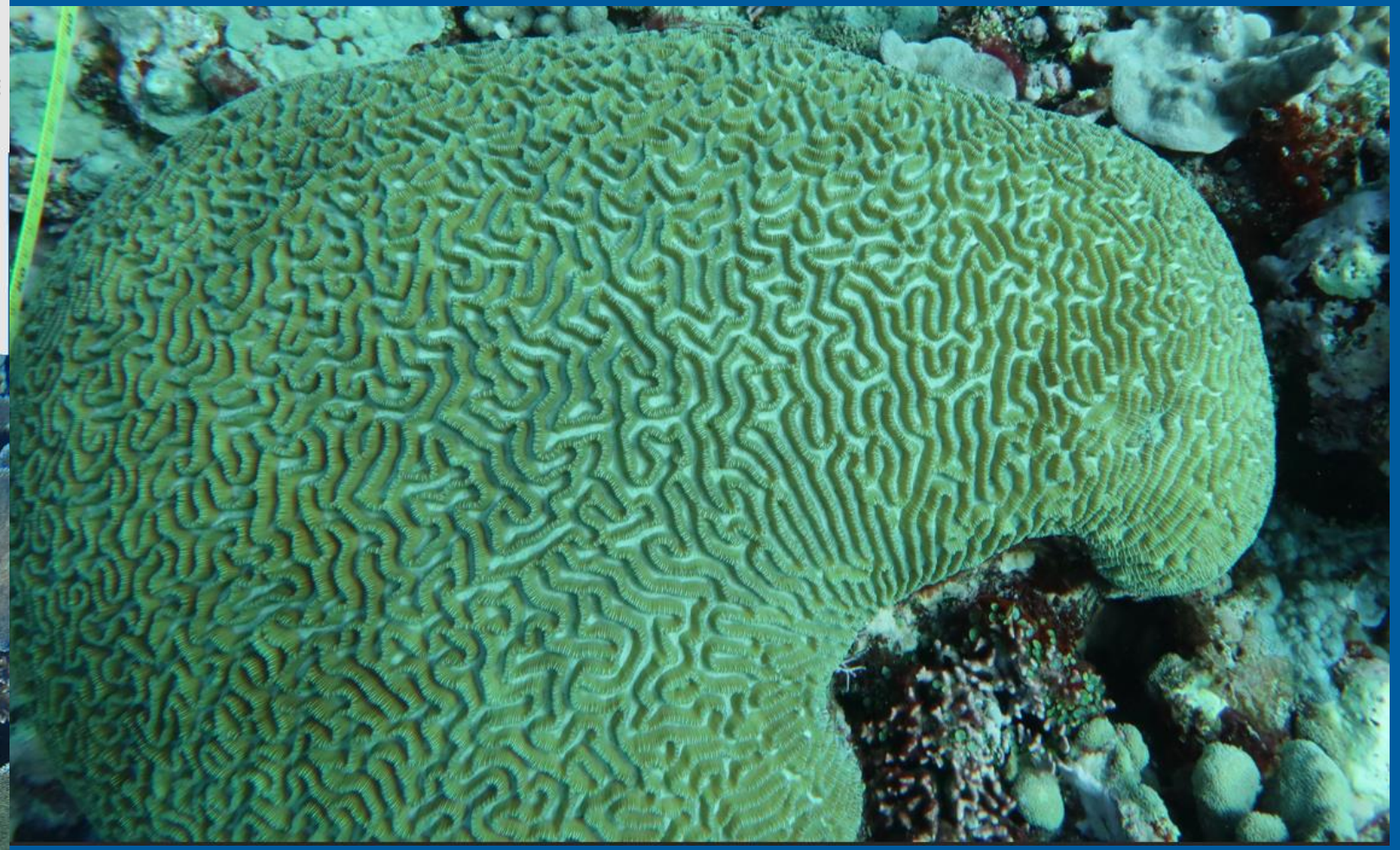

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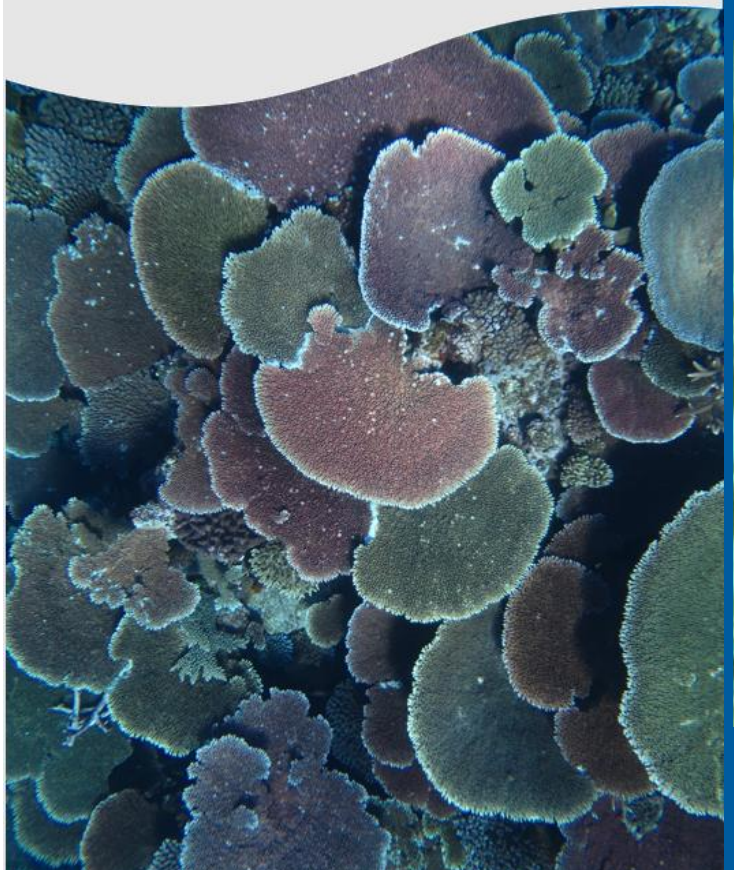
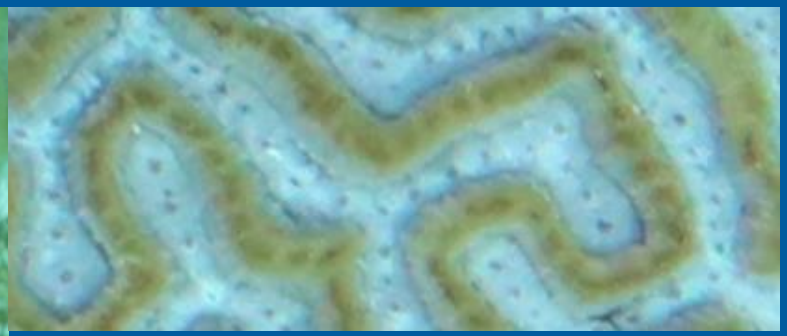


Platygyra

- ‘Meandering’ valleys
- Septa are often ragged or disorganised (depends on species)
- Colour of the oral disks markedly different to the walls
- Multiple mouths along the valleys (most species)
- Often confused with leptoria



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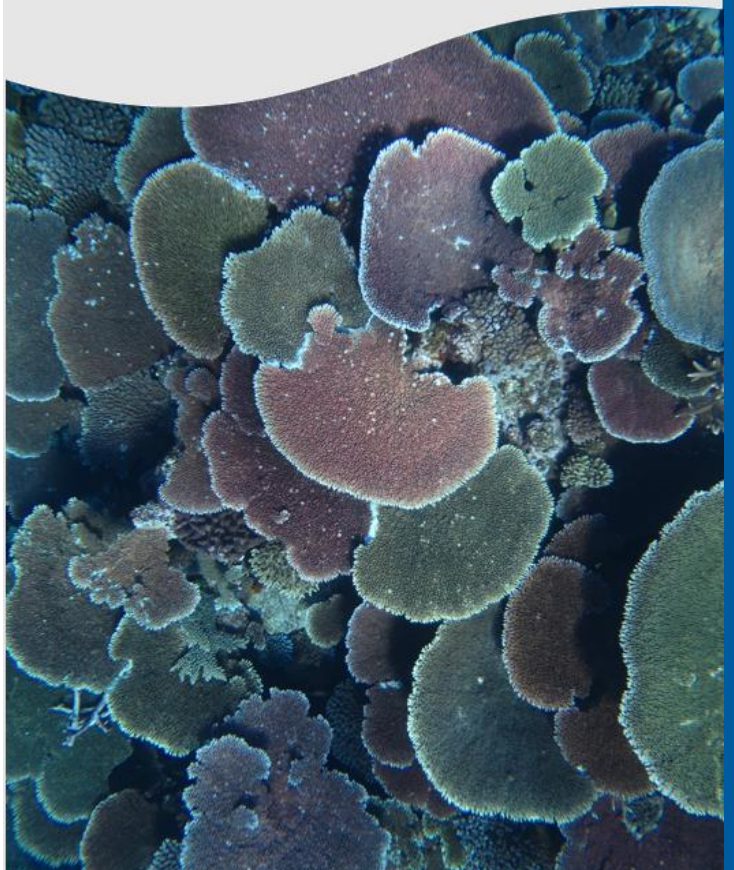

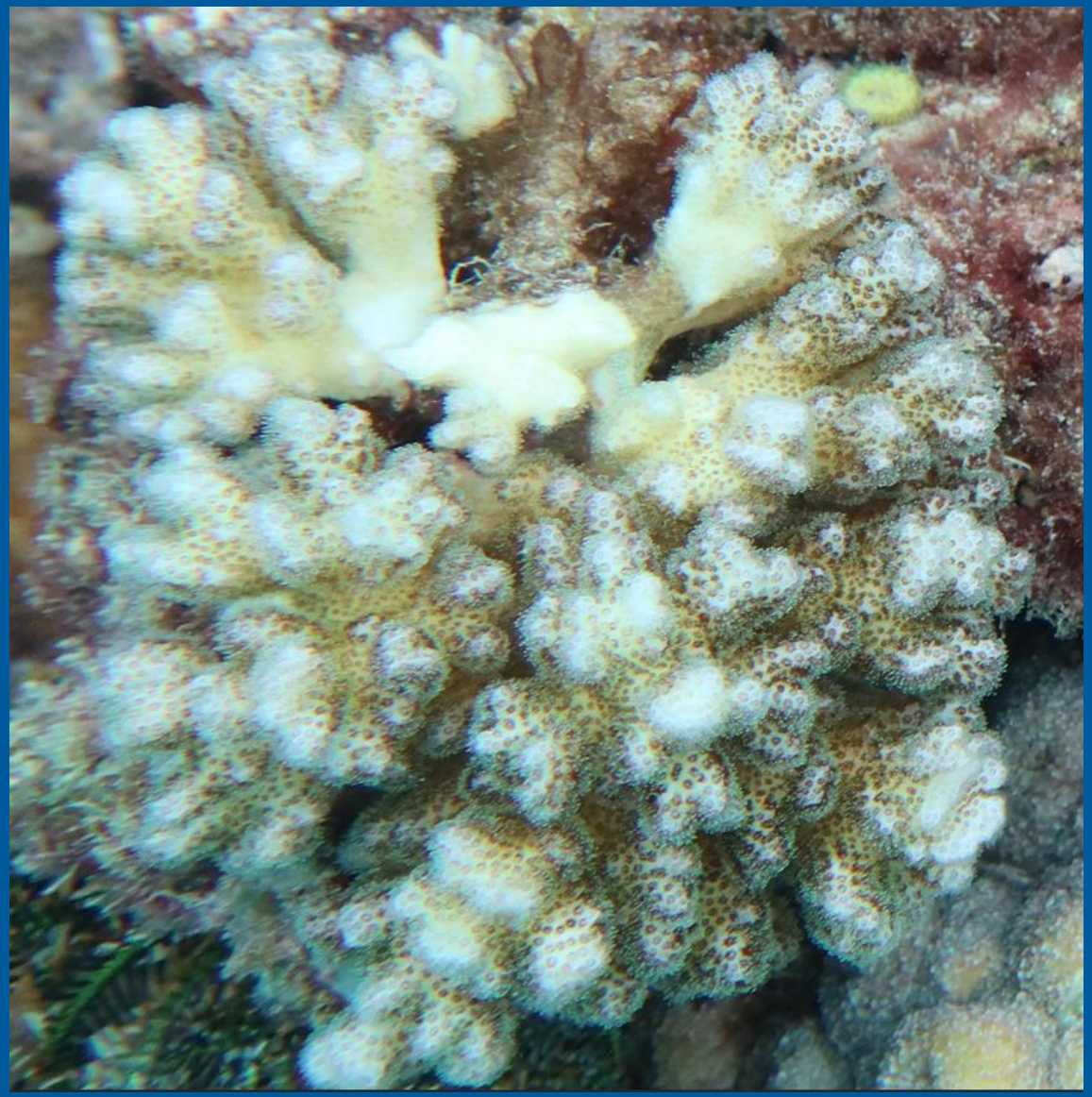

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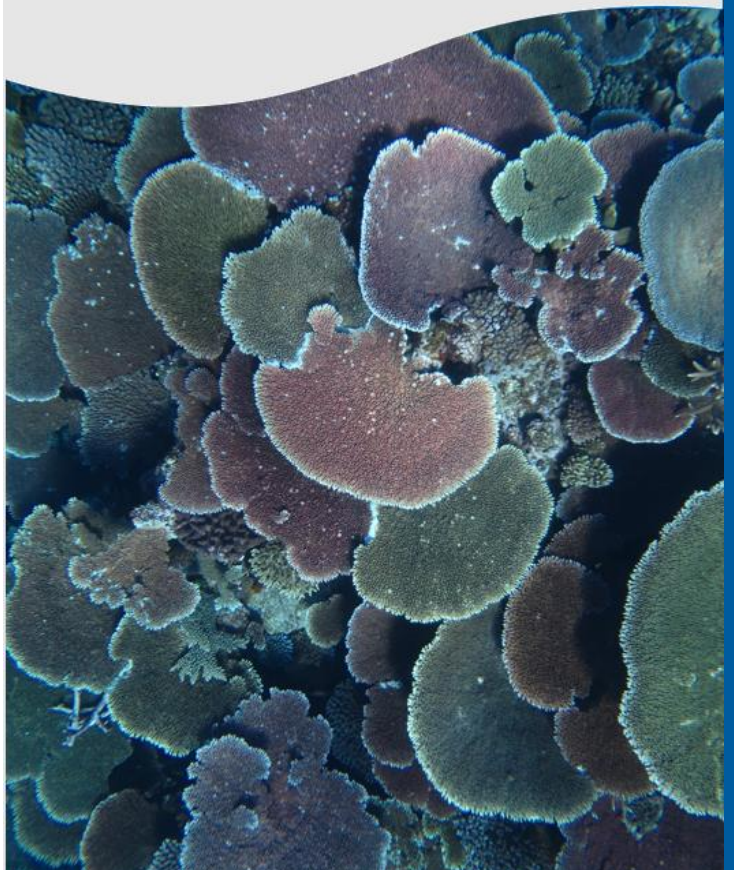
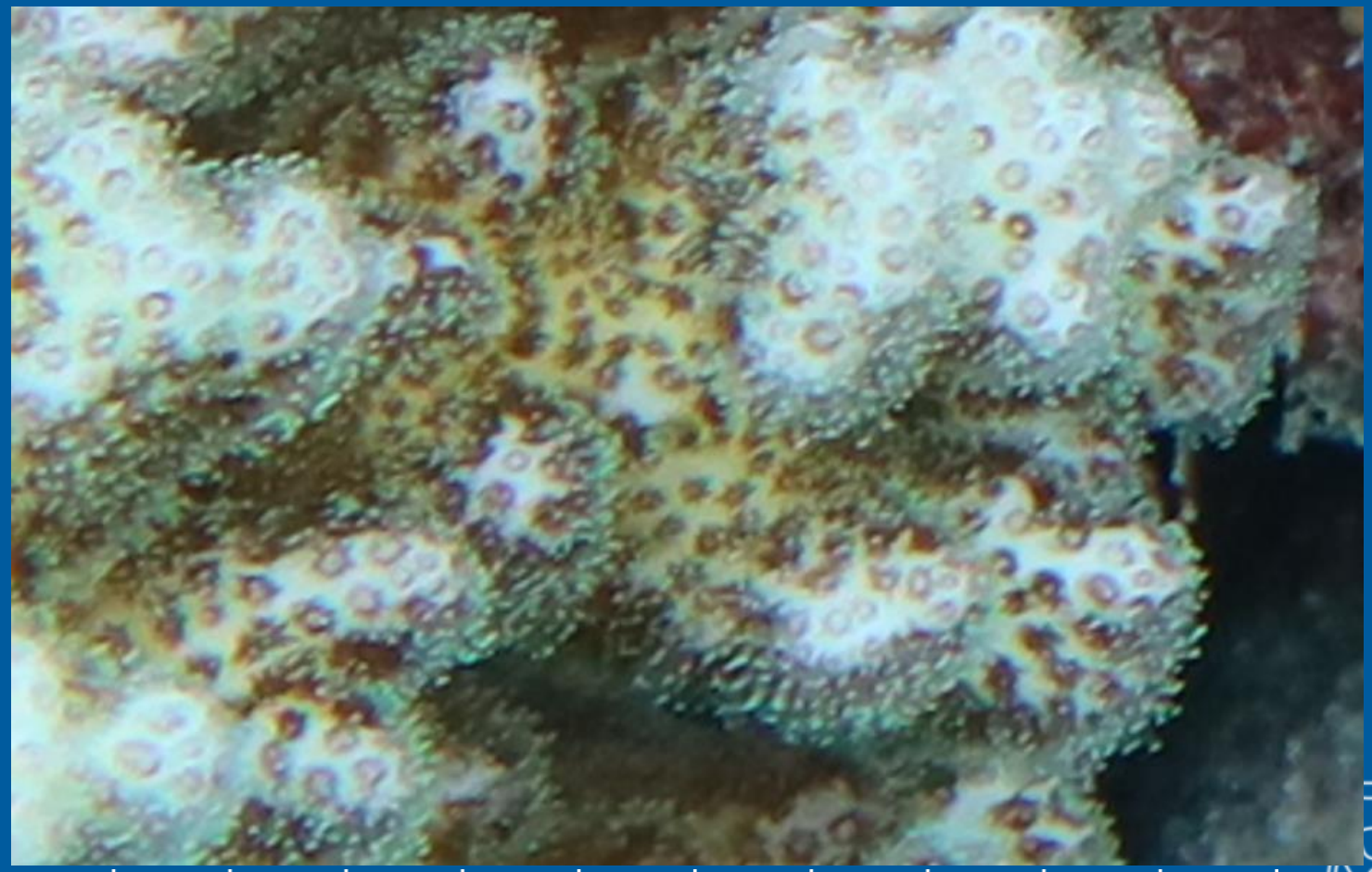


Pocillopora

- Has little lumps called verrucae which have ‘ring shaped’ corallites seen below
- Comes in several different growth forms



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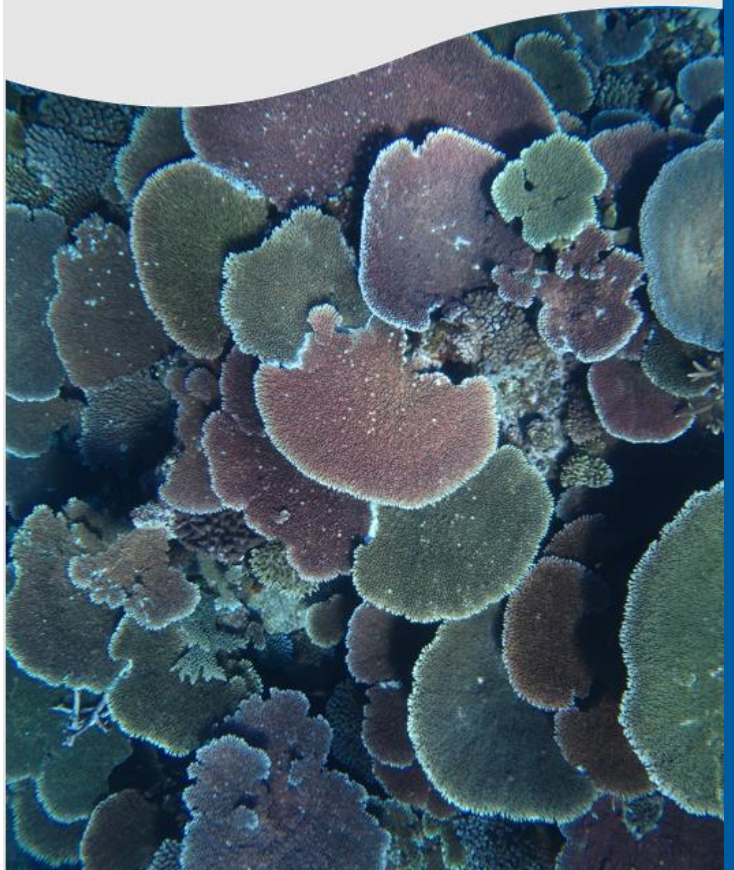

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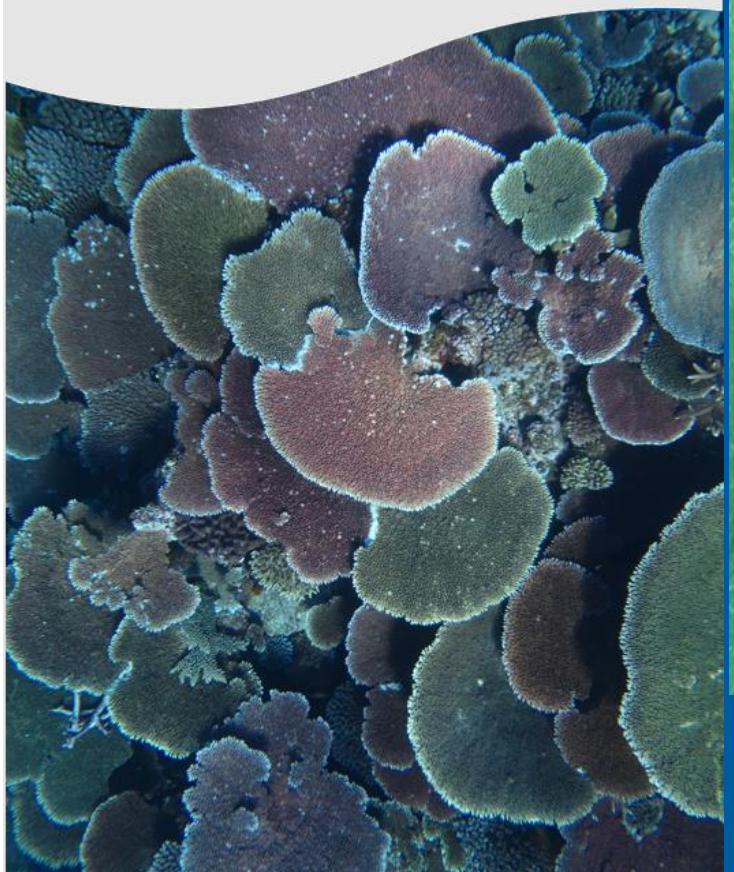
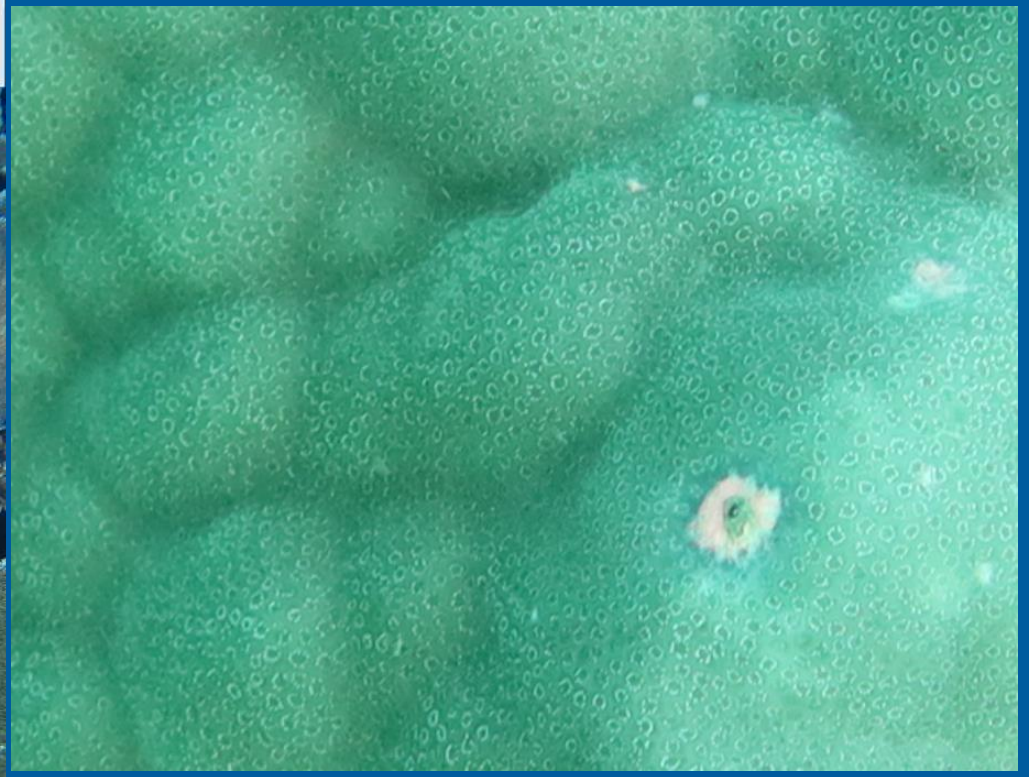


Porites

-Often grows in a massive, lumpy colony

-These colonies can be huge, 10 meters across

- Tiny corallites resembling ‘skin pores’ seen below
- A tell tale sign is “porites pinking” seen here in the colony and at the margins



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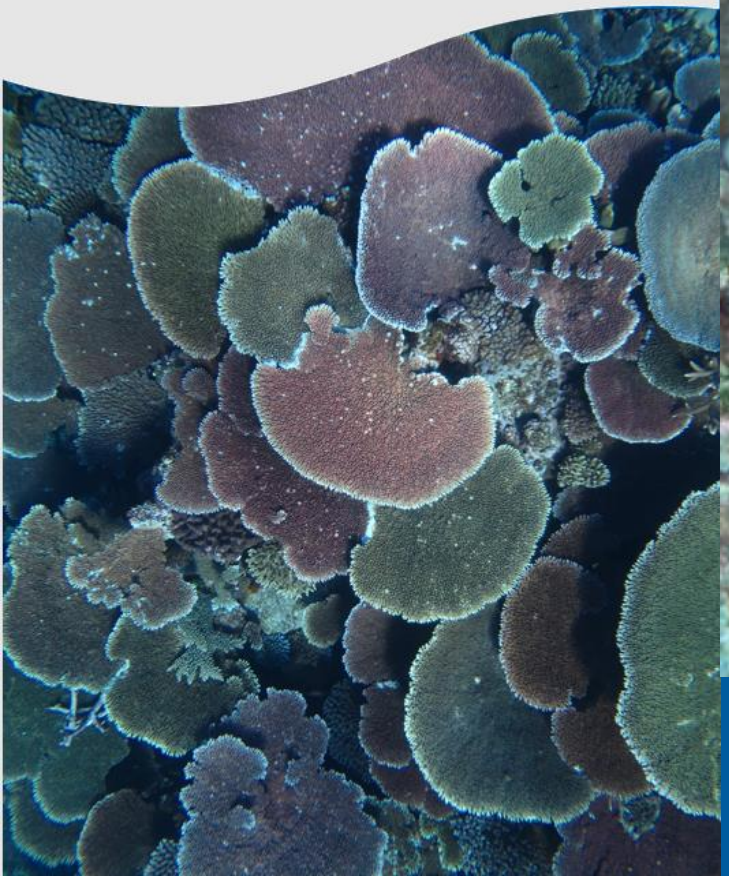

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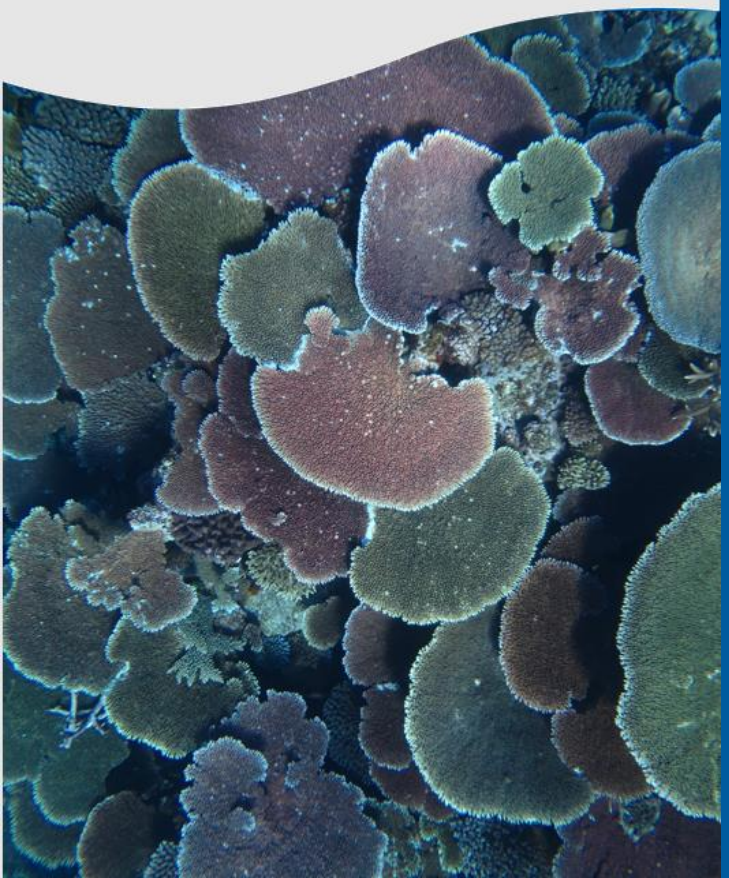

Goniastrea

- Very neat septa
- Often bland, boring colour
- Bleaches easily, so often pale
- Book says look for paliform lobes, these can be very hard to find in photo transect imagery
- One species, G.pectinata often has bright green highlights (seen below).

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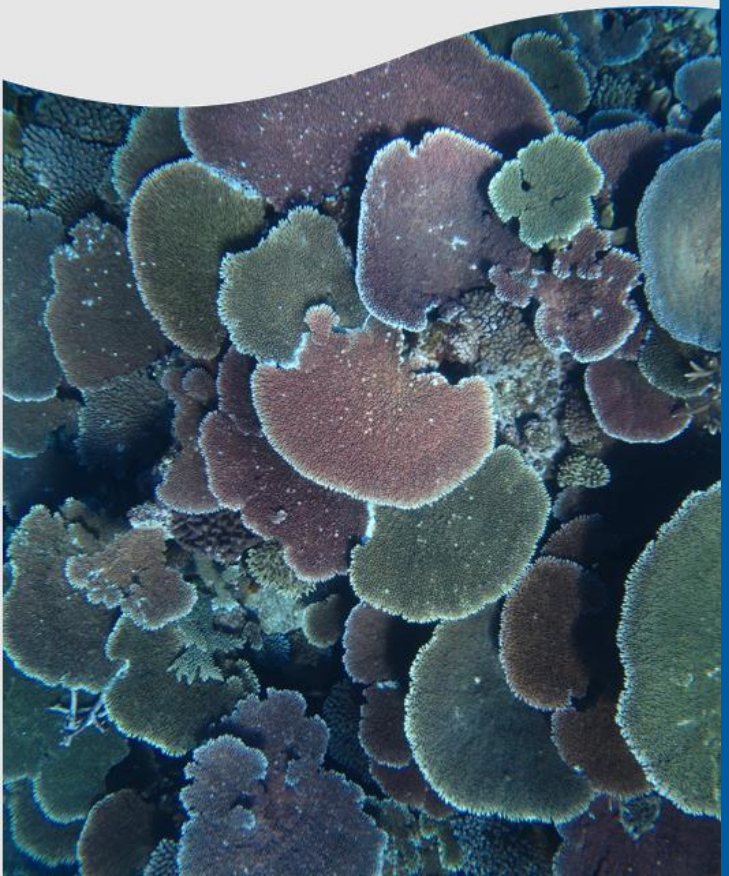

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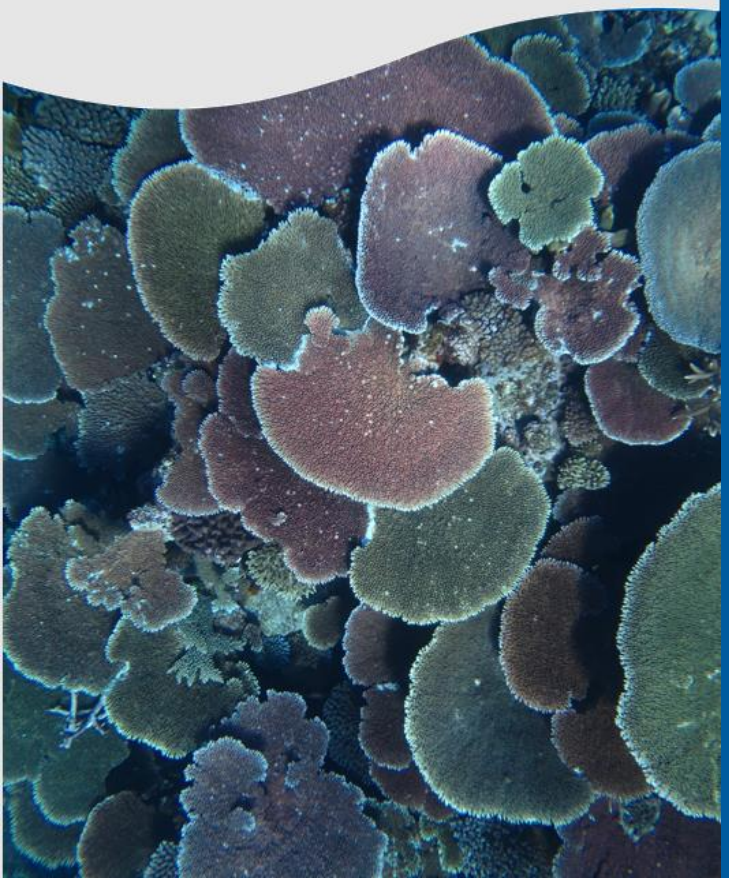
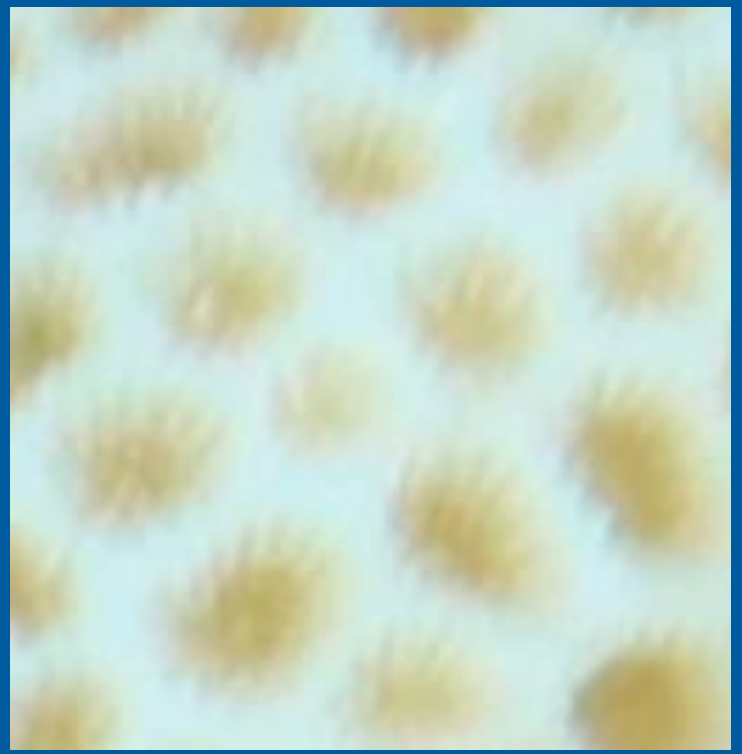


Goniastrea

- This species has very small corallites and is often confused with porites
- If you zoom in, you can see the tiny septa on the inside of the calyx



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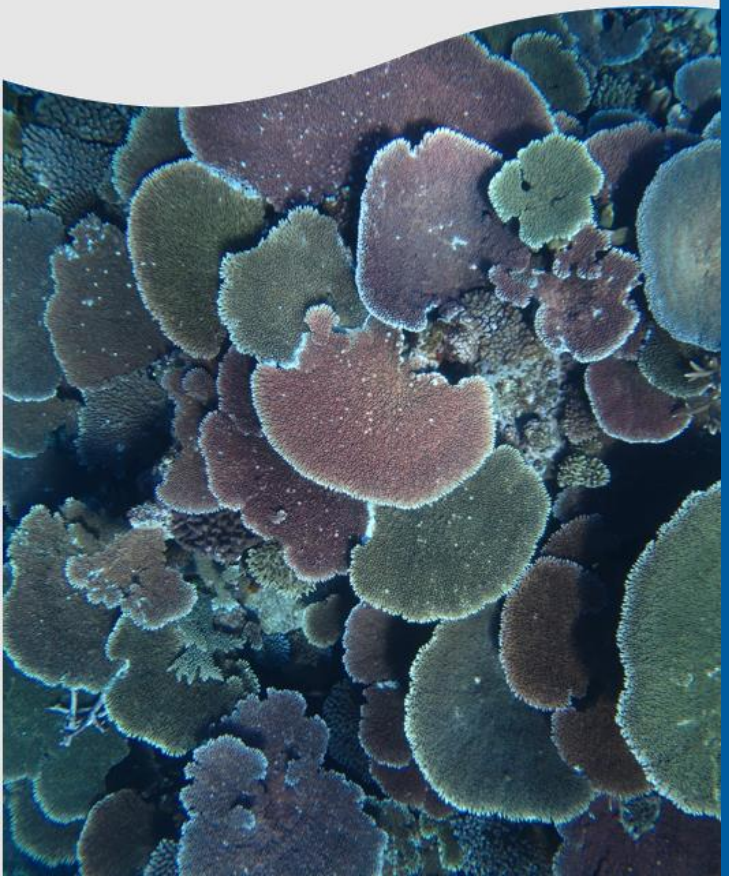

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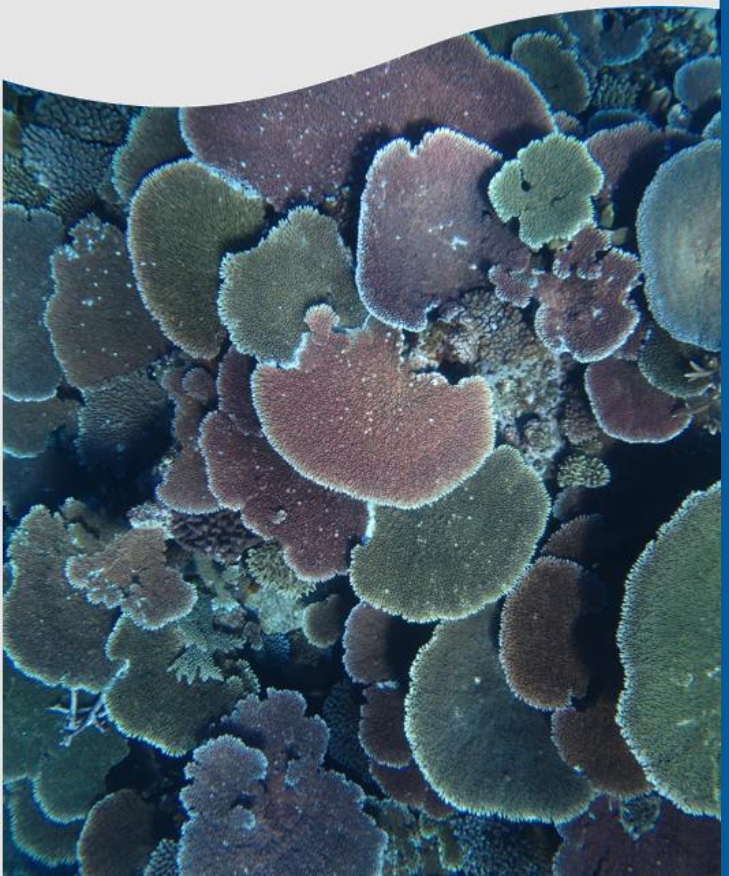

Favites

- Often confused with Goniastrea
- Like Goniastrea has shared walls
- Like Goniastrea (usually) neat septa
- But (usually) more colourful Goniastrea
- Larger, colourful oral disc (they have big mouths)
- Doesn’t have paliform lobes like Goniastrea, however be careful, just because you can’t see them just means they might not be visible in the photo

Goniastrea

Favites

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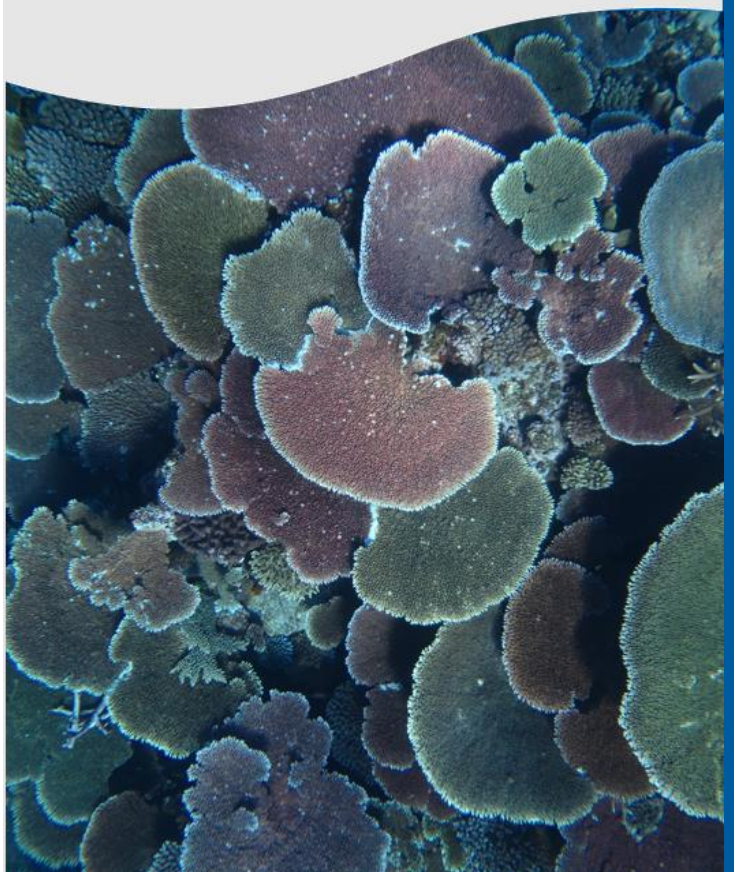

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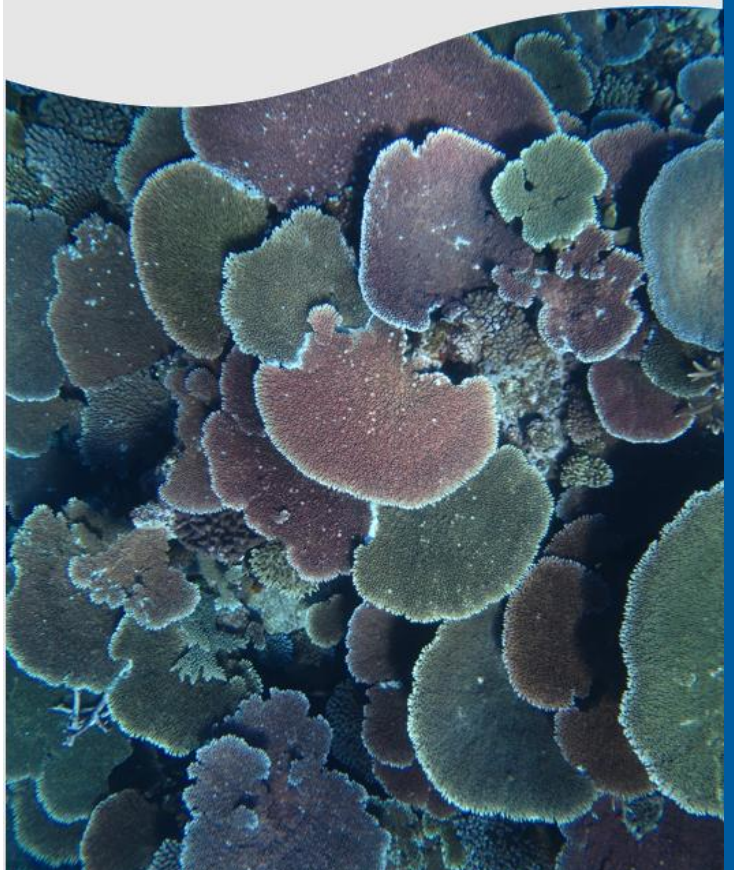
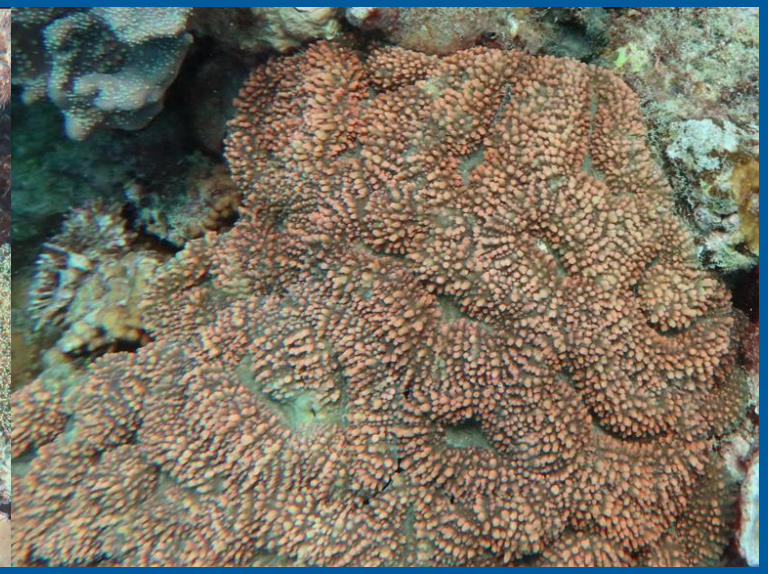


Lobophyllia

- Many species are comprised of separate ‘stalks’.
- However some have fused corallites (below right) and some have meandering walls as seen (below left)



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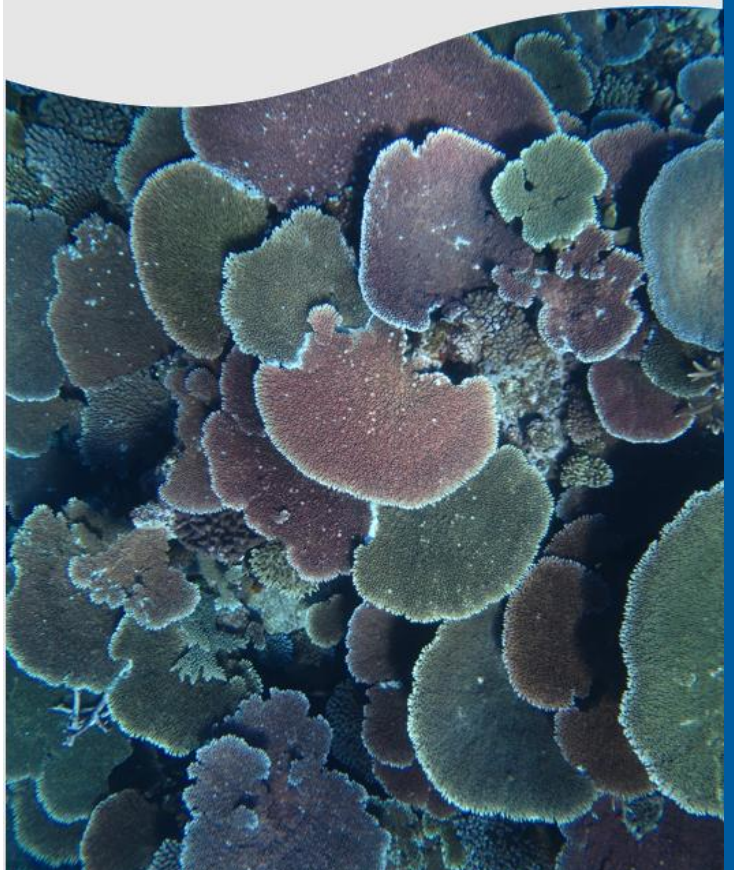

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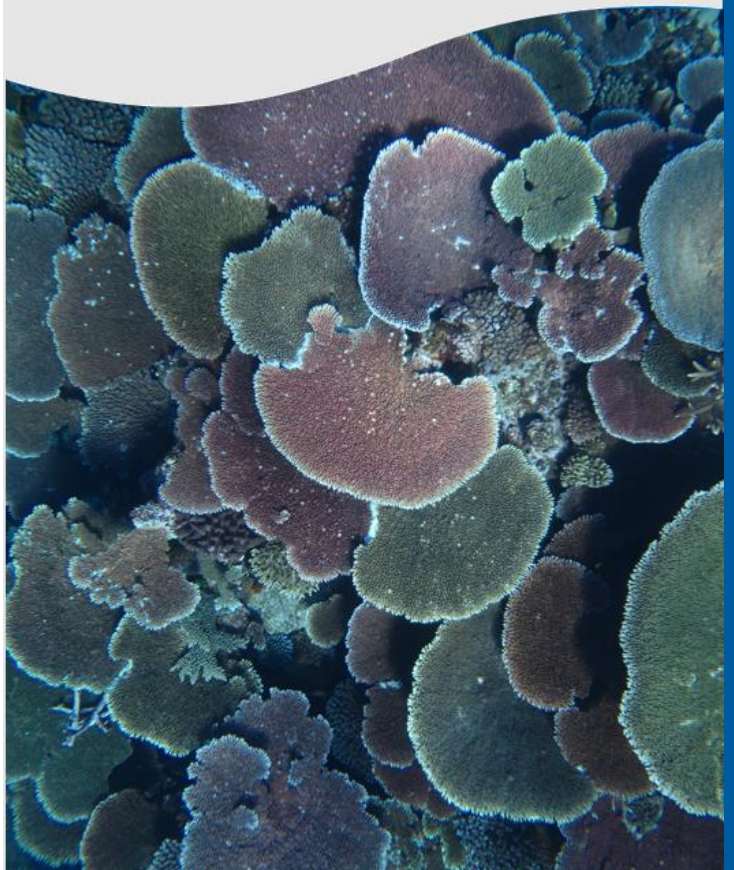

Leptastrea

- Forms massive or encrusting colonies
- Often appears bleached between the corallites
- Often has 4,5 or 6 very prominent septa within each corallite

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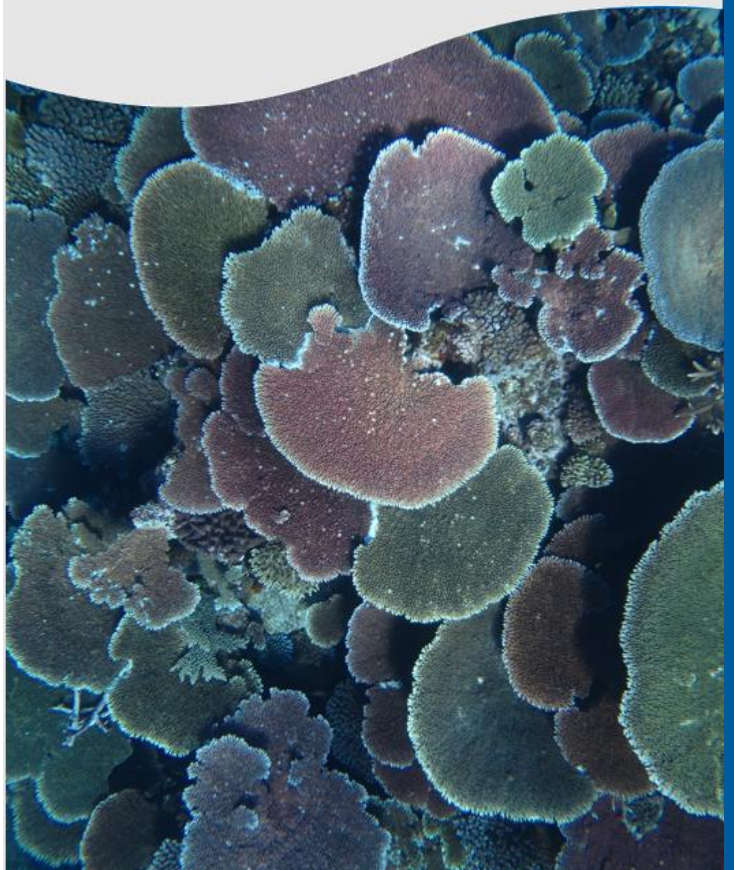

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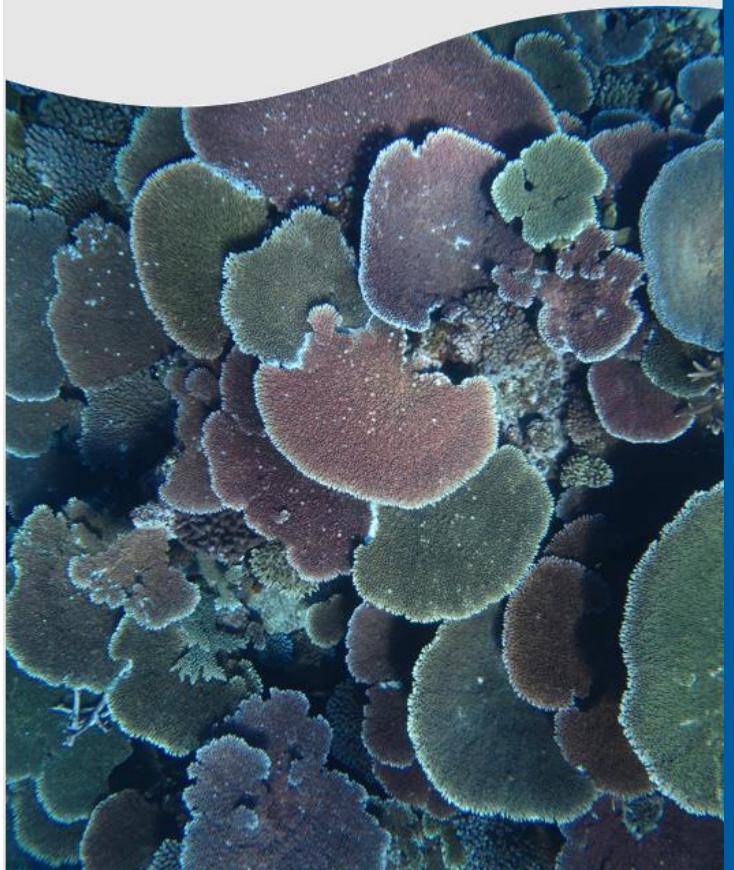
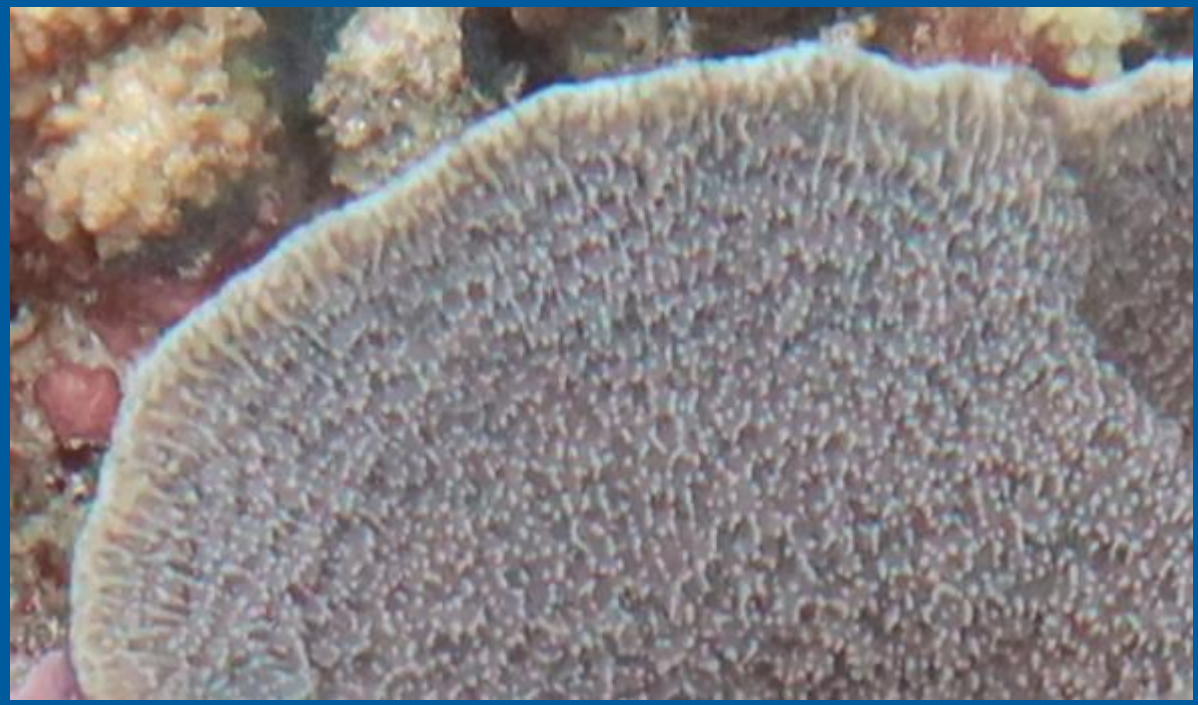


Montipora

- Forms a thin foliose plate, or can be encrusting
- Tiny corallites and a distinctive skeletal texture
- Often forms a unique pattern at the margin of the colony (seen below)



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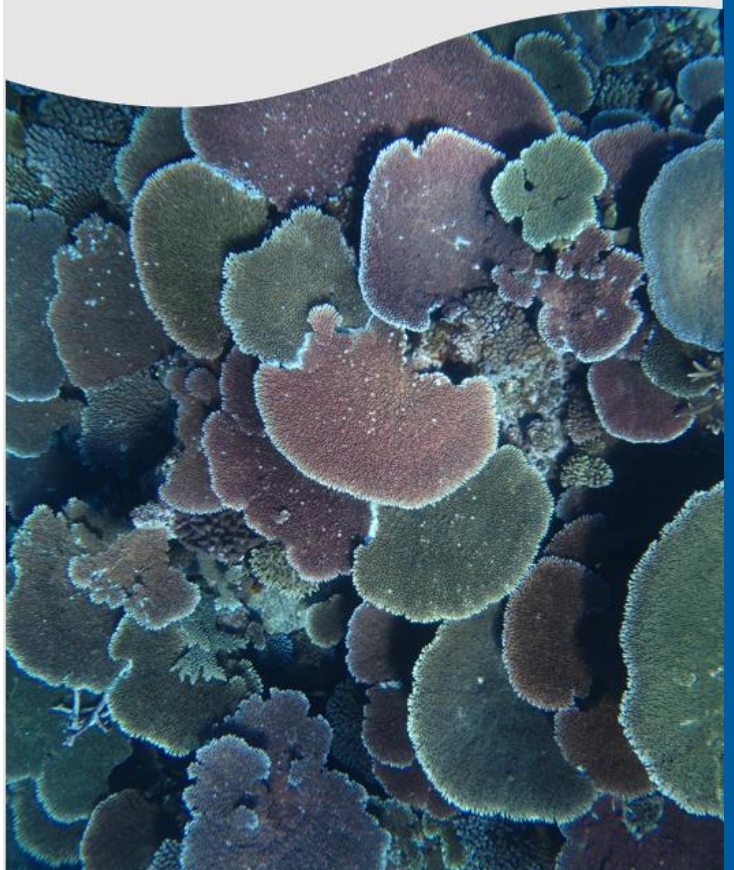

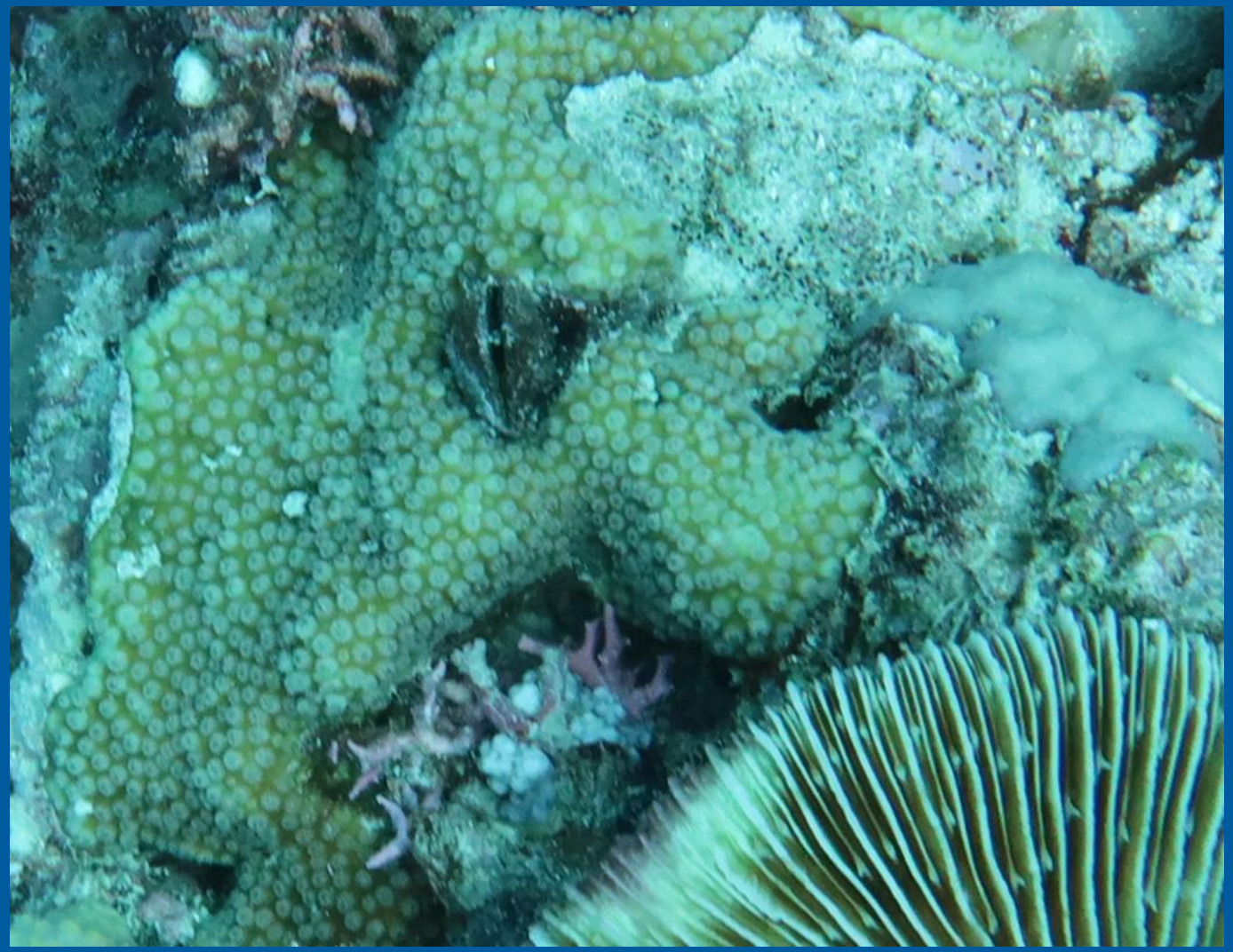

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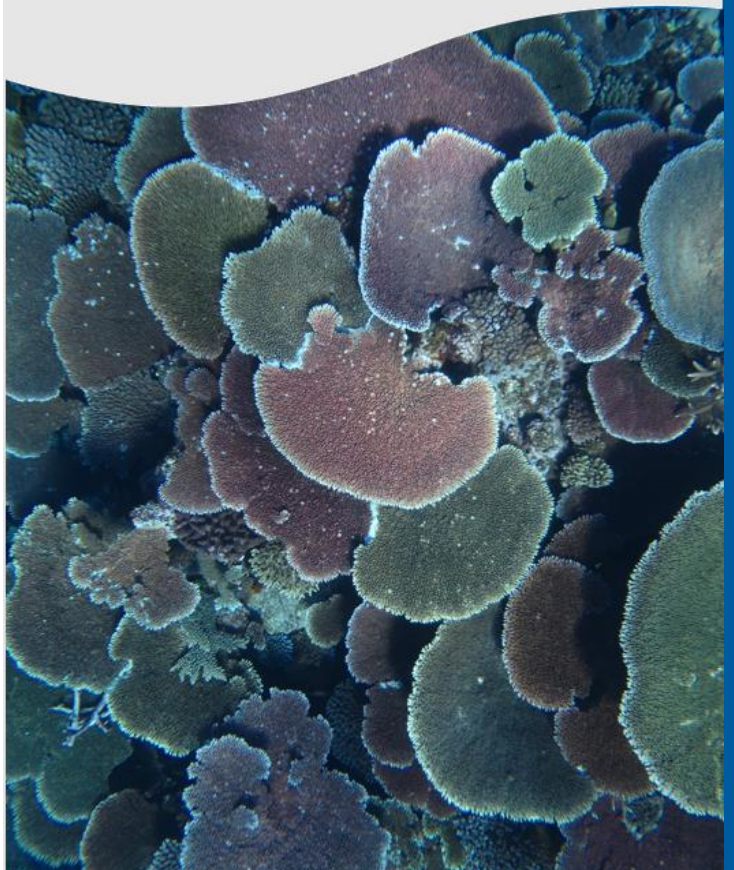
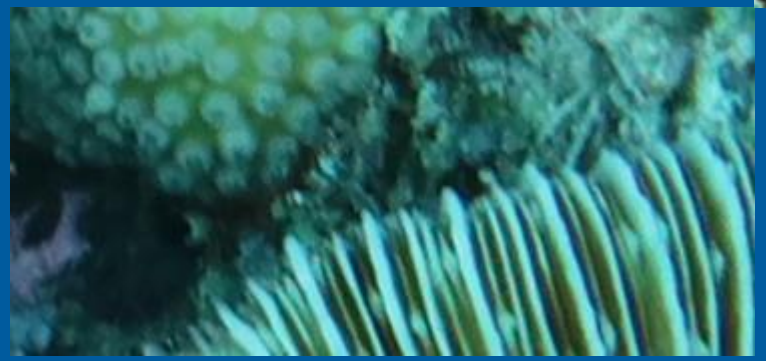


Cyphastrea

- Very small corallites, look at the image below and note how big the strands of turf algae and costae of the fungid are next to the colony
- Can be confused with pavona, cyphastrea doesn't have the pretty flowing patterns between corallites



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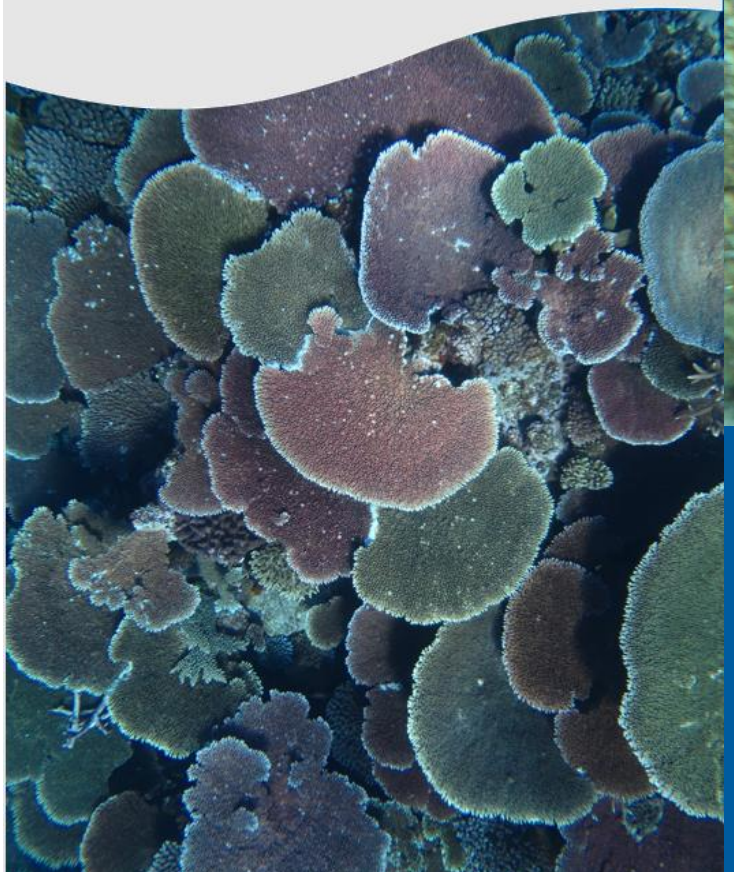

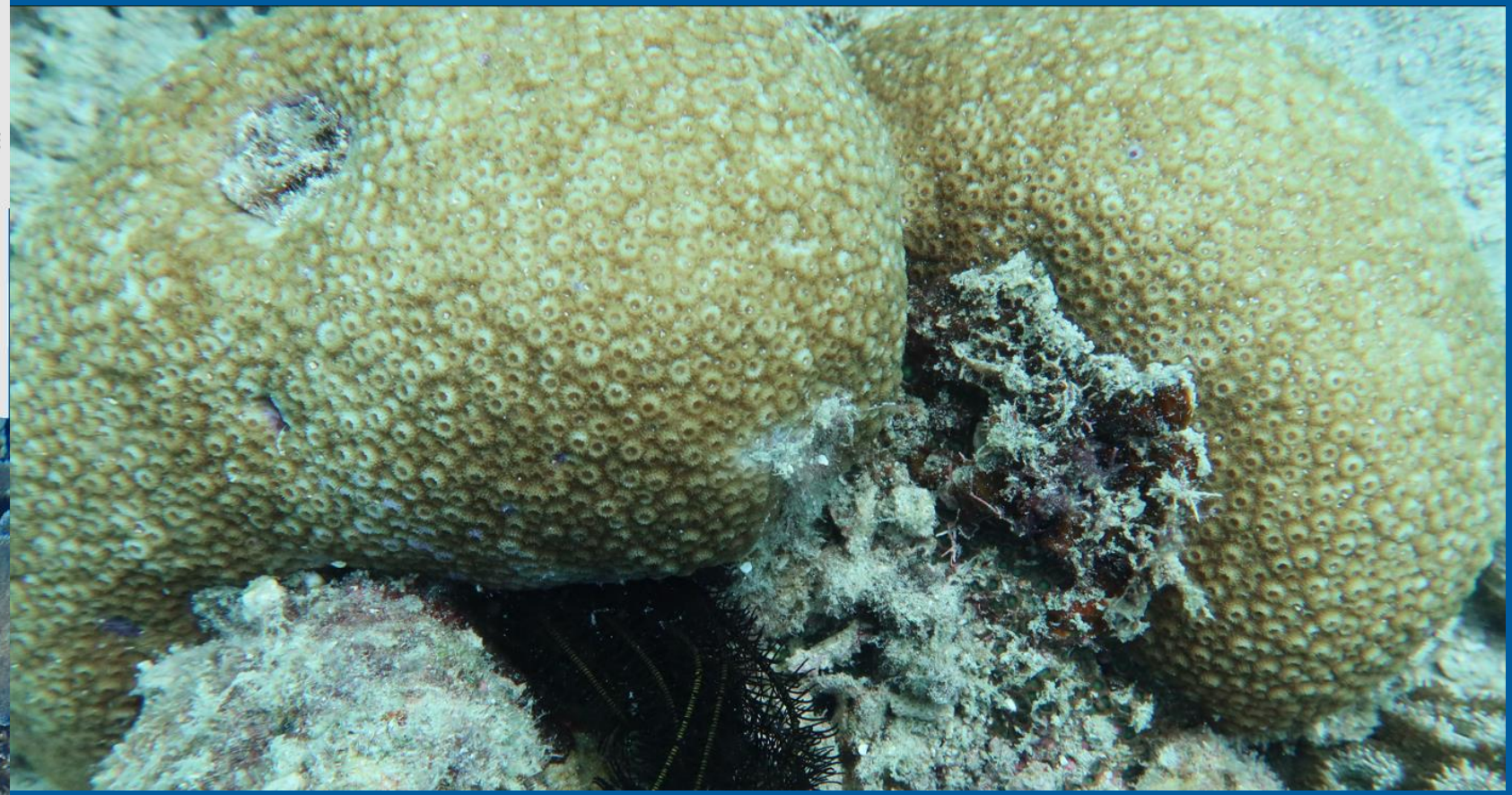

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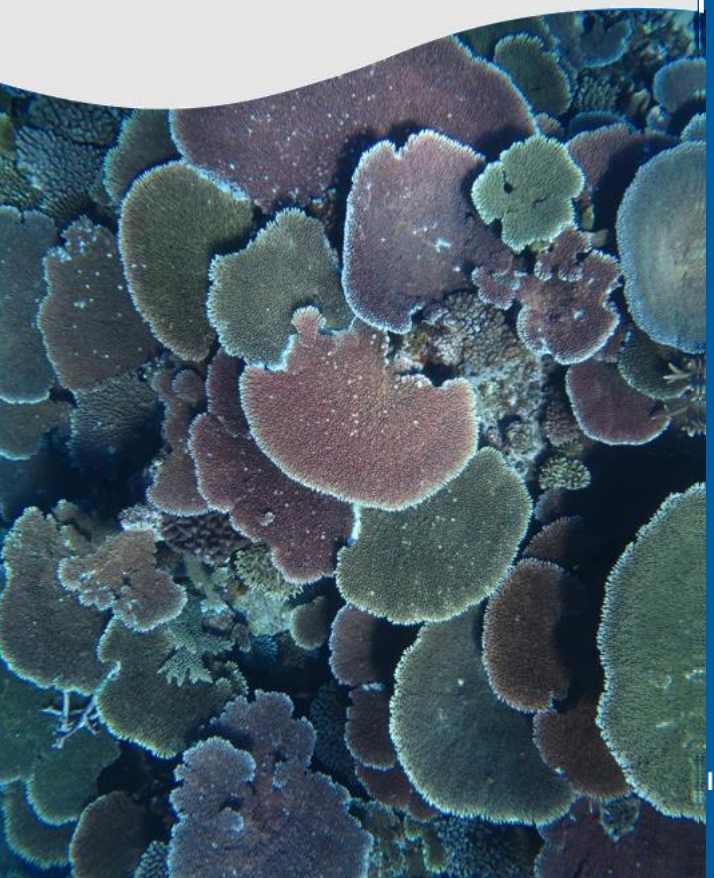

Astreopora

- Corallites look like big, empty, donut shaped holes
- Beads/spinules on the outside of the corallite
- Sensitive to bleaching so parts of the colony are often bleached
- Corallites are often jumbled and crowded together

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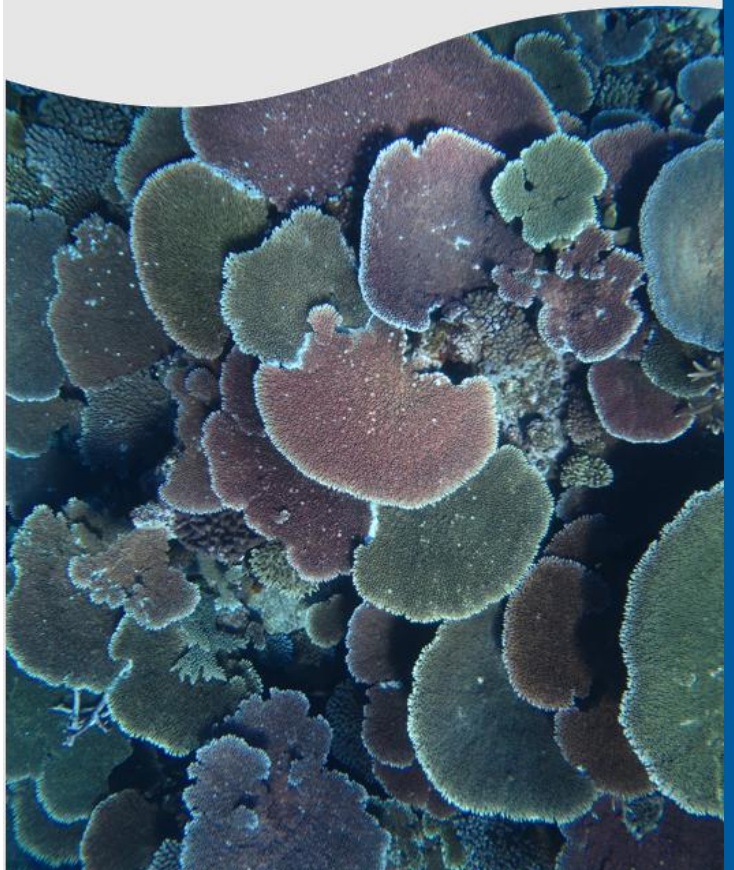

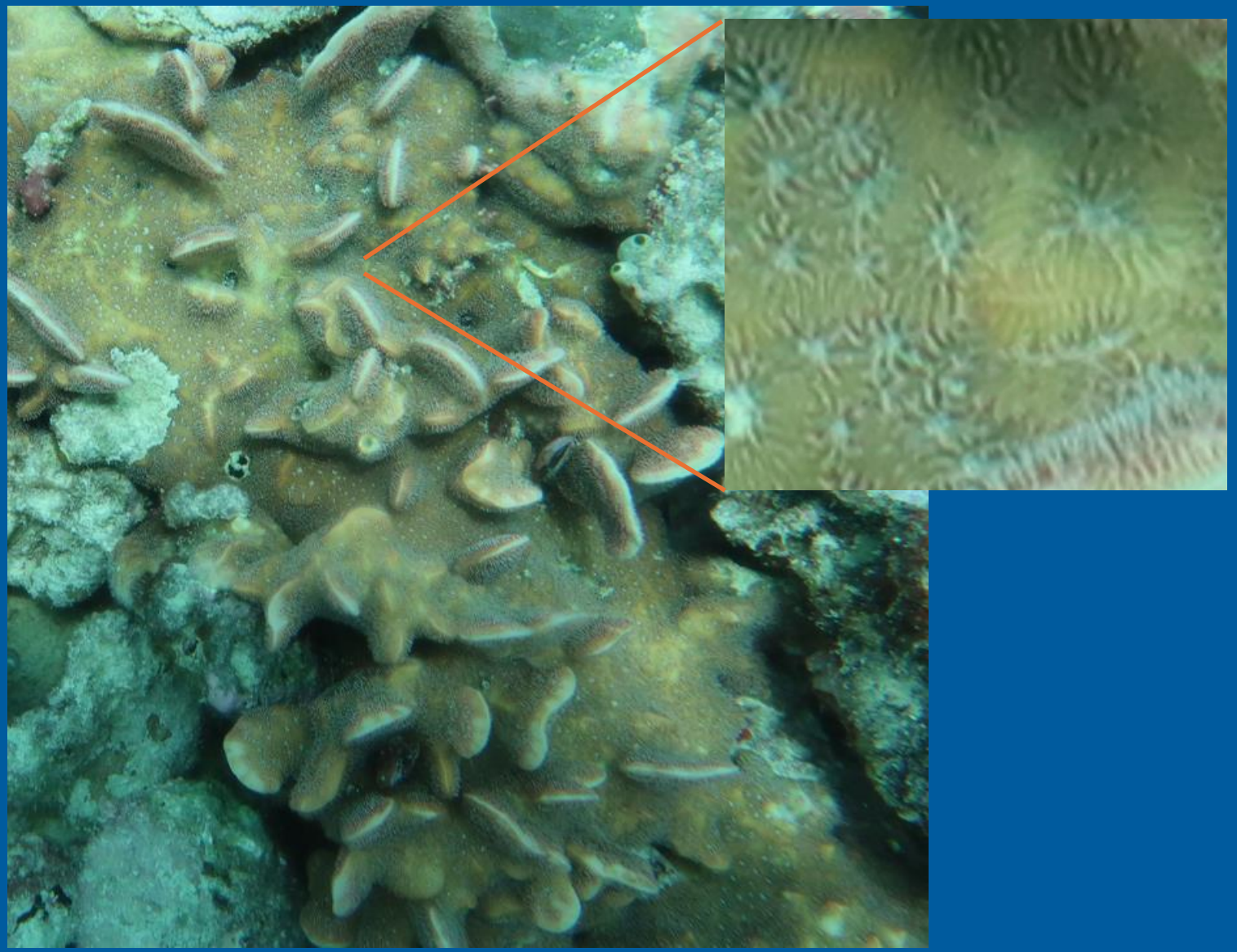

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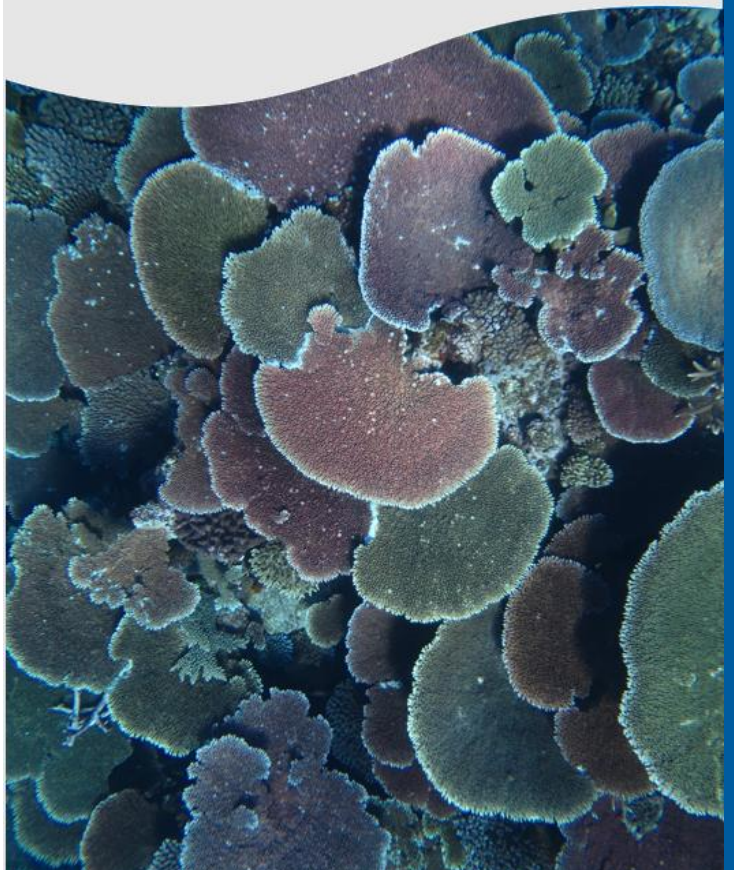

Pavona

- Flowing septo-costae between corallites
- Can be confused for leptoseris, however leptoseris has inclined corallites

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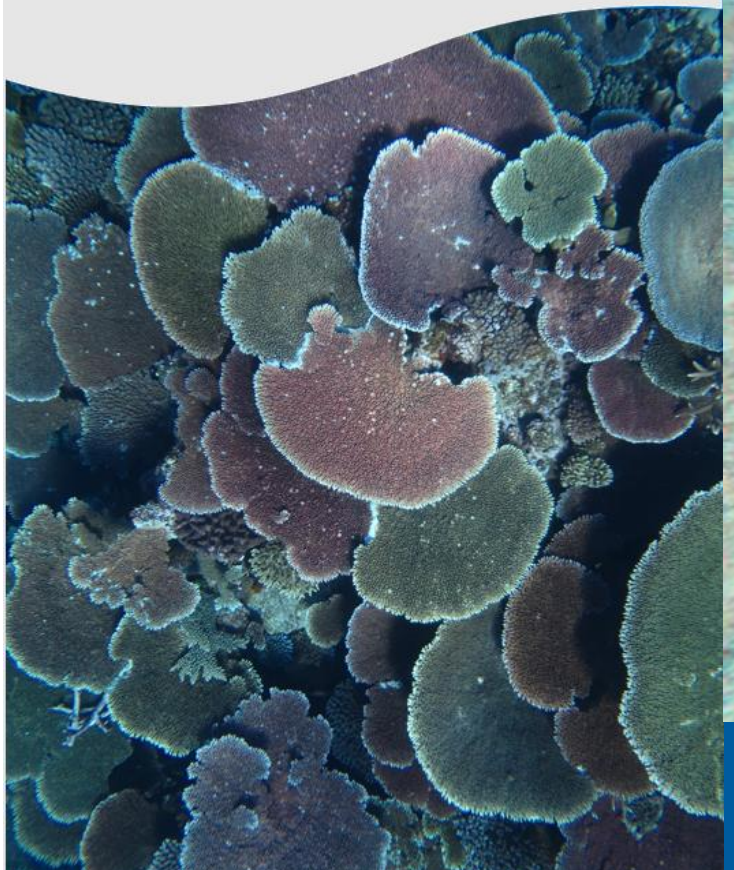

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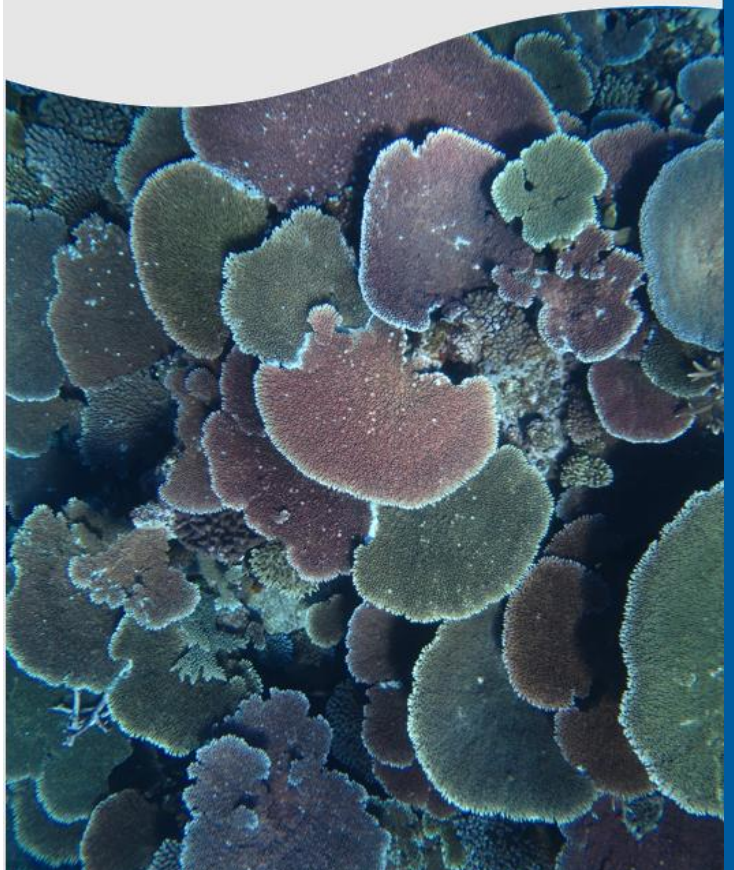

Montipora (Encrusting)

- Rough surface texture, often can't see corallites
- In phototransects, it can be hard to tell from encrusting Porities, you can see in the margin of the colony that Montipora is unique. However there is also another cheat. Porites has an immune response to lesions, disease etc where it shows pinking, Montipora does not do this.

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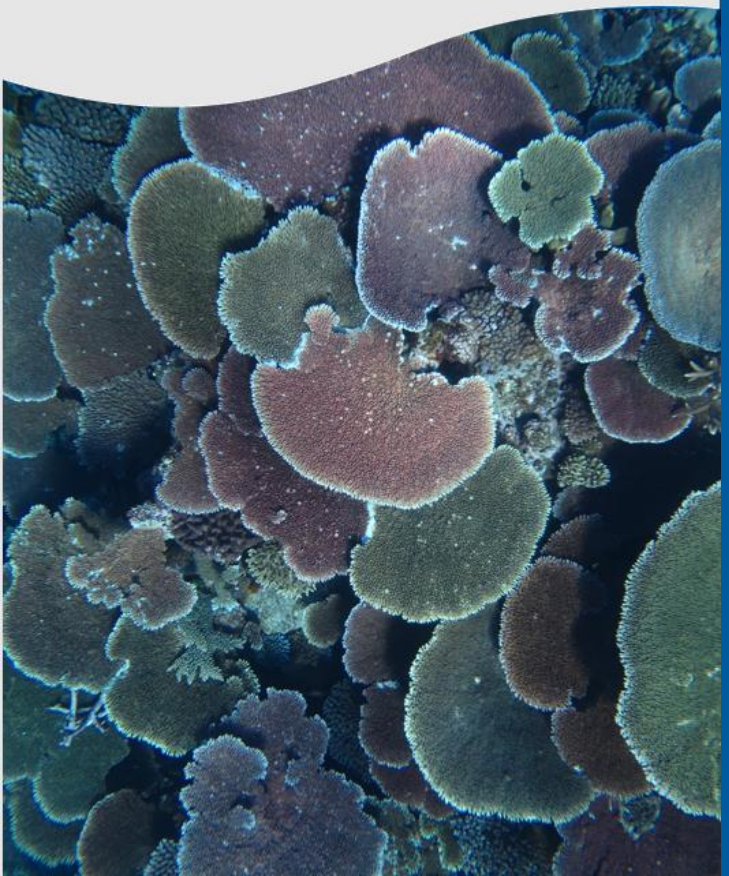

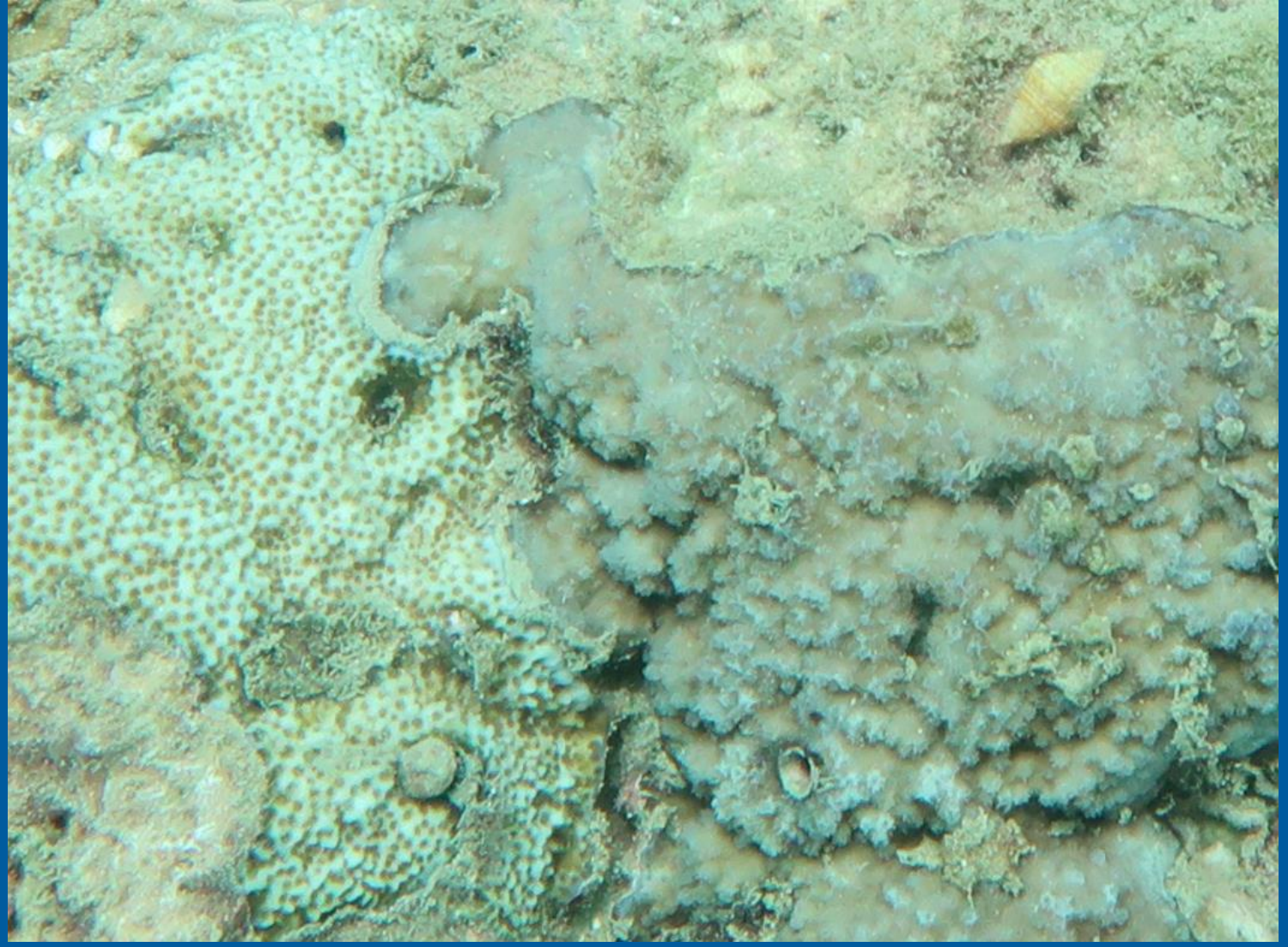

Which is which?

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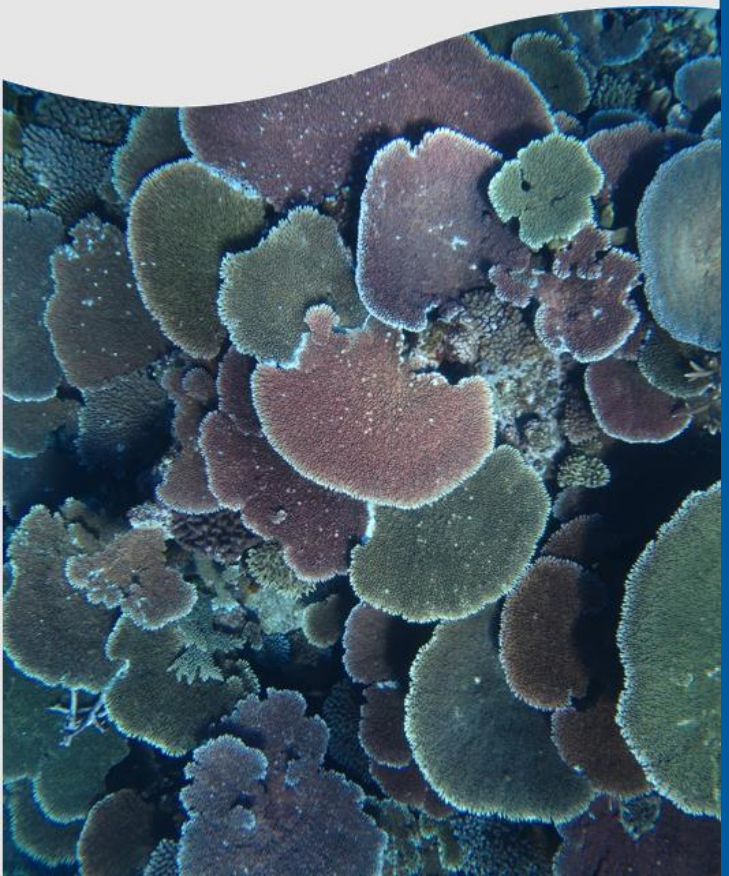

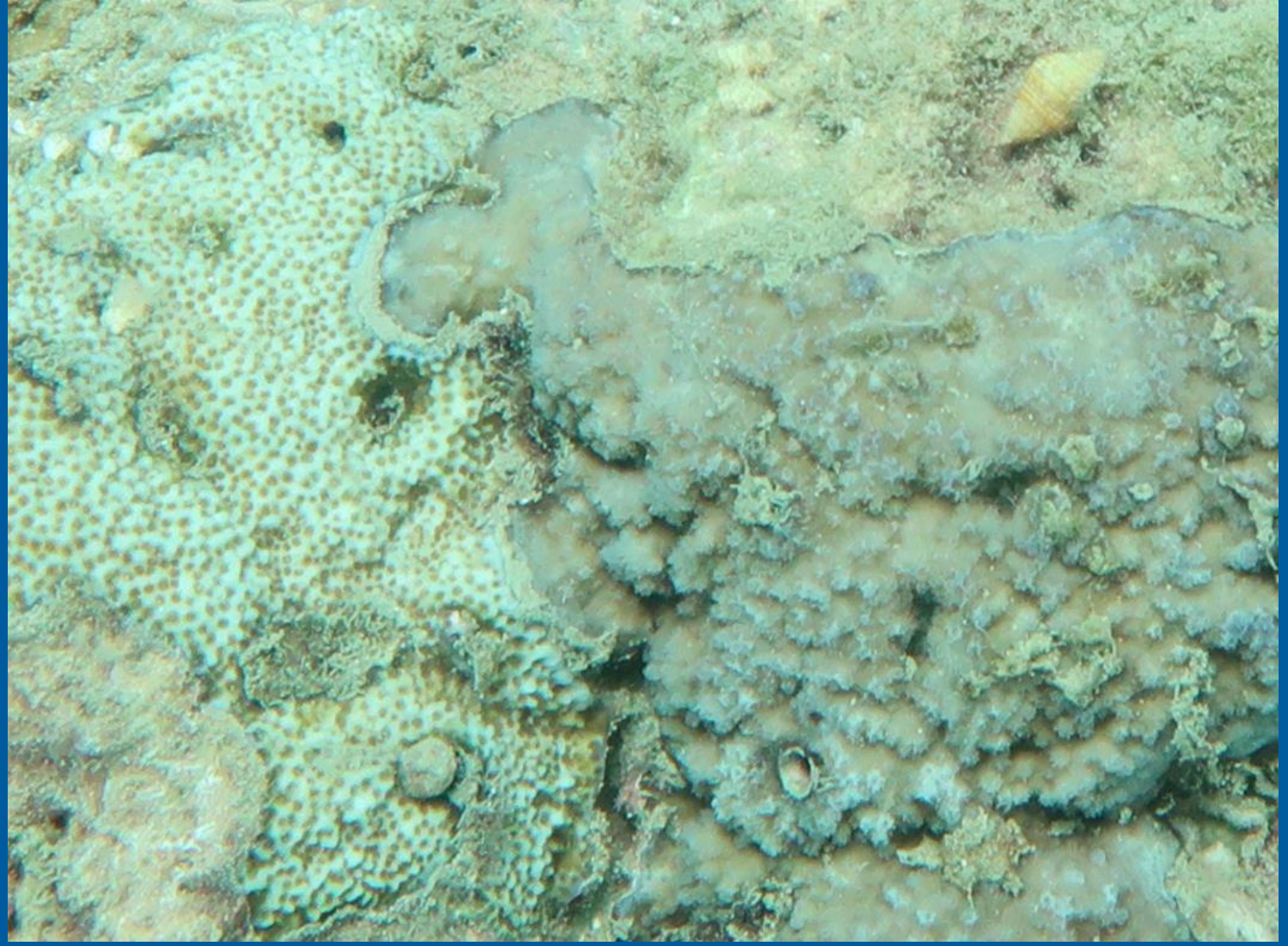

Porites
Can see corallites
Smoother texture

Montipora
Coralites to small to see
Rougher texture

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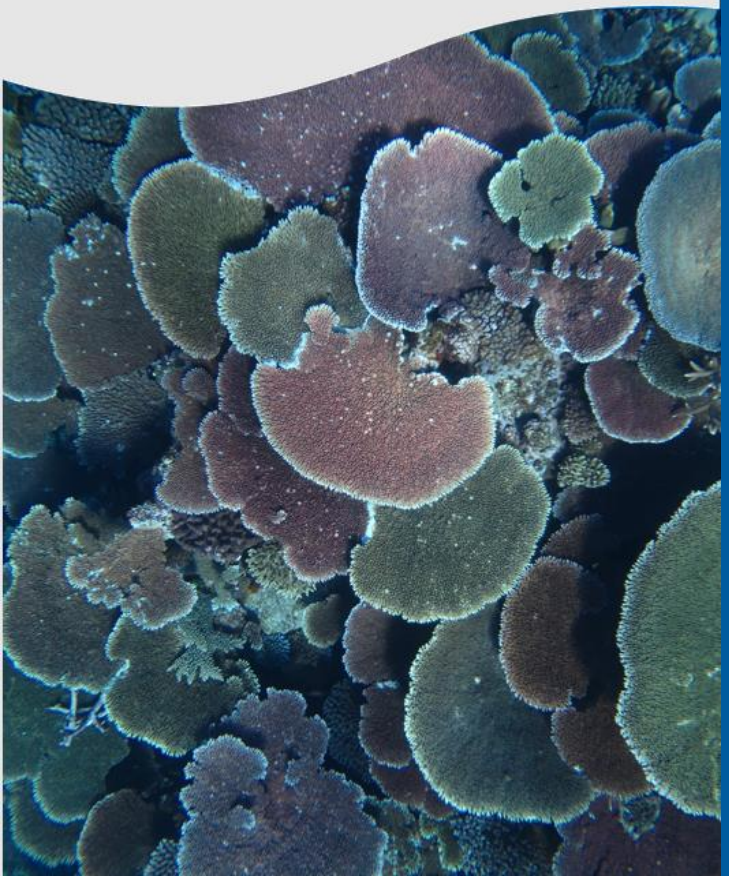

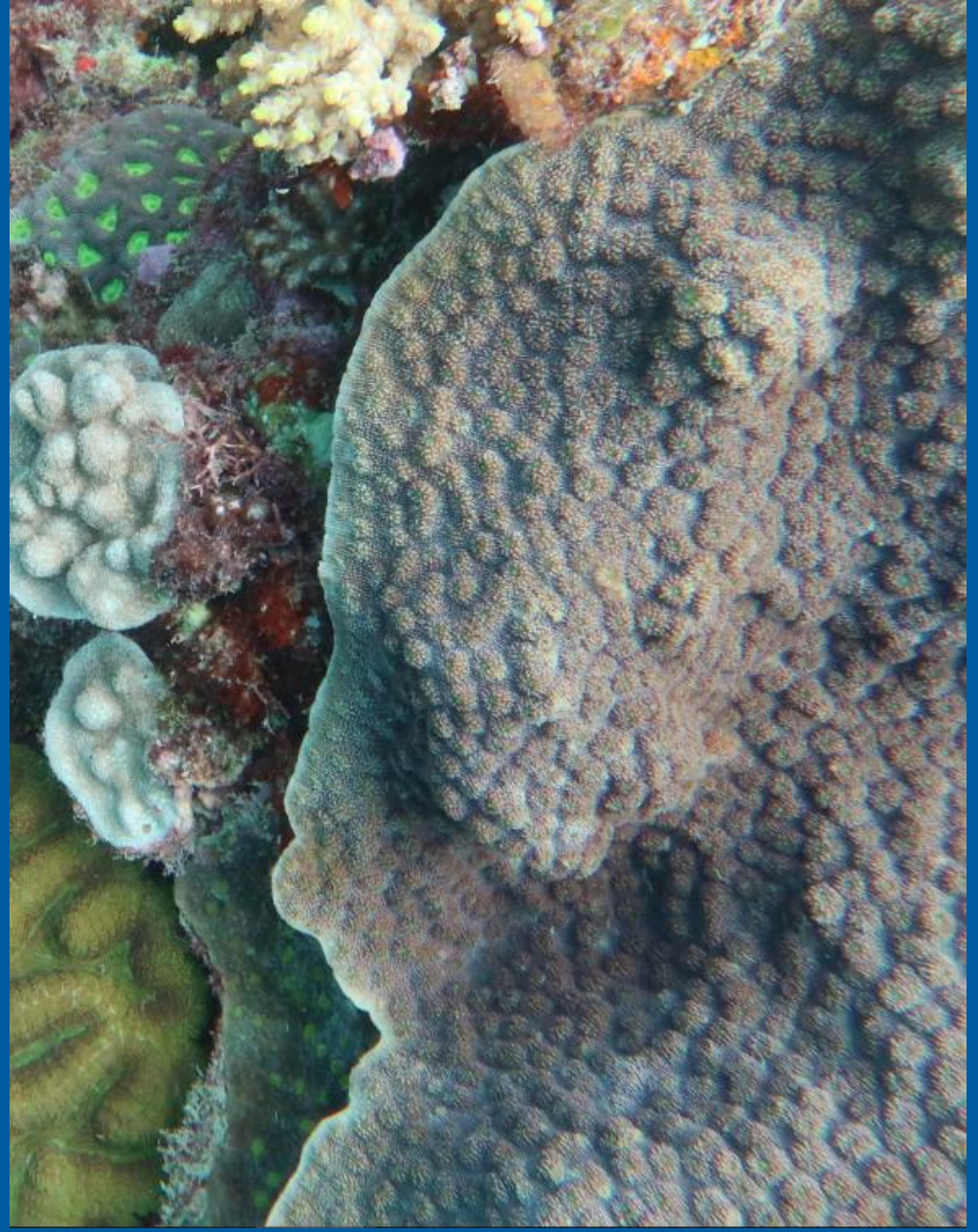

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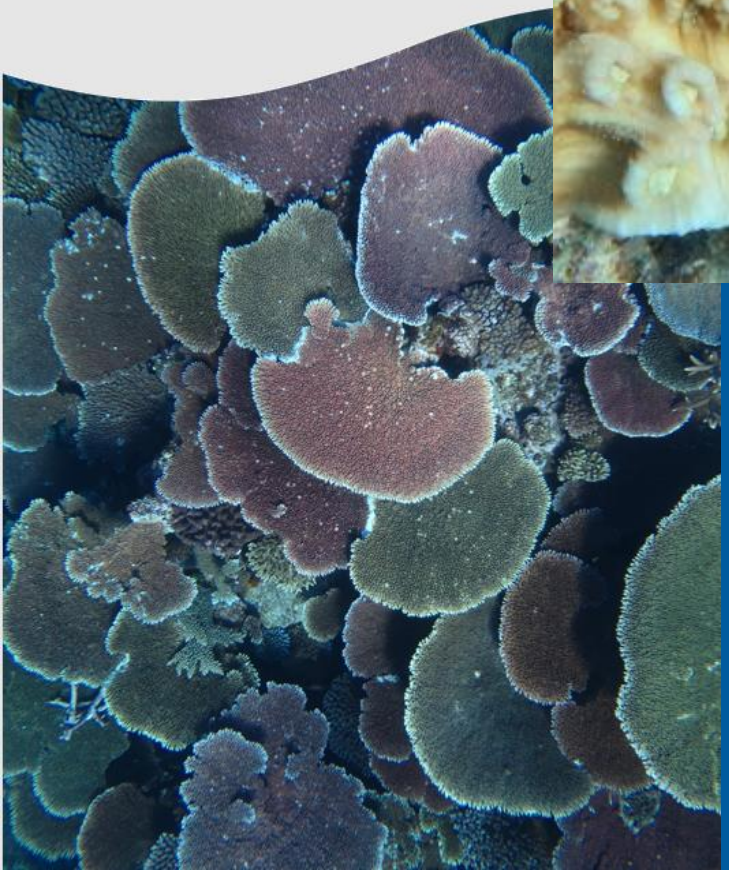
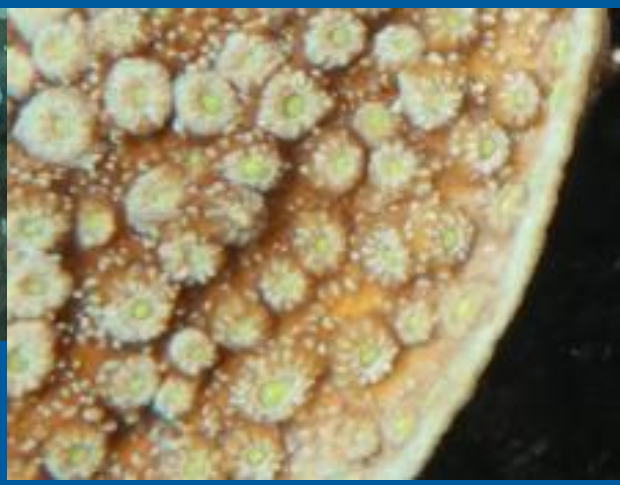
Echinopora
- Rounded, beaded costae between corallites, this can often form lines towards the edge of the colony.
- Can be confused with Oxypora, Mycedium and Echinophyllia



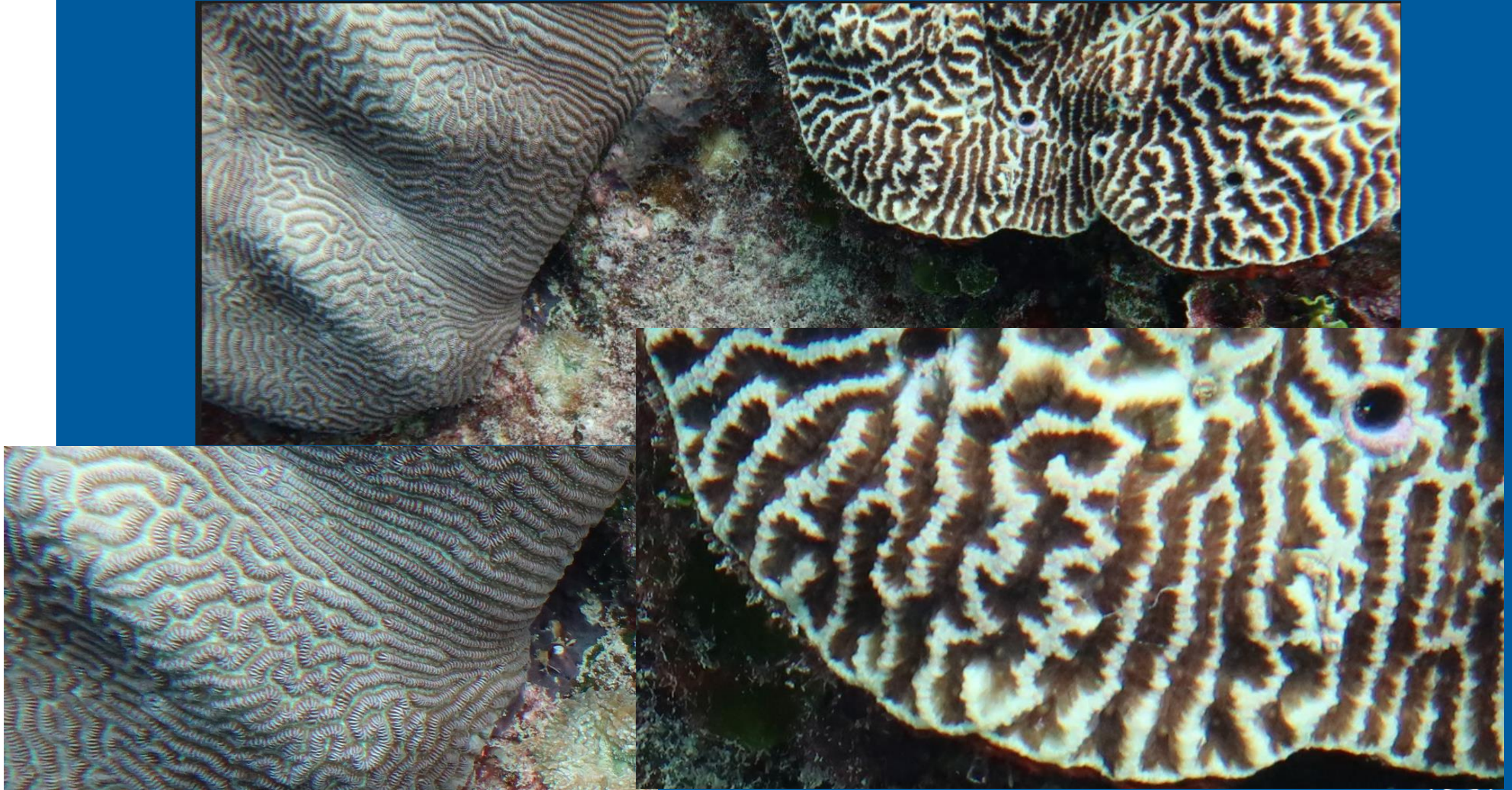
Mycedium

Oxypora



Echinophyllia

Echinopora



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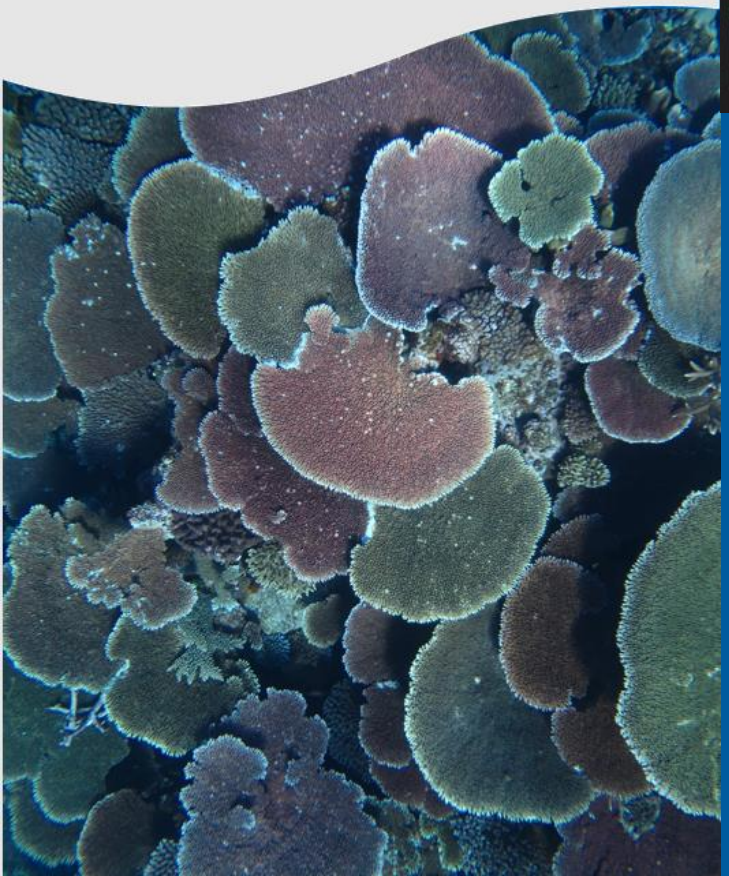

Leptoria

- Often has very straight lines running parallel with each other
- Thin consistently, wide valleys
- Larger colonies grow with ridges

Platygyra

- In some species has more ragged septa
- Wider valleys
- Valleys can run parallel with each other however not as uniform as leptoria
- Larger, massive colonies grow as spheres

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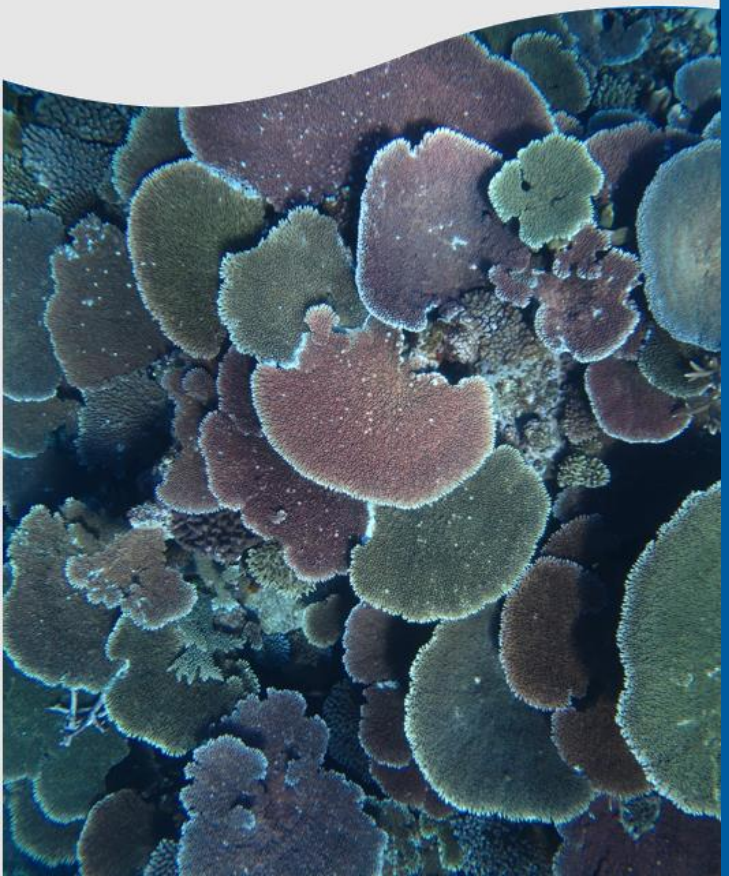

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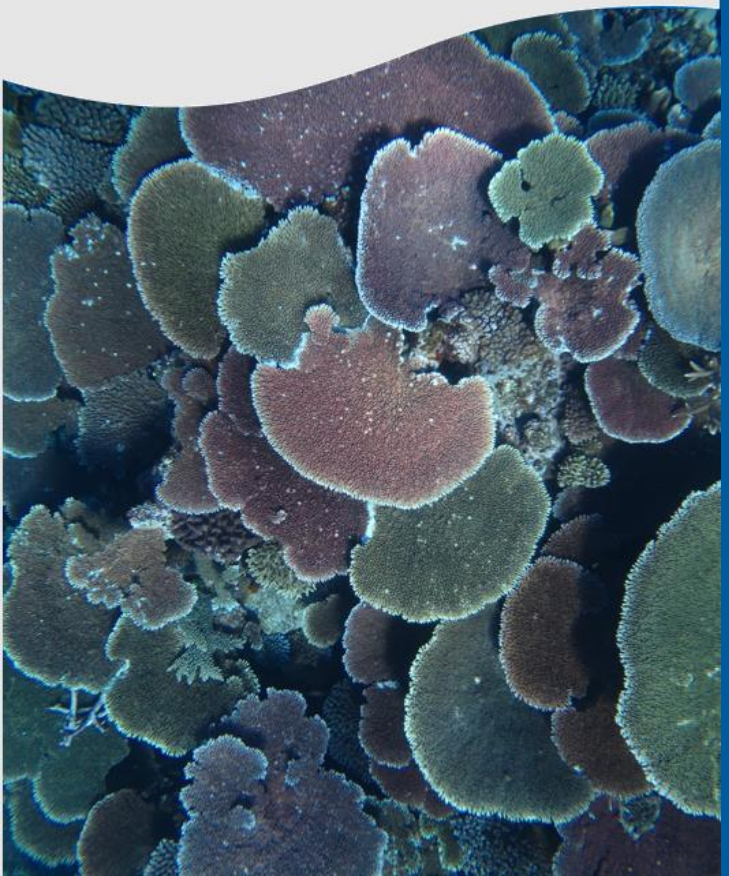

Isopora

- Is nearly always that creamy, brown colour
- Jumbled corallites close together
- Closely related to Acropora (It used to be in the same genus), but no axial corallites
- Is typically either encrusting or submassive
- Can be confused with Turbinarea, but Turbinarea has a smooth space between the corallites

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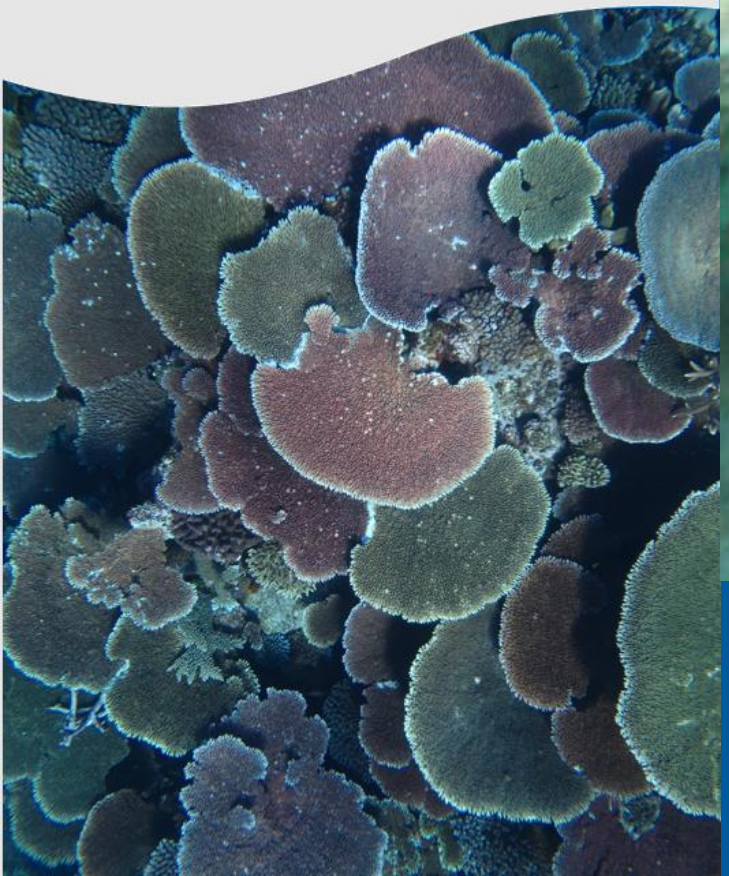

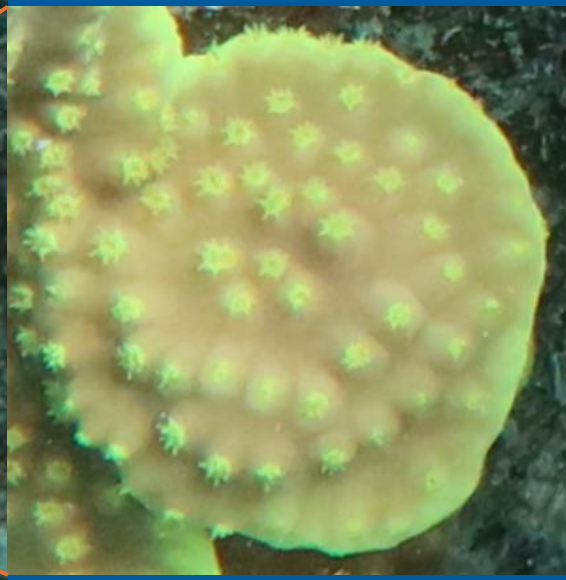

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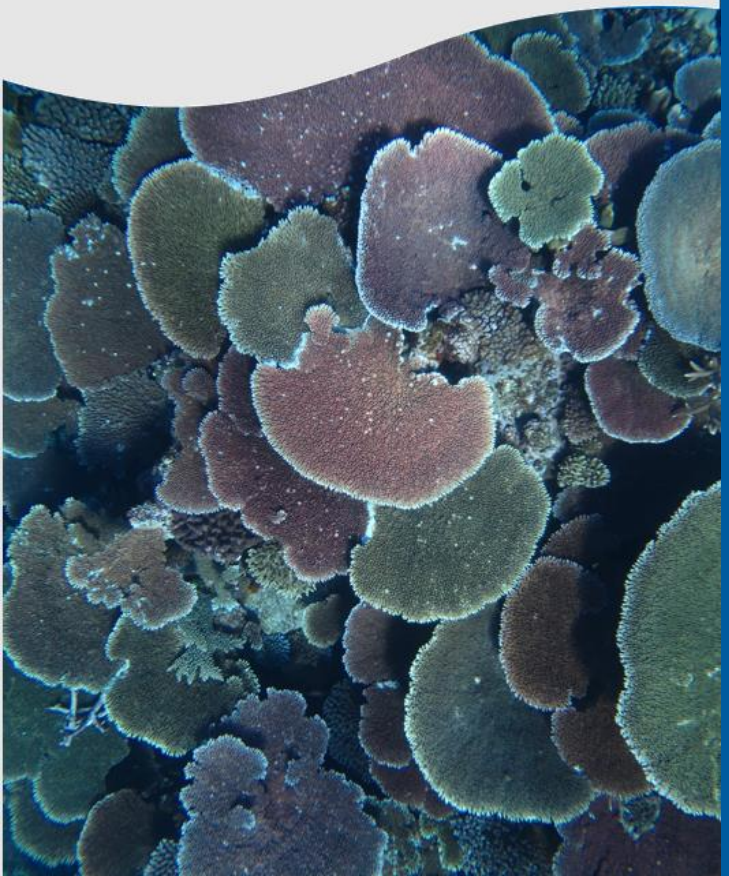
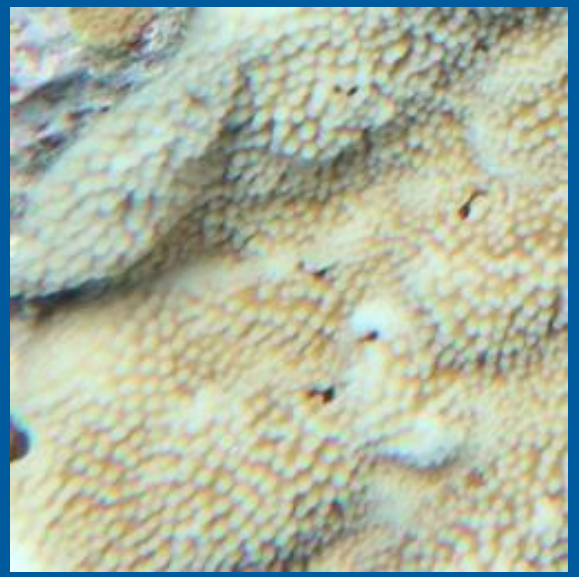
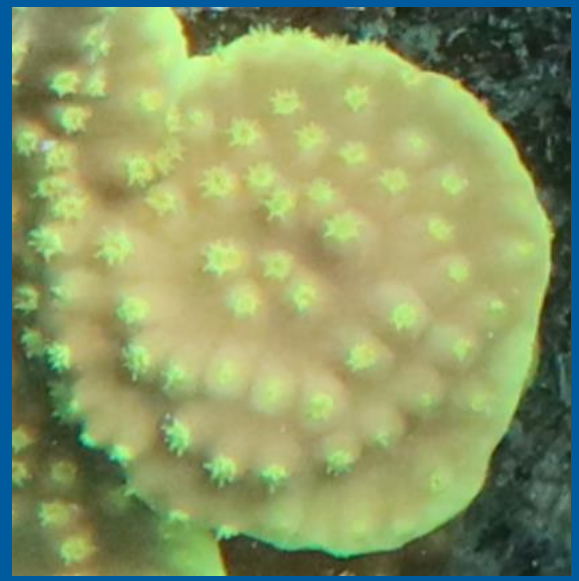


Turbinarea

- Very smooth coenostrum (space between corallites
- Tentacles tentacle patterns, almost forms a star burst pattern
- Can be encrusting or foliose
- Sometimes confused with Isopora, but Turbinarea has much more space between the corallites



Isopora



Turbinarea

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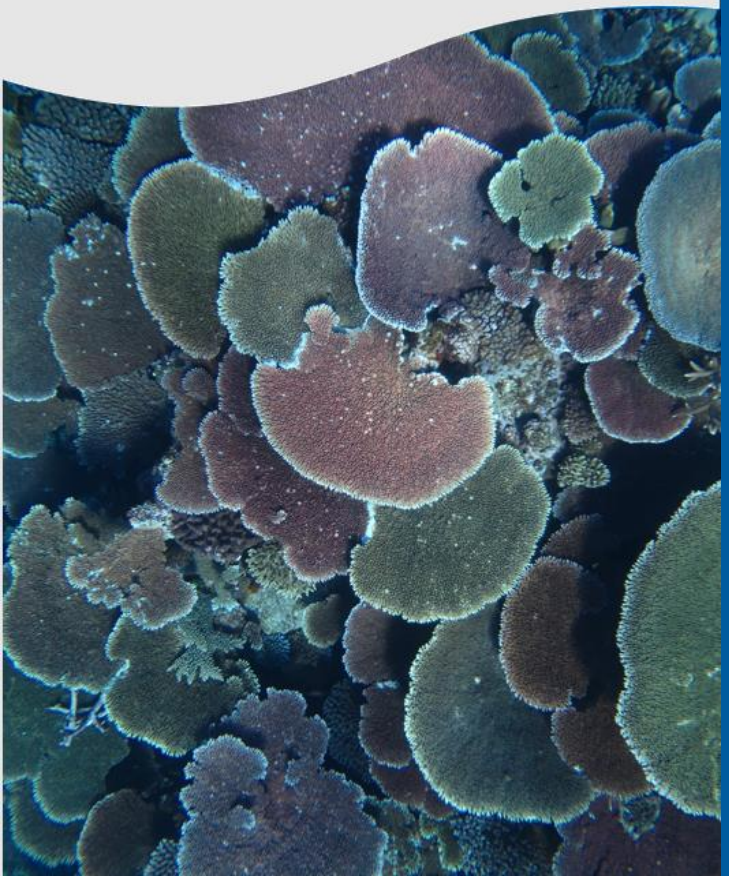

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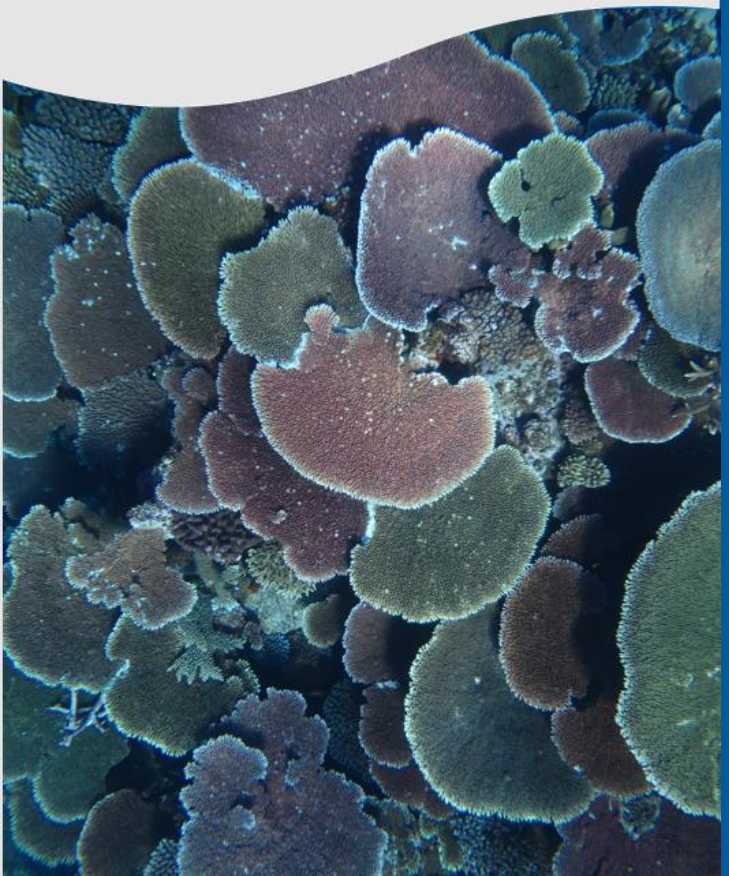

Galaxea

- Separate walls with blades
- Skeleton forms blades (reminds me of twinkling stars you'd see in the galaxy

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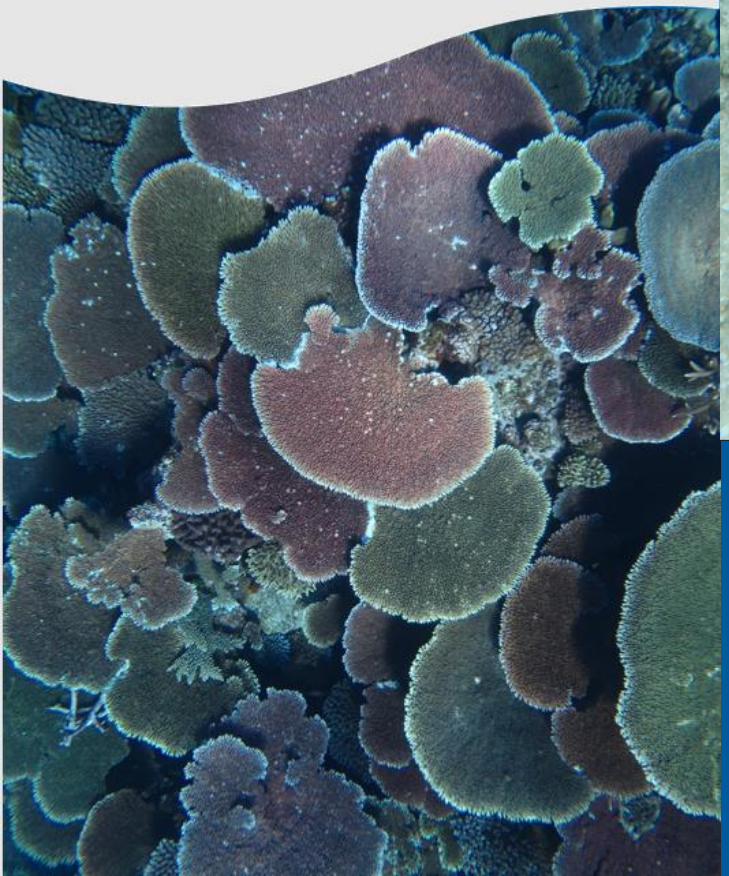

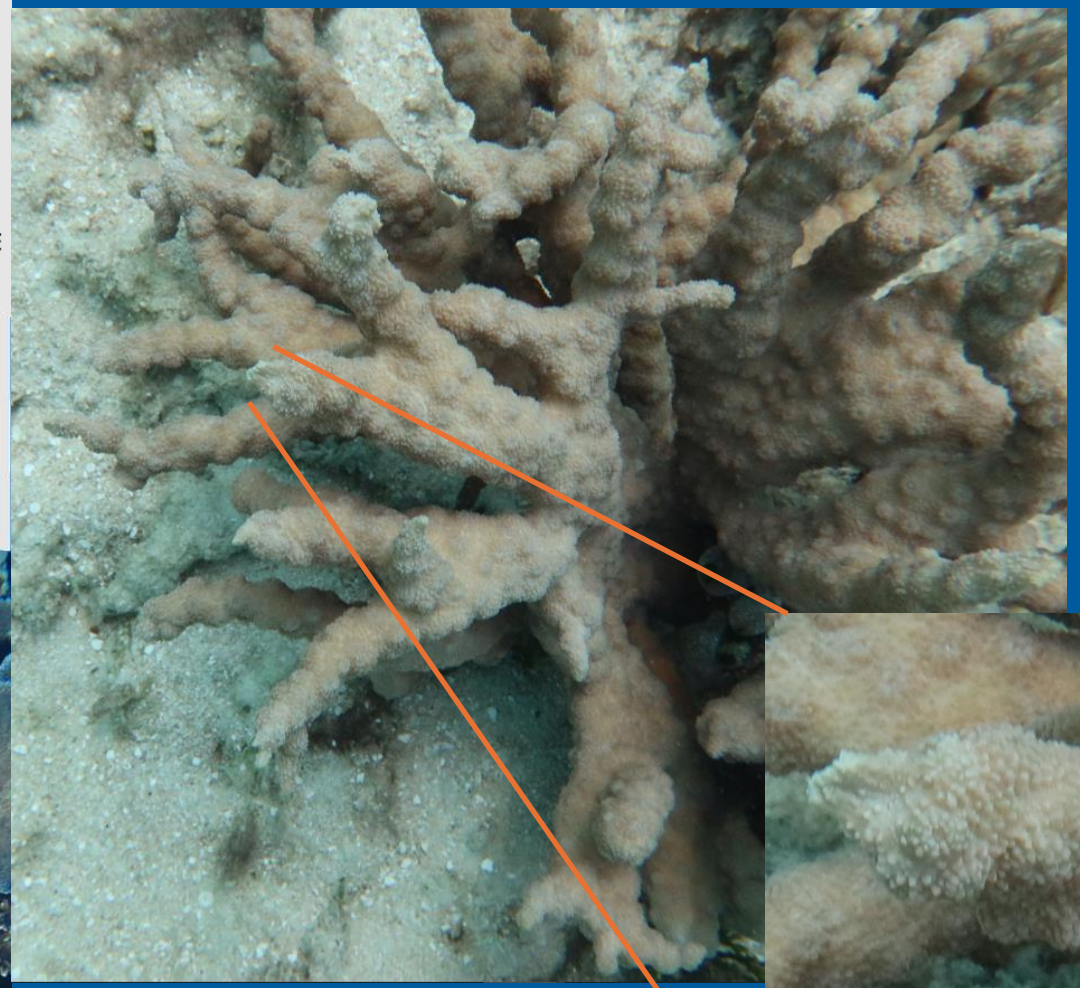

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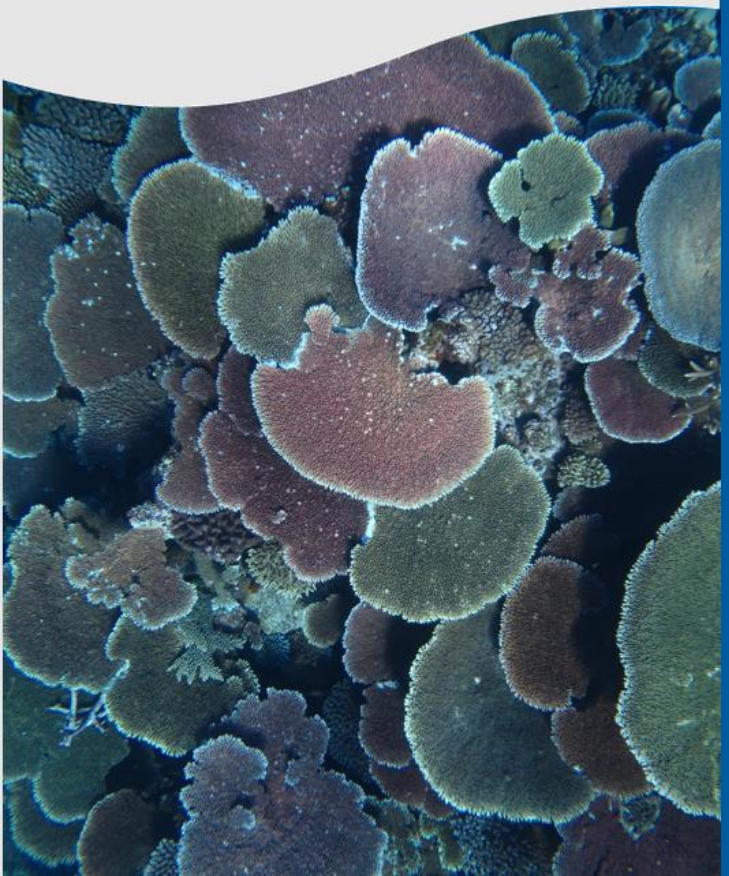

Echinopora (Branching)

- Beaded coenostrum (Space between corallites)
- Rounded, beaded corallites

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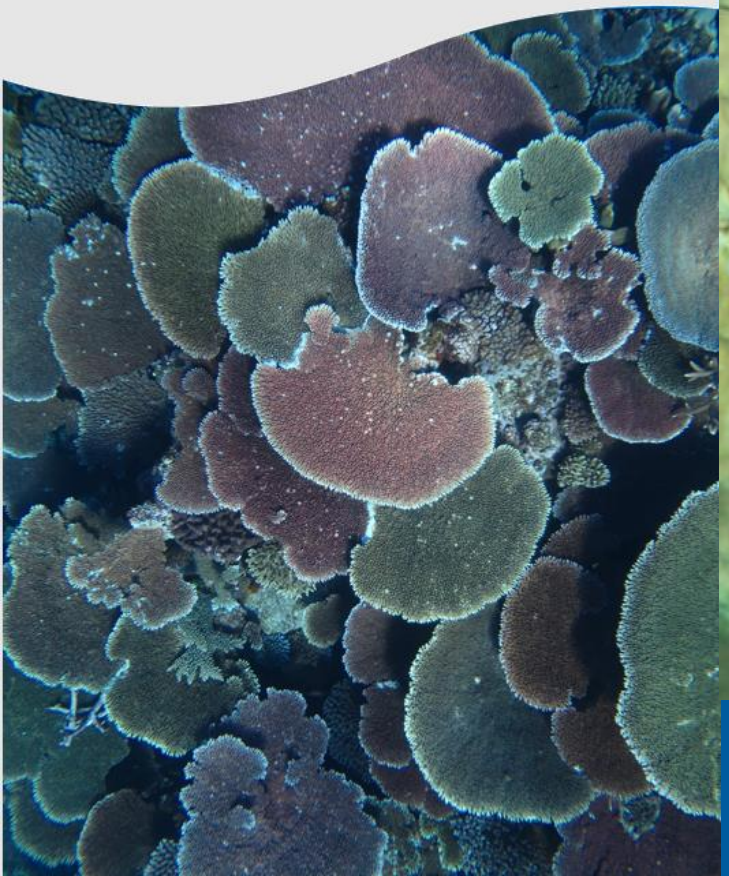
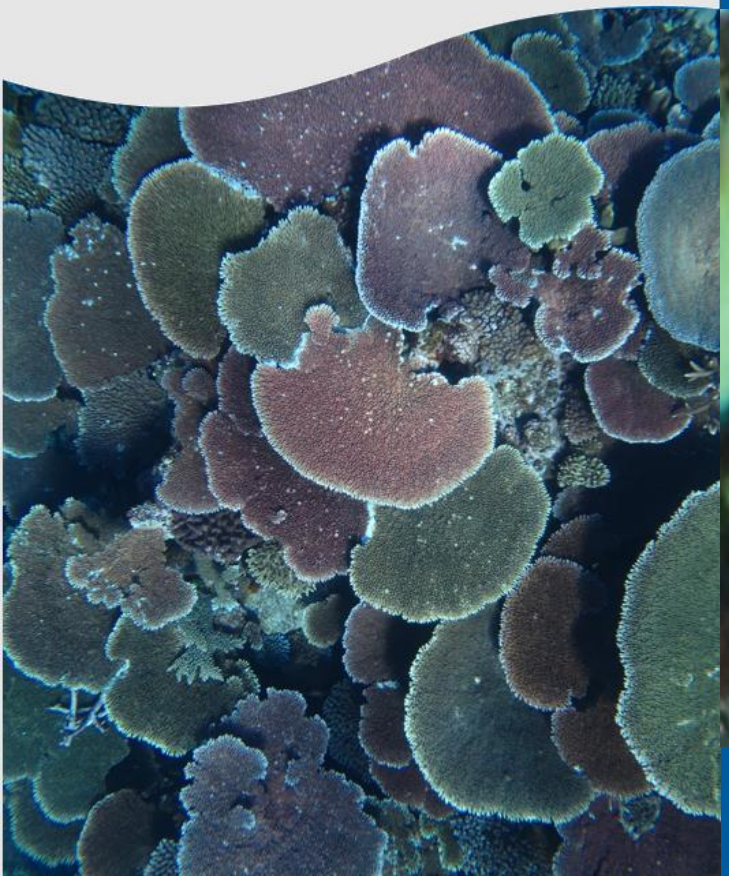


Millepora

- Not a coral
- Typically has that colouring
- Often has hairs as seen below, although you might not be able to see this from a photo transect photo



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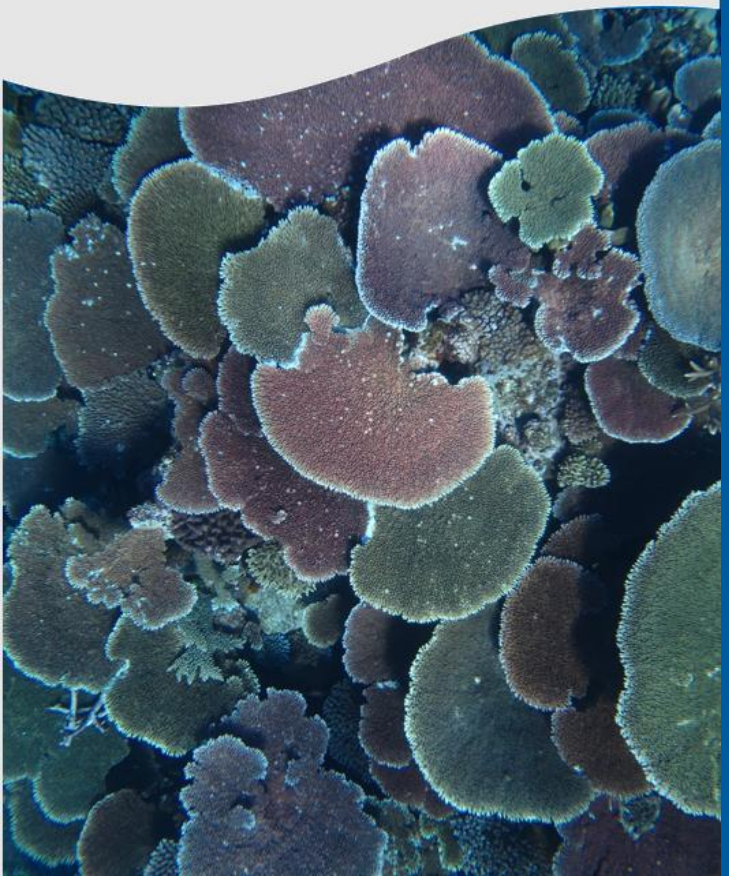

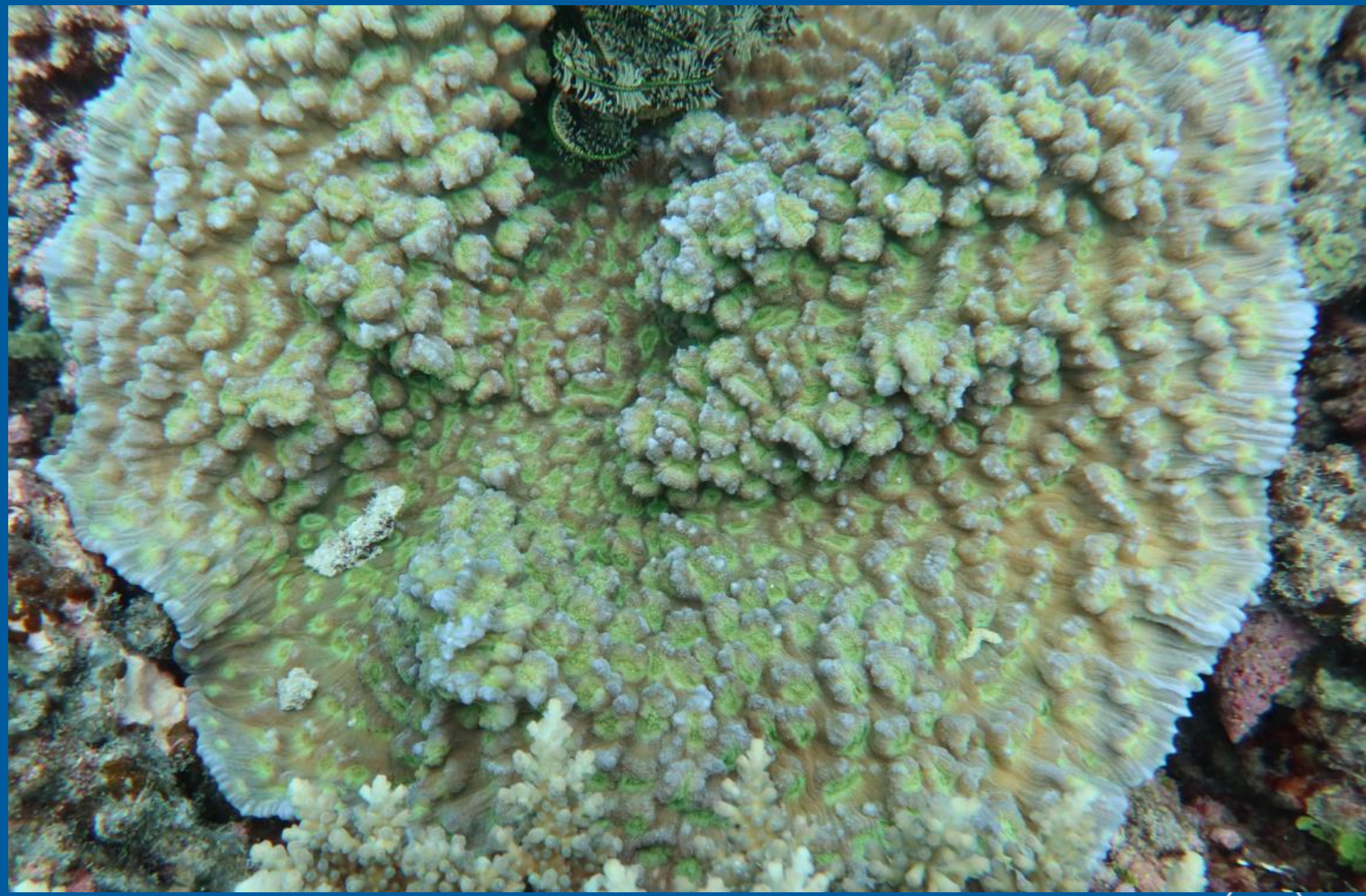

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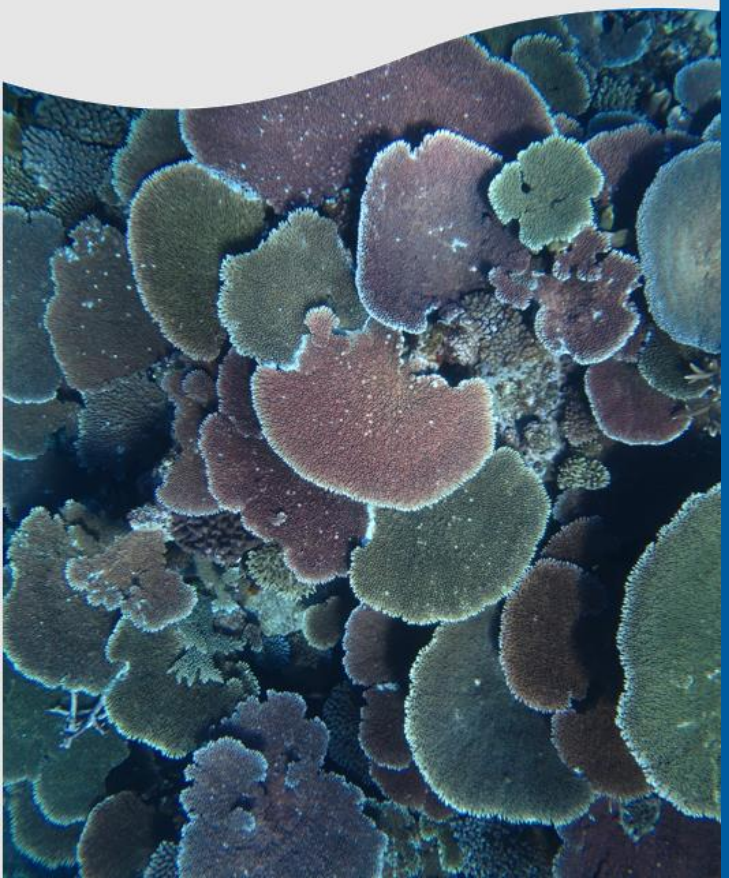
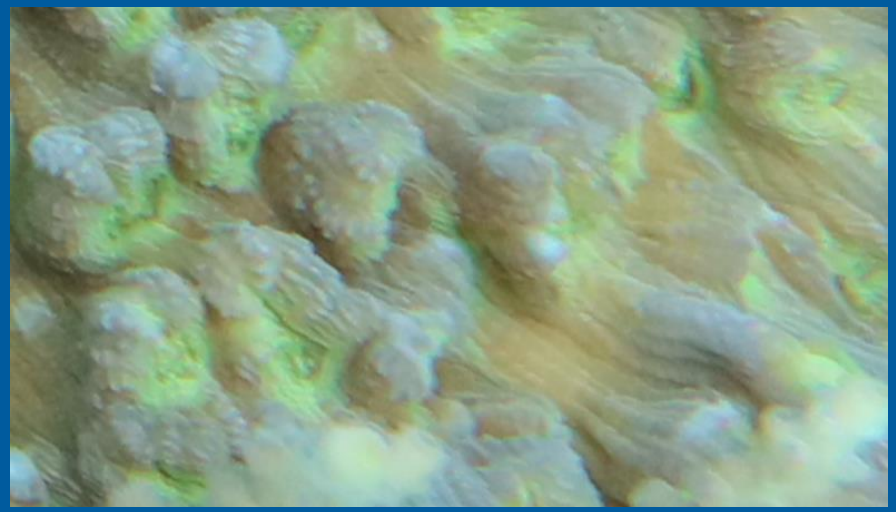


Mycedium

- Corallites are inclined towards the margin
- Large mouths and oral discs



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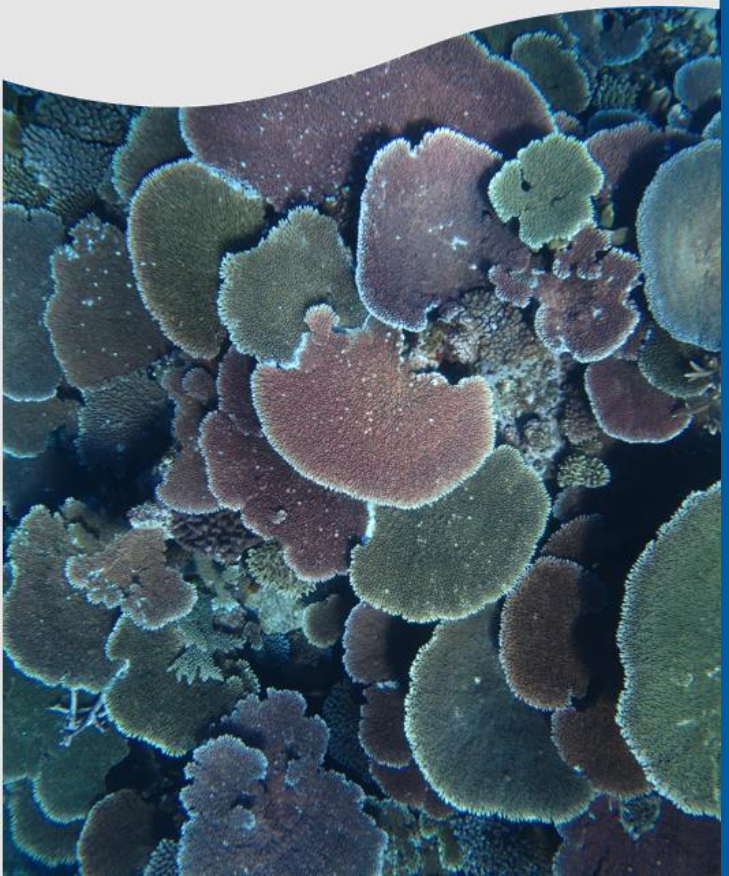

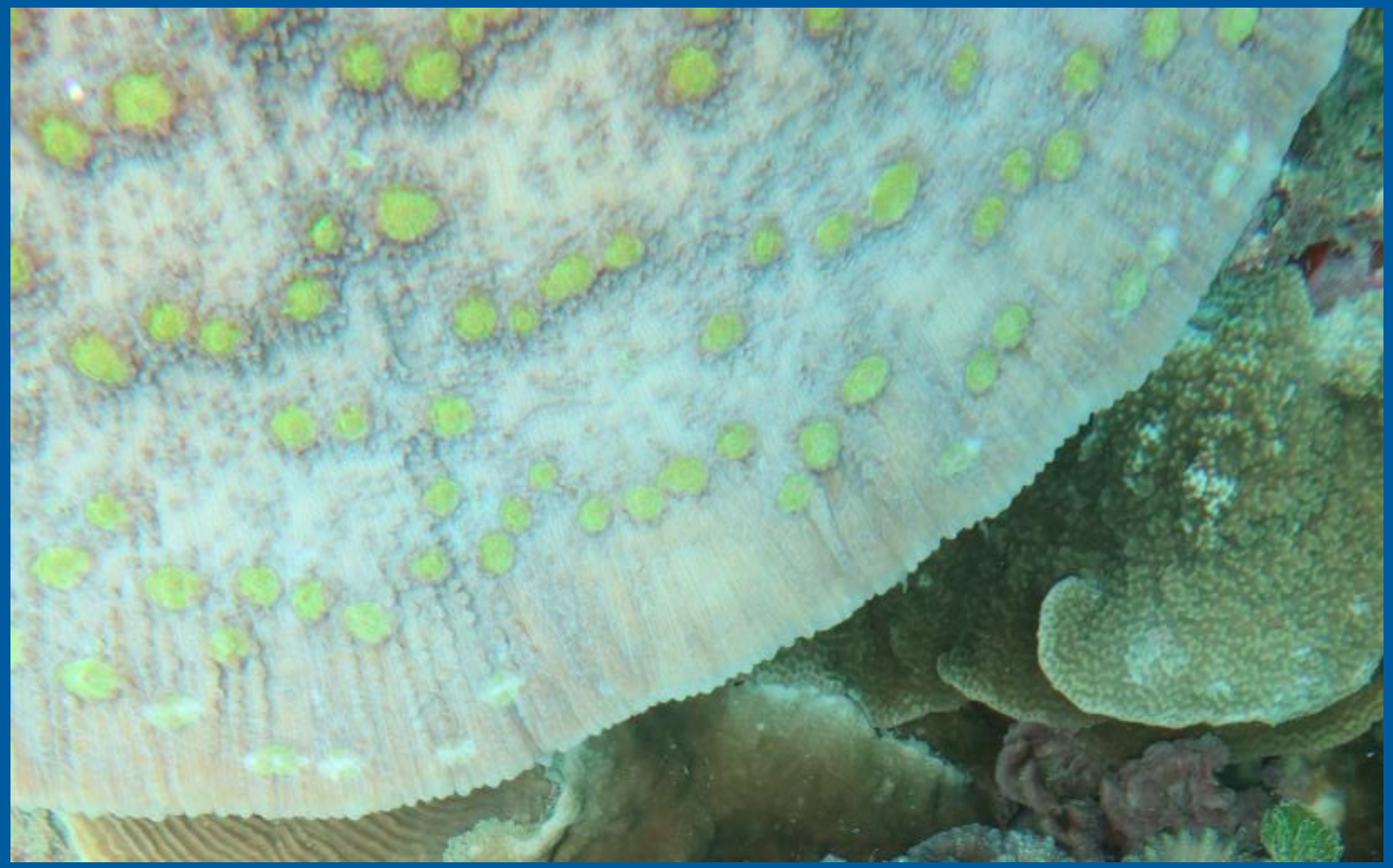

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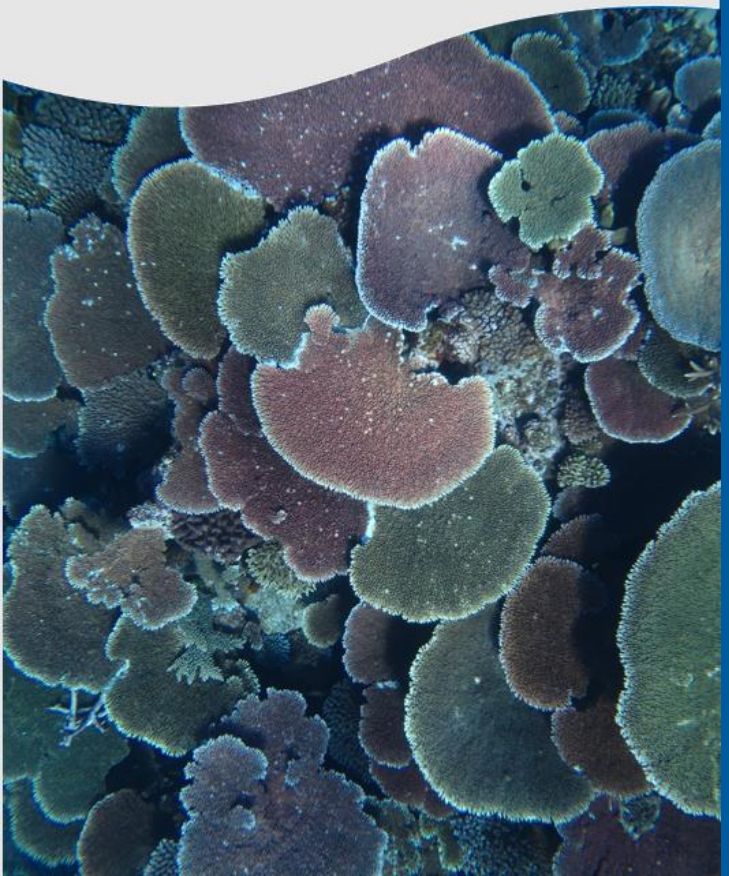
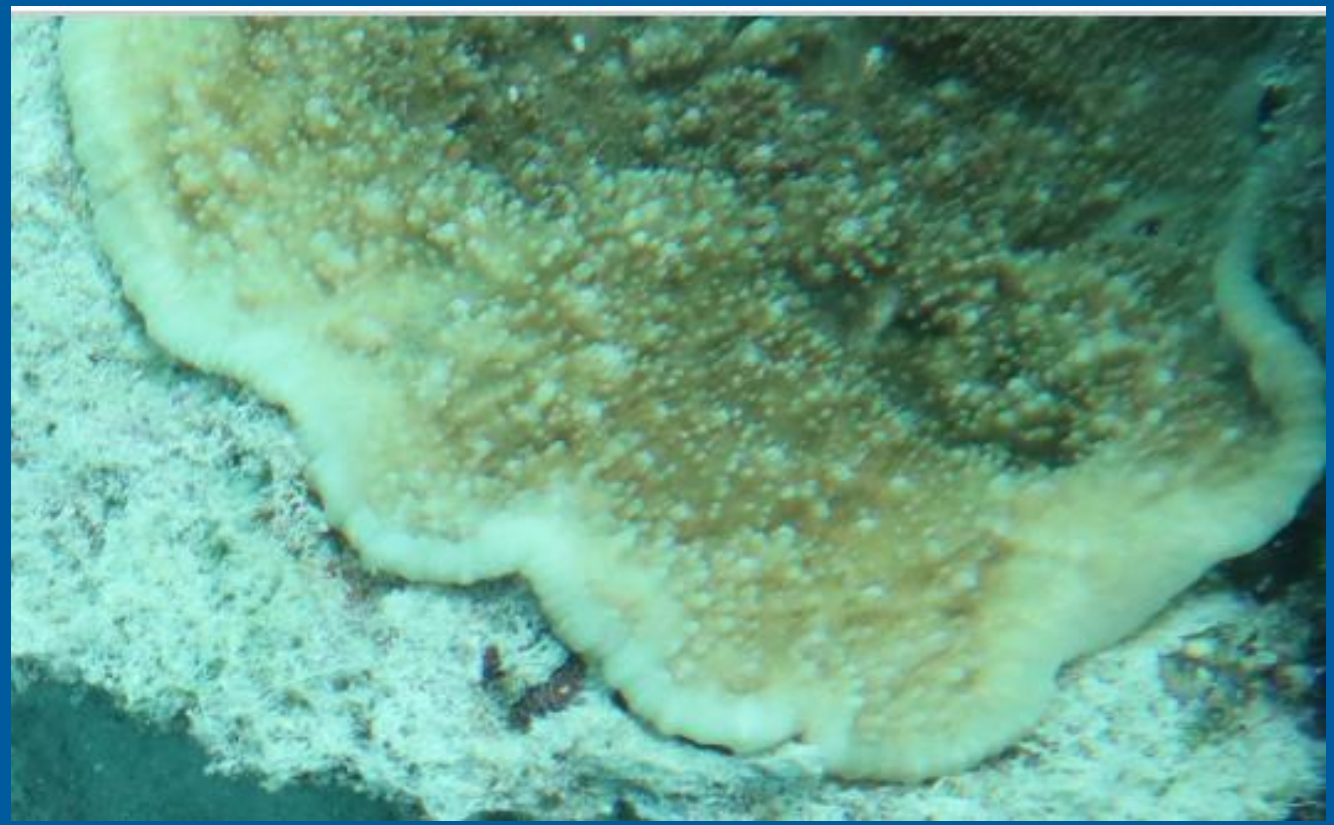


Oxypora

- Poorly developed corallites
- Colony often has a ragged, ‘saw blade’ edge can be more exaggerated depending on species



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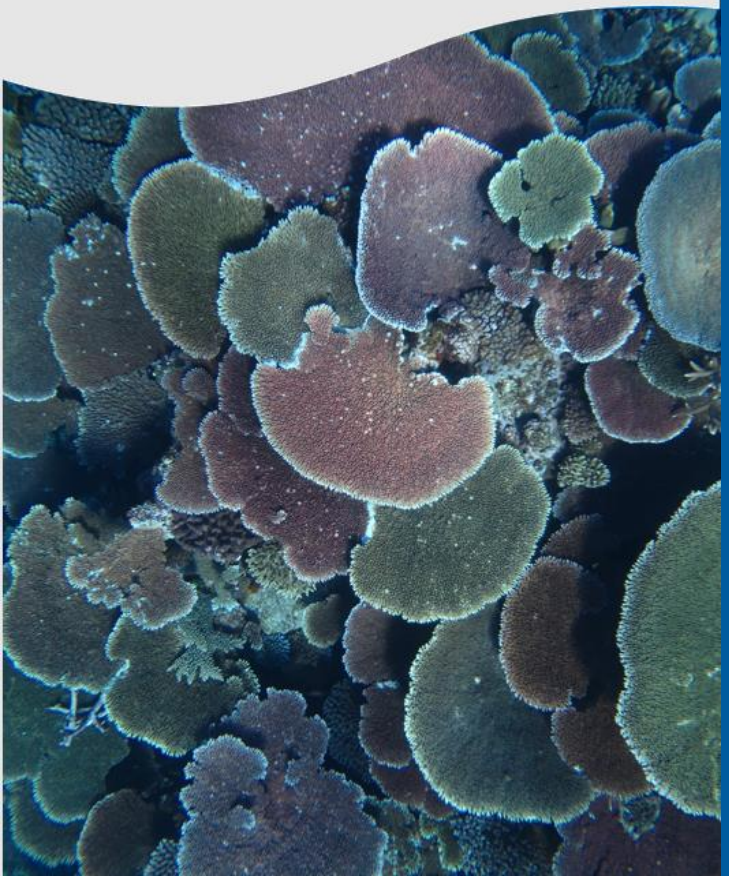

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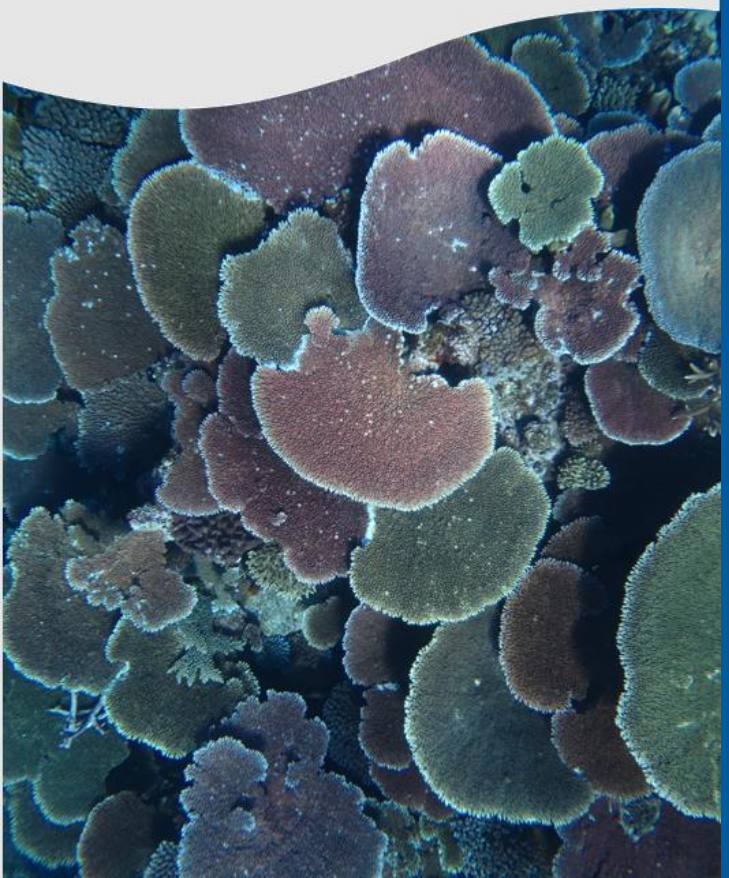
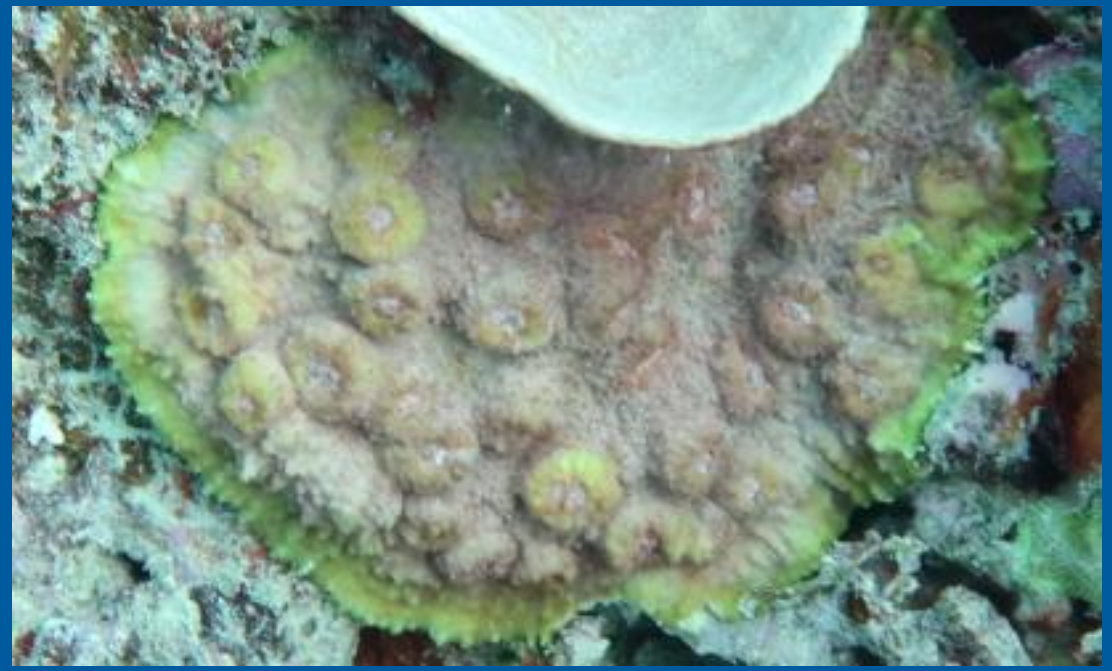


Echinophyllia

- Corallites are well built
- Often jumbled, not pointing in any particular direction.
- Coarse beading
- Can be very colourful and pretty



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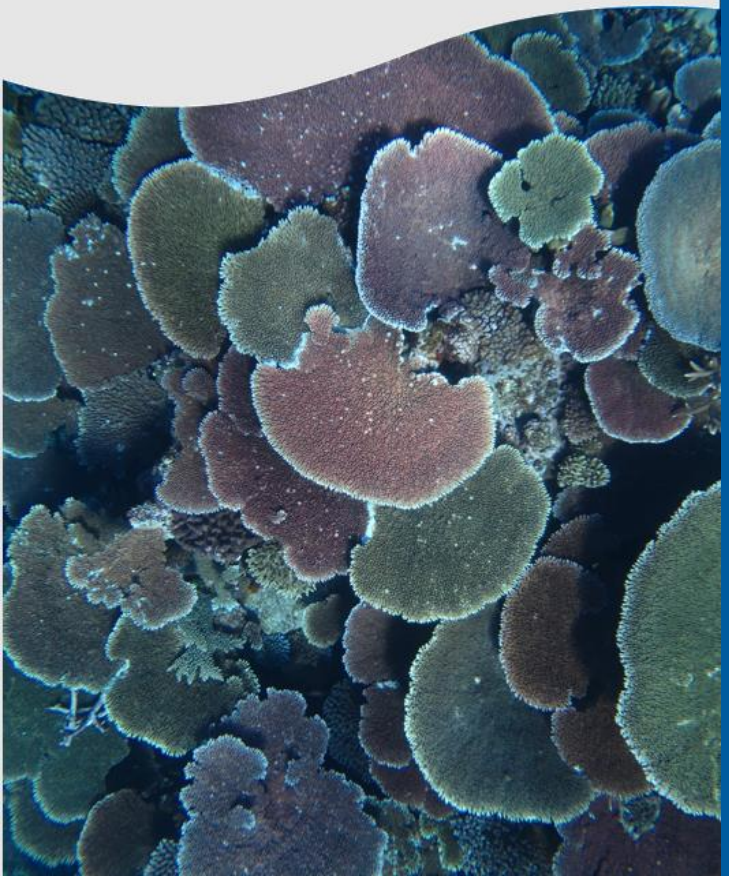

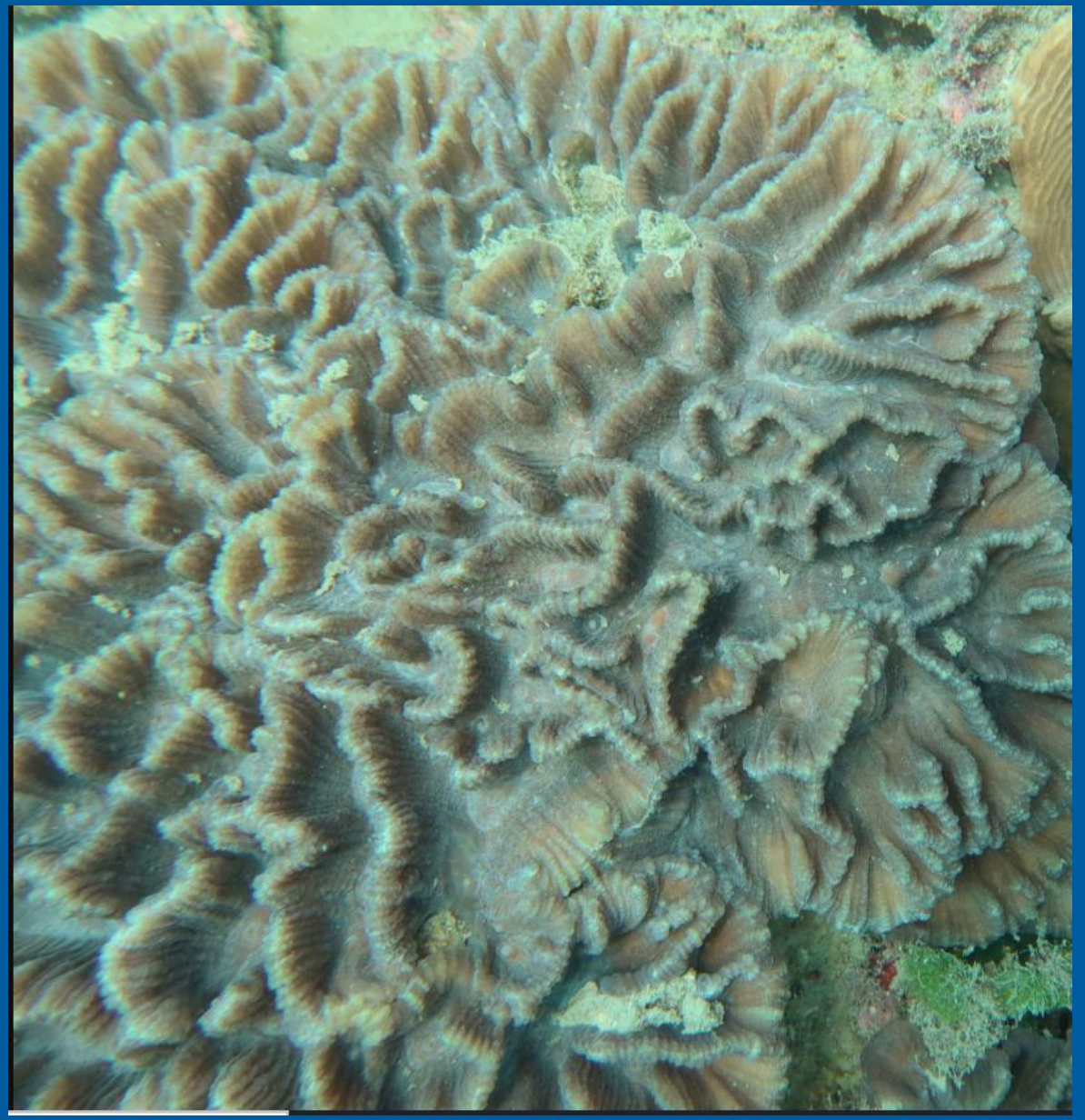

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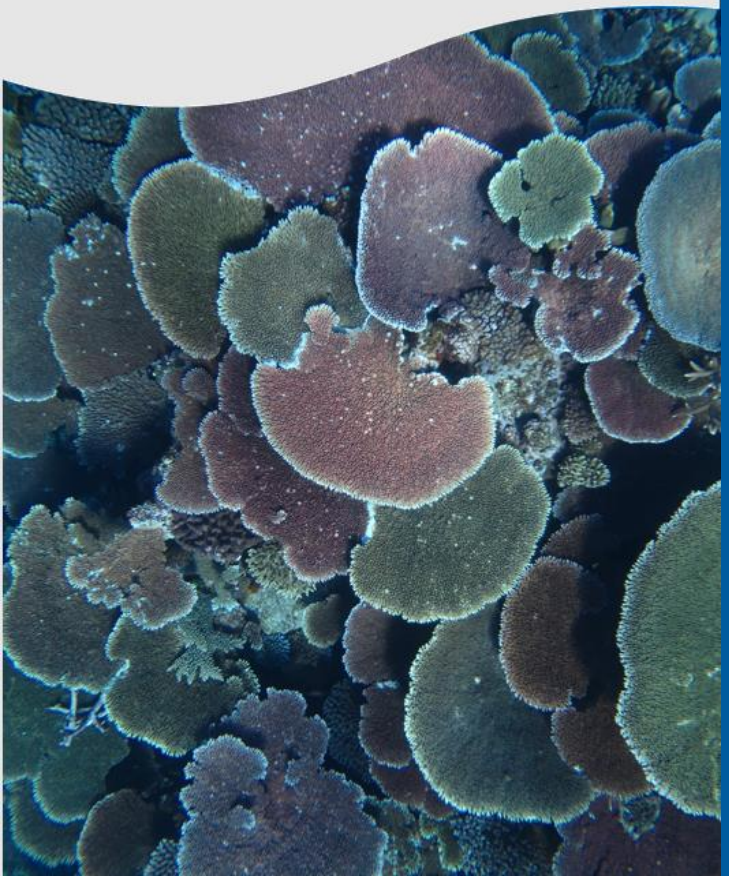

Pectinia

- Has some valleys in the colony but not like Platygyra
- Beaded septa
- Large mouths, but often blend in

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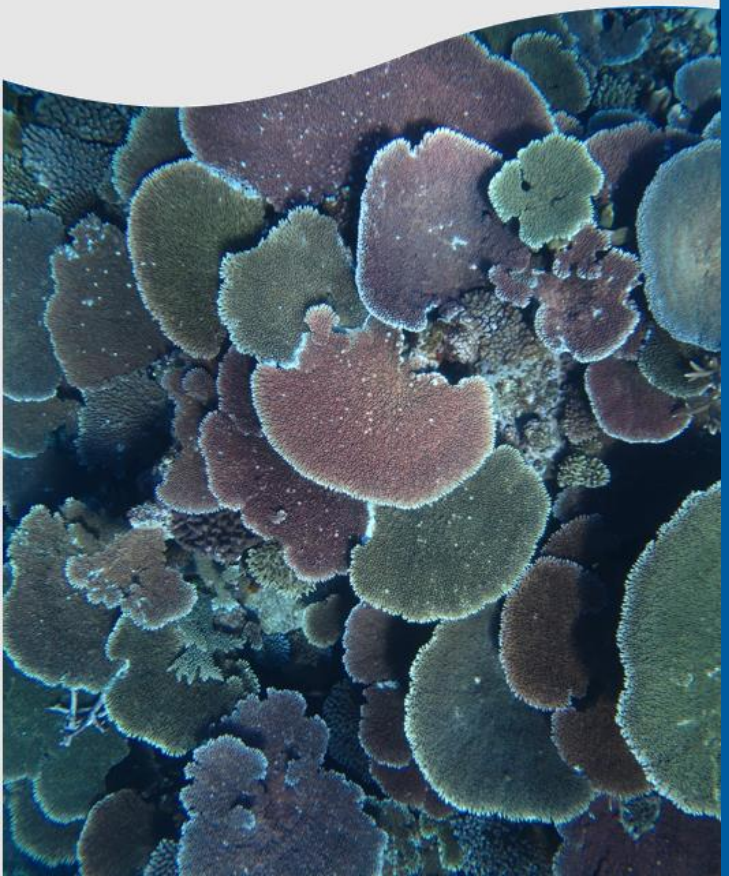

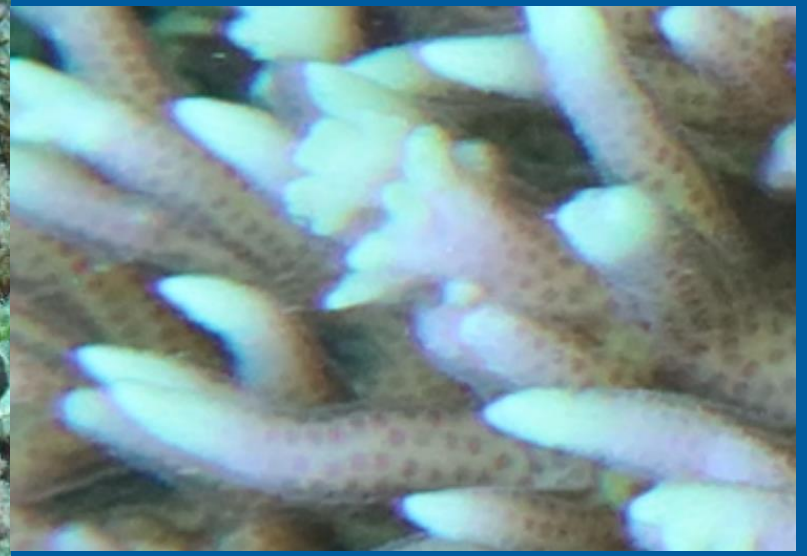

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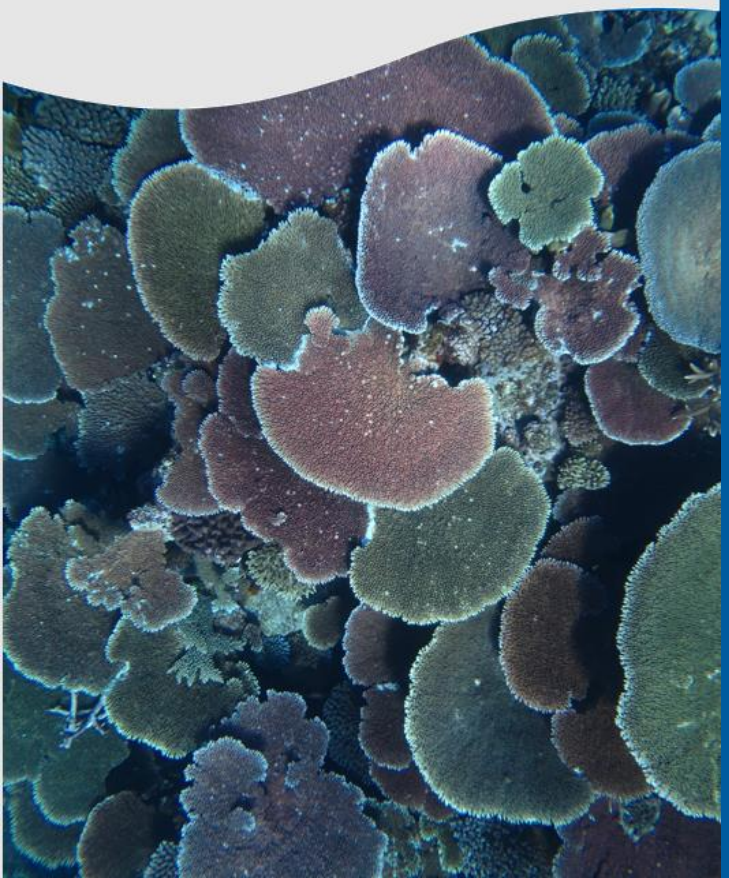

Seriatopora

- Thin branches
- Is often bleached
- Often has sharp ends
- Corallites are arranged in lines (seen below)

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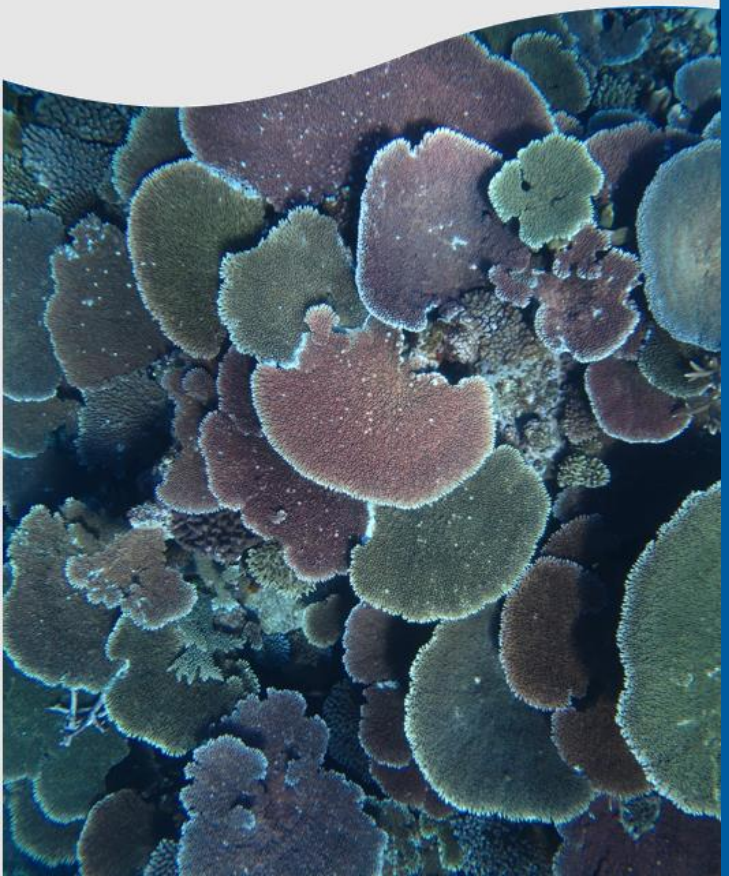
ReefCloud



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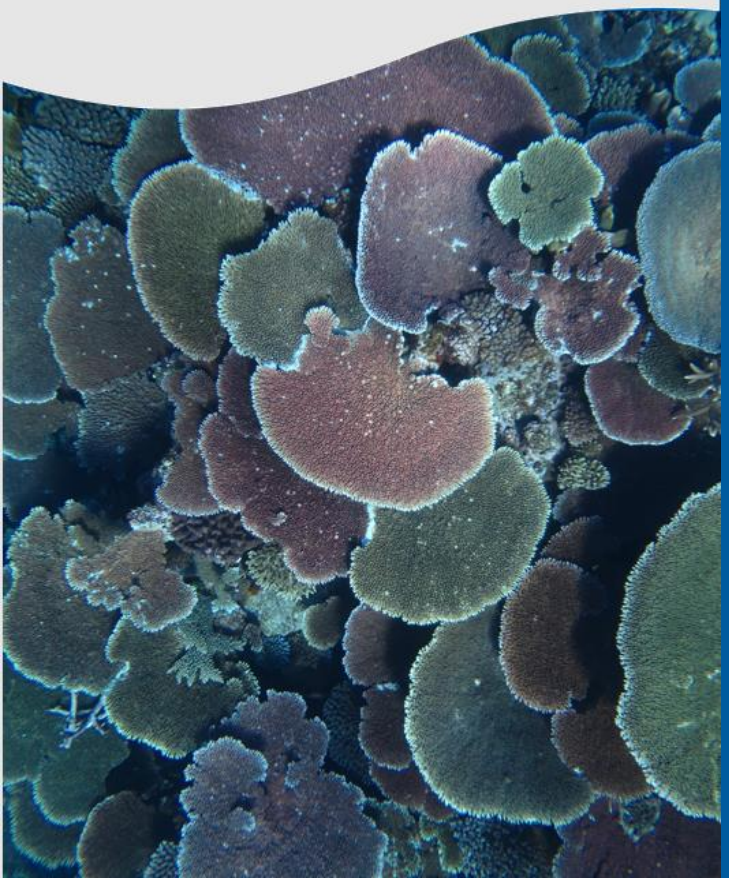
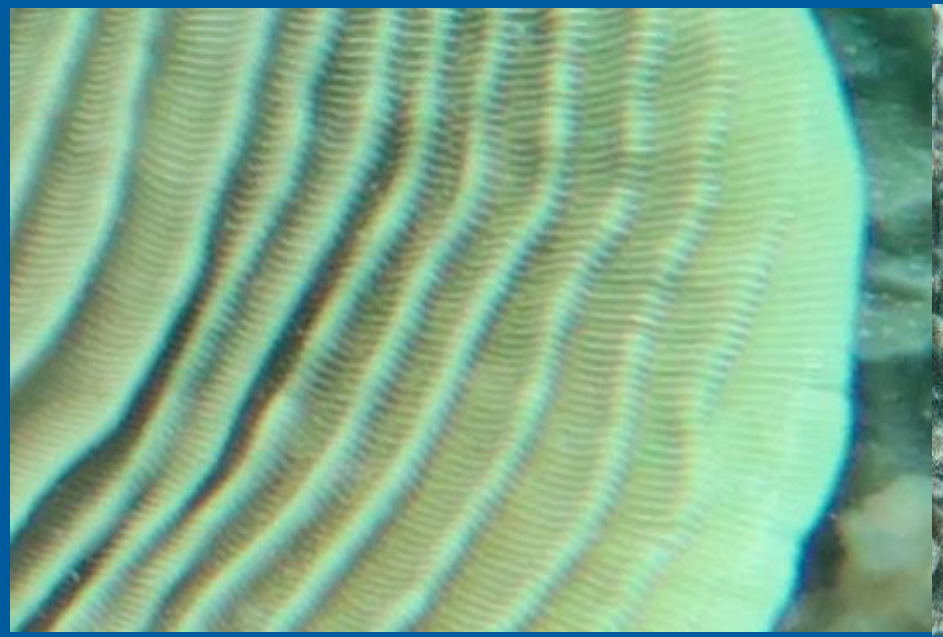
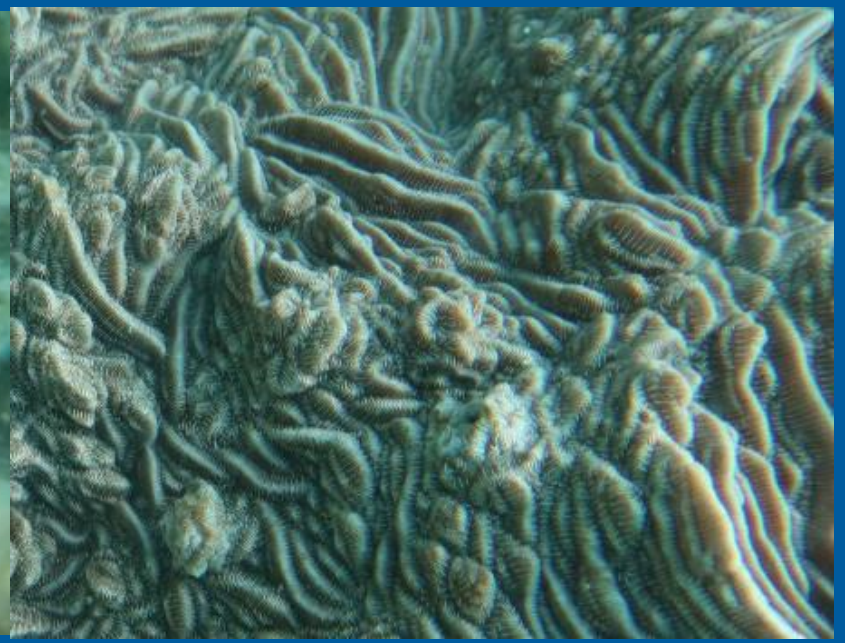


Pachyseris, can be foliose, encrusting or submassive

- Has ridges, which have very neat septa
- Depending on species, ridges can also be very neat or very messy. (See below)





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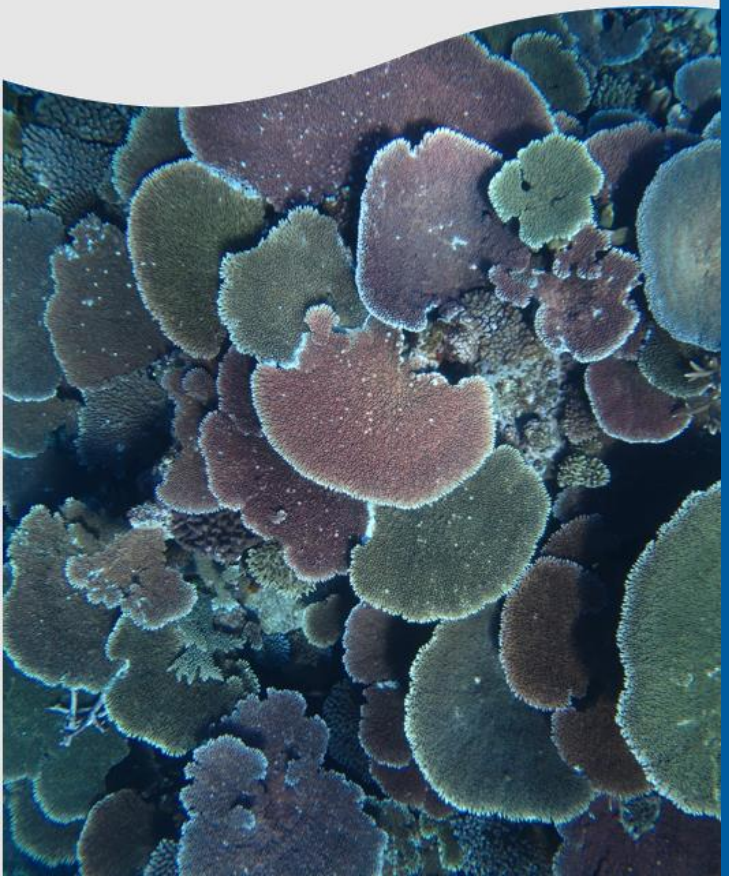

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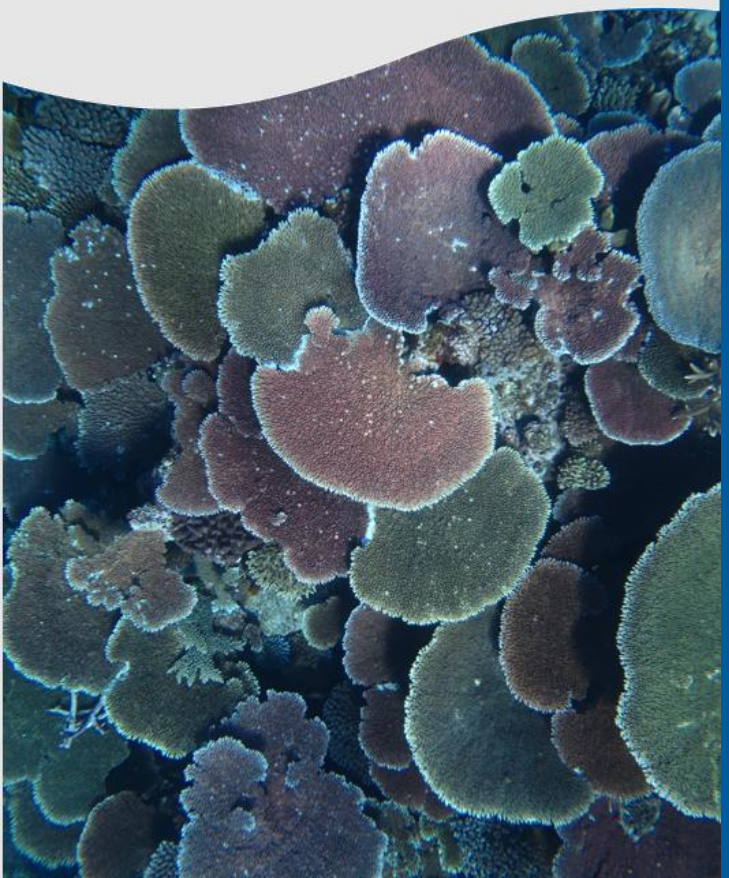

Astrea

- Very round, donut shaped corallites
- Neat septa
- Bleaches easily
- Extra-tentacular budding (shown below) (Used to be in the Montastrea Genus)

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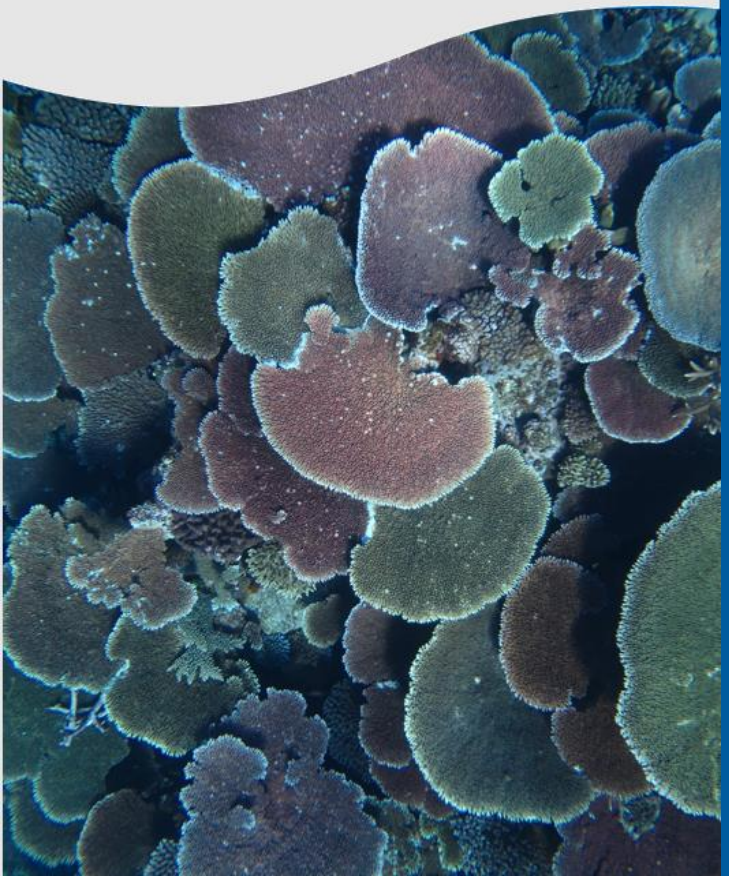

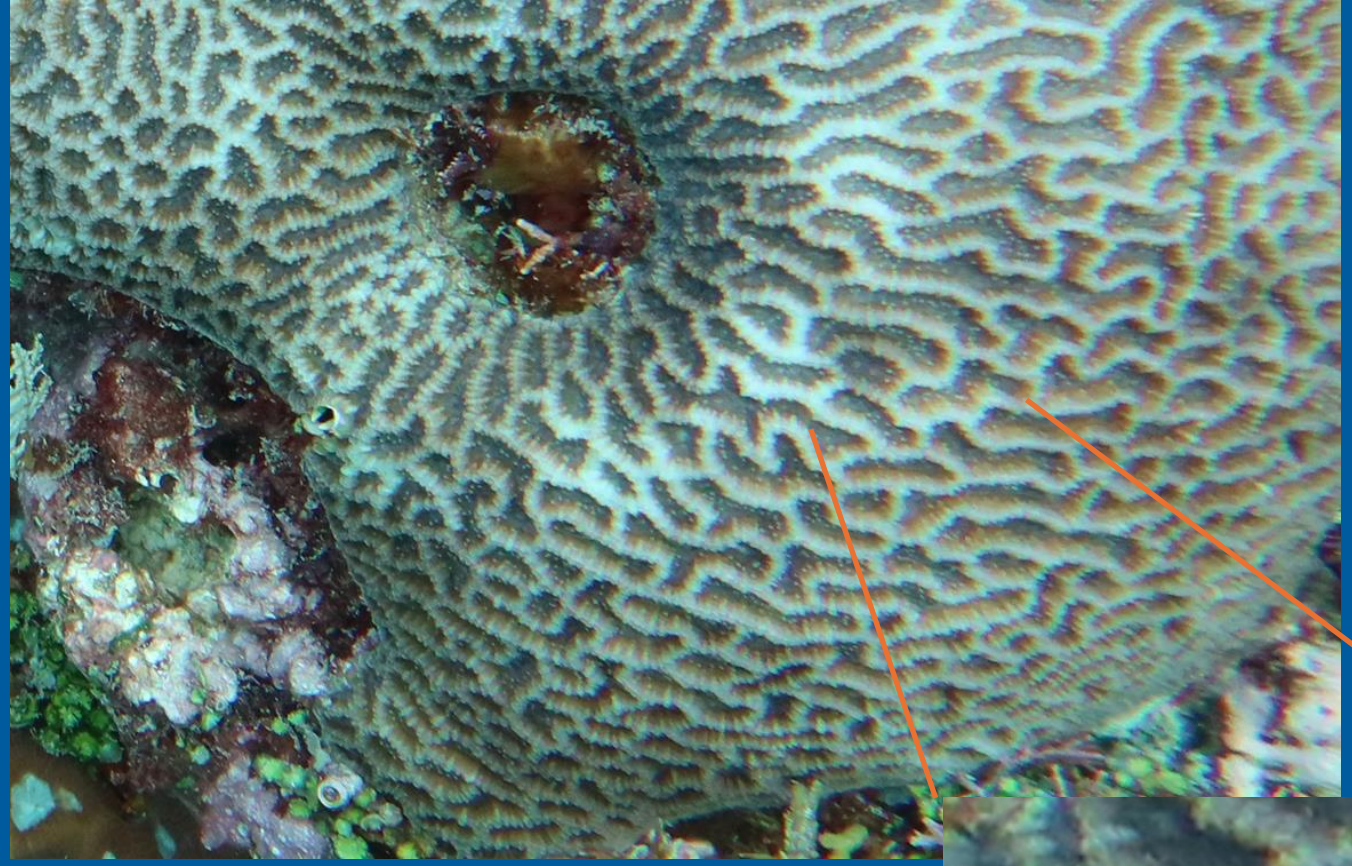

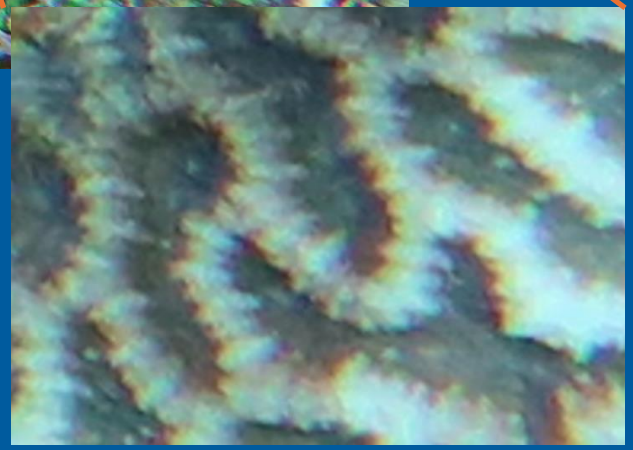

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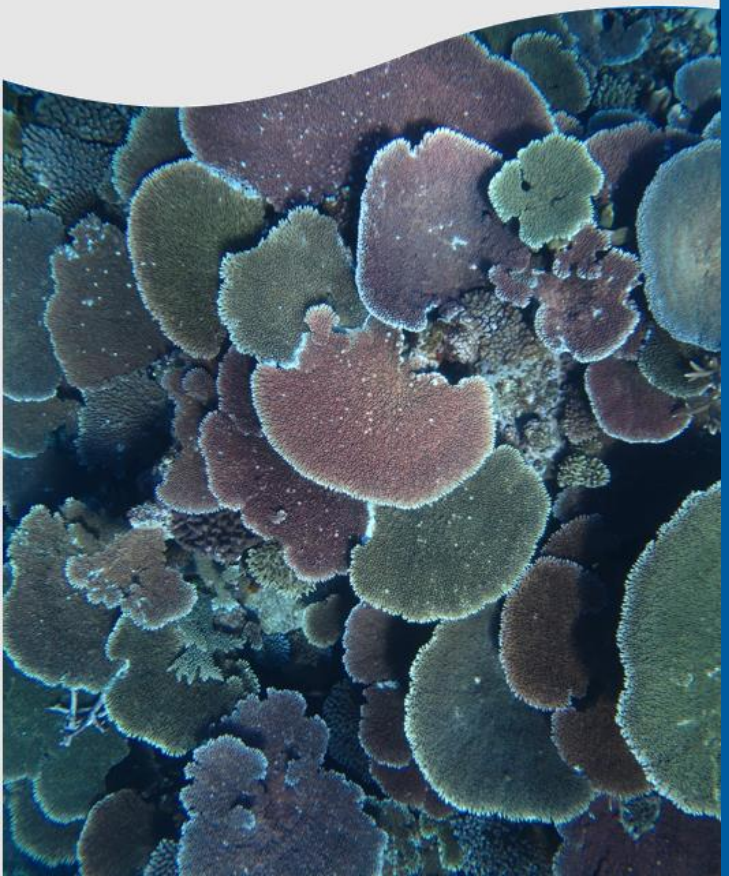

Platygyra
- Ragged septa
- Meandering valleys

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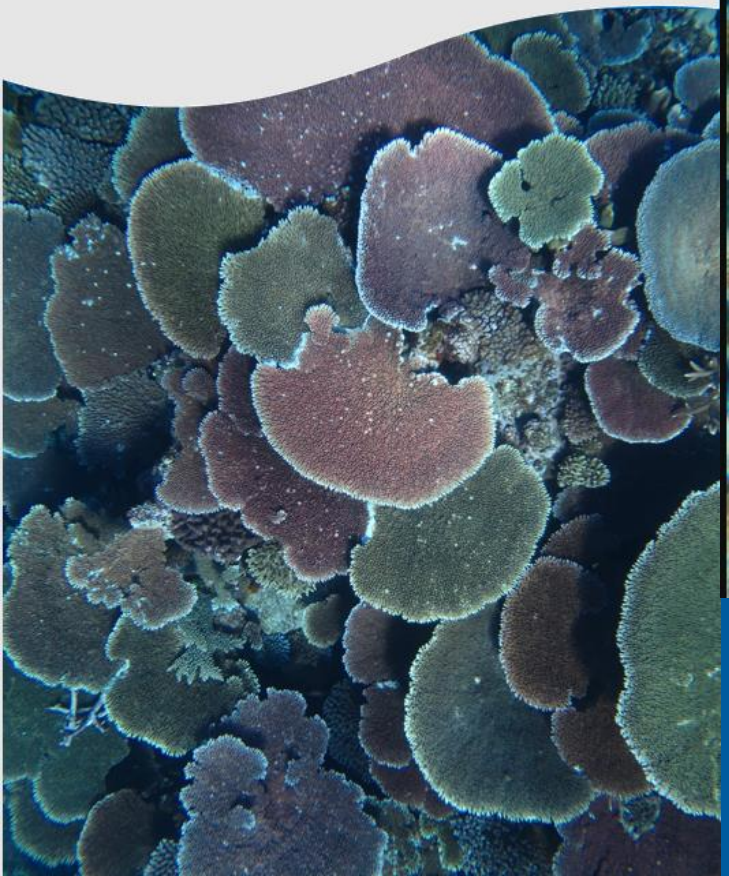
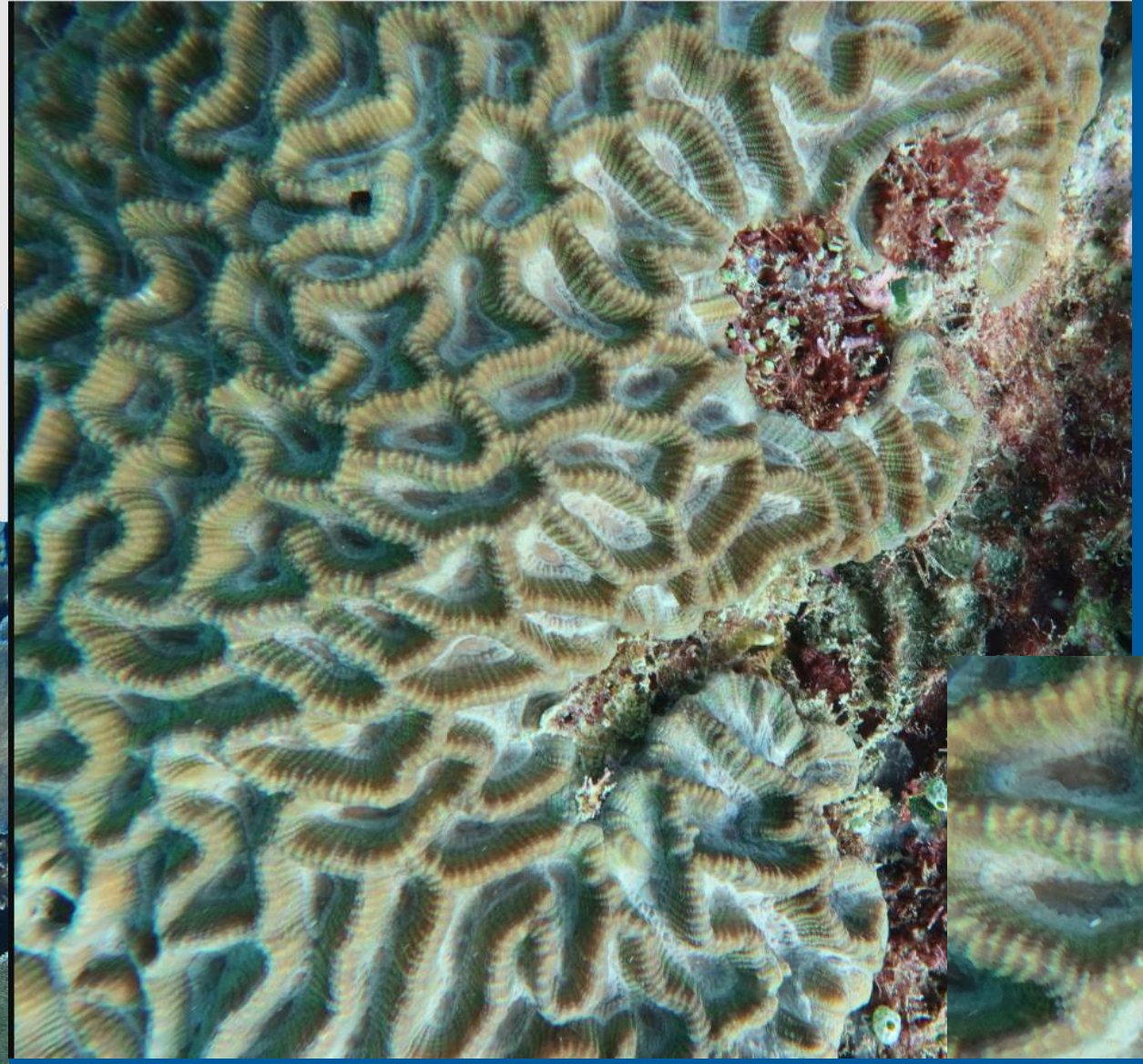
ReefCloud





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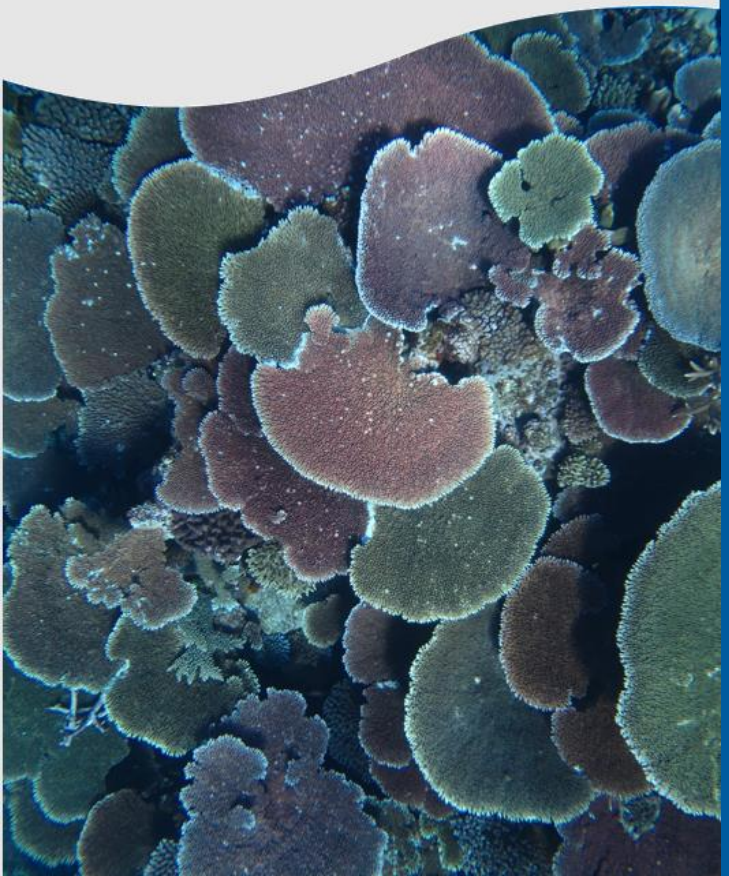

Oullophyllia

- Short, wide,valleys
- Steep, v-shaped walls
- Can sometimes see paliform lobes

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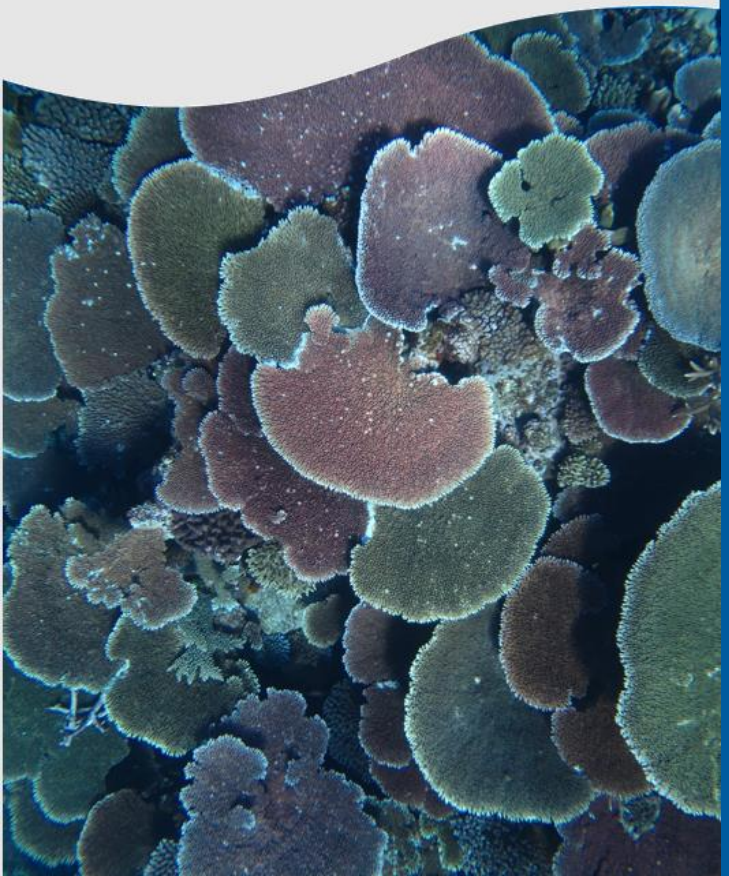
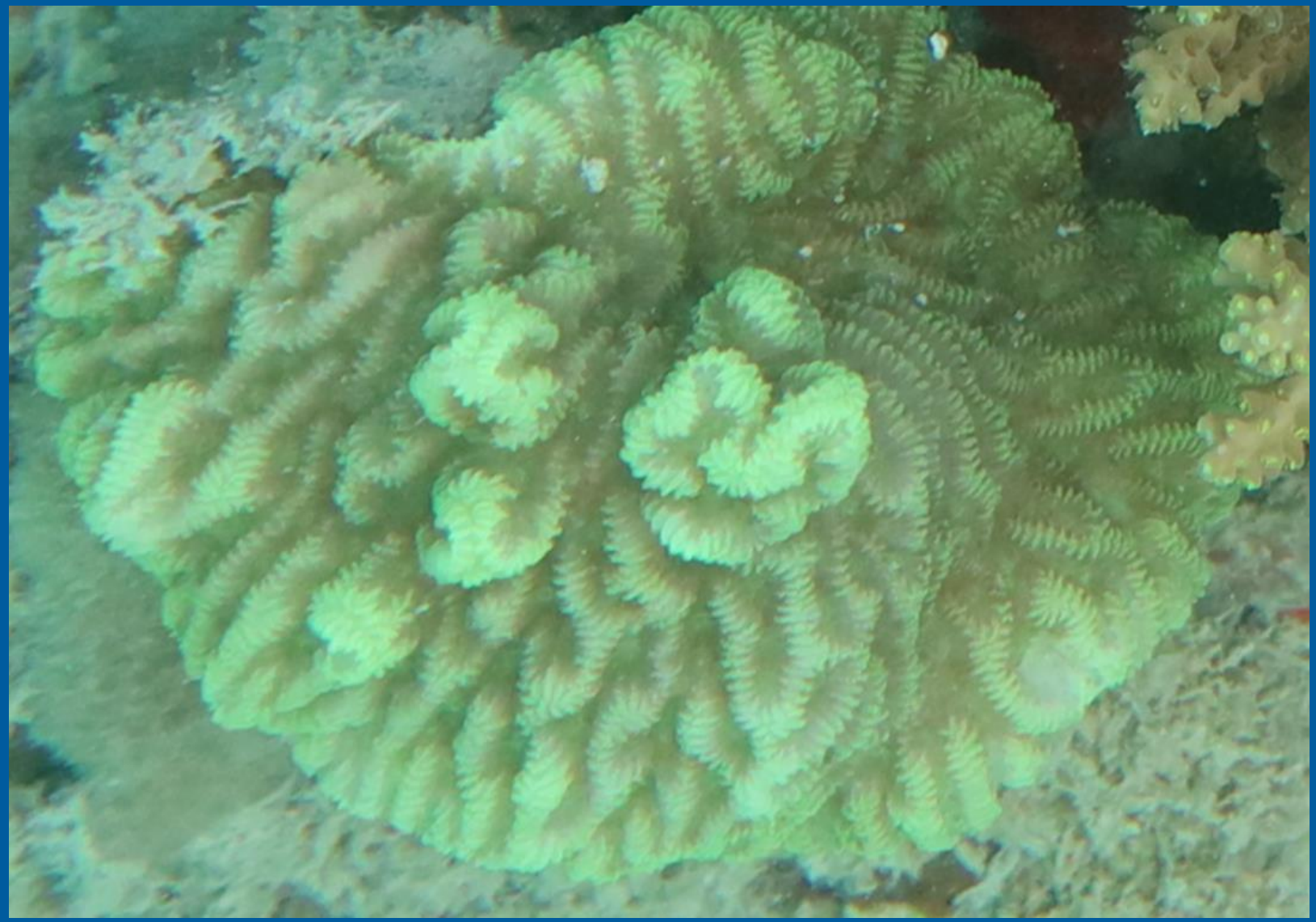
ReefCloud





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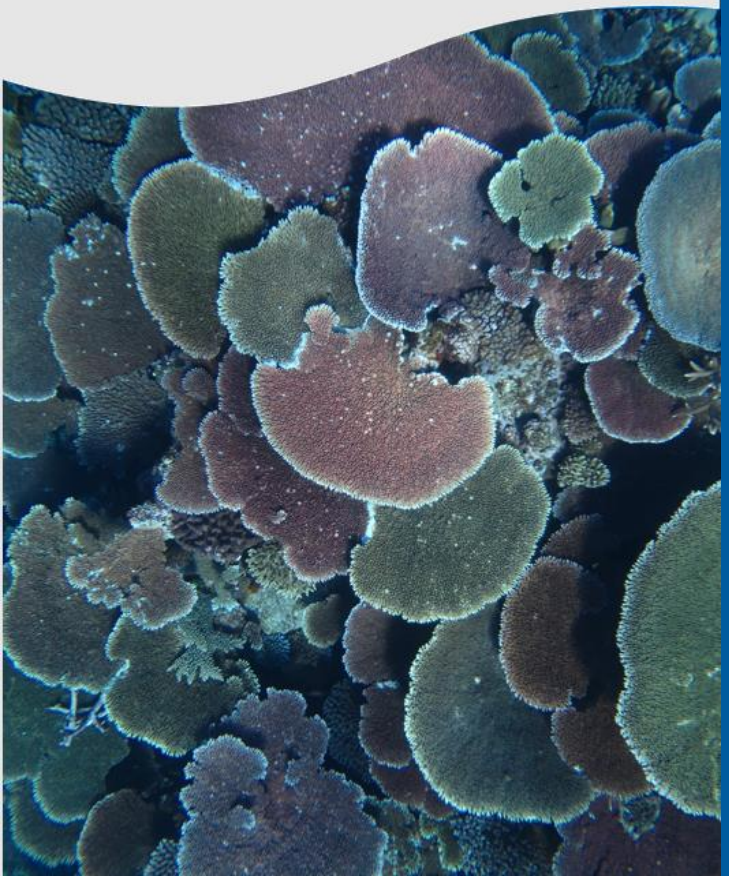
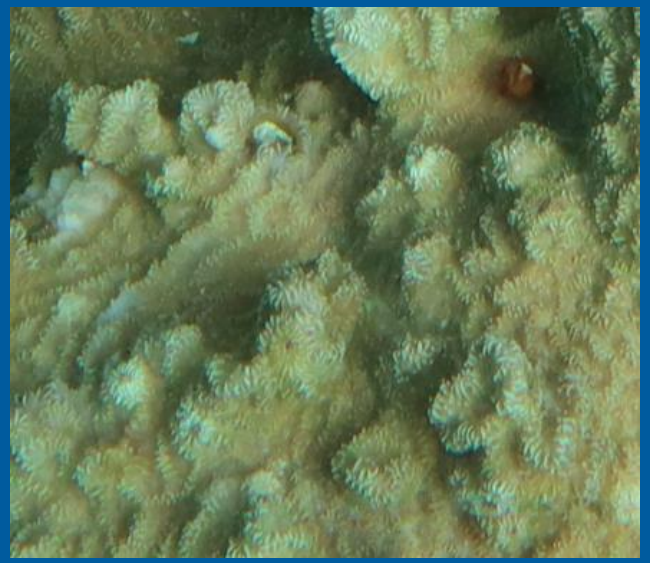
ReefCloud



Merulina

- Valleys travel towards margins
- Encrusting, foliose, or sometimes has “knotty bumps” ranging to sub massive columns
- Bleaches easily



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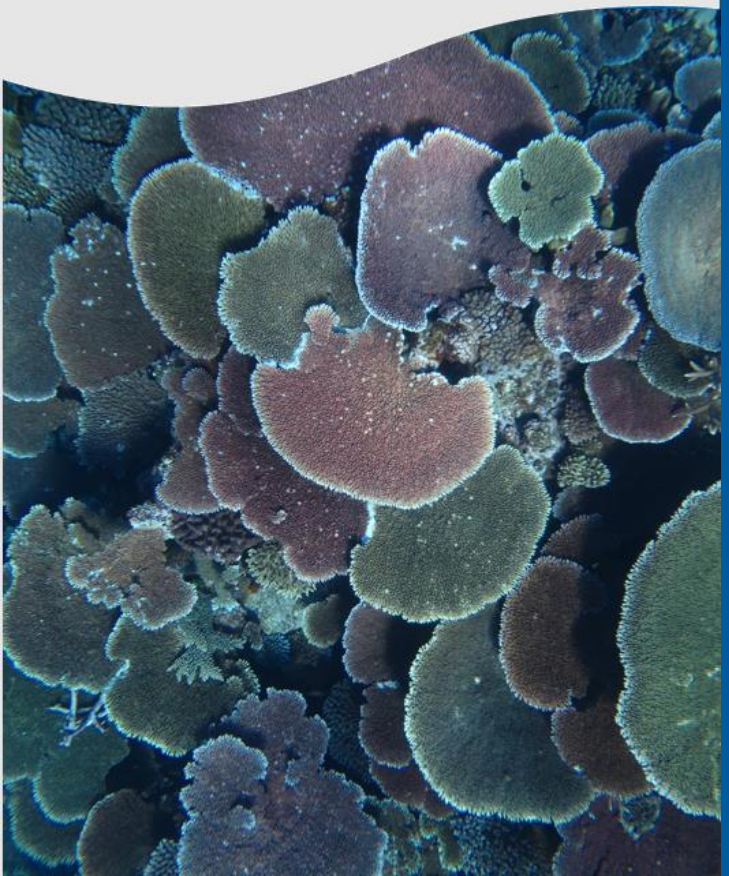

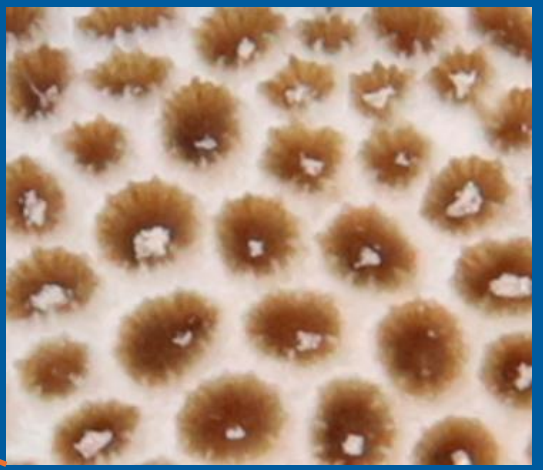

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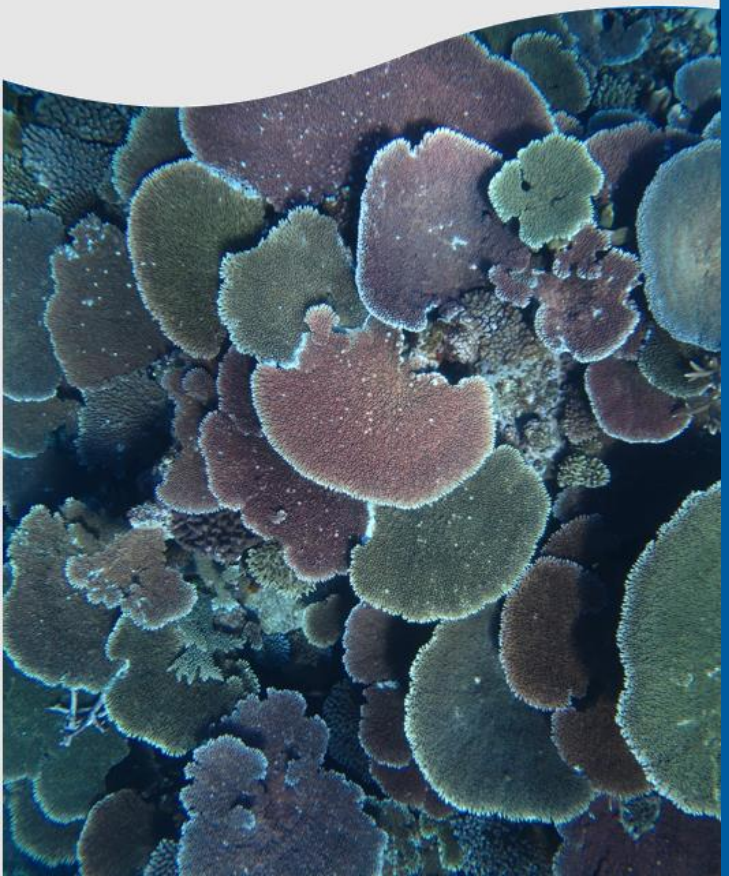

Dipsastrea

- Separate walls
- Usually intra-tentacular budding, no extra-tentacular budding

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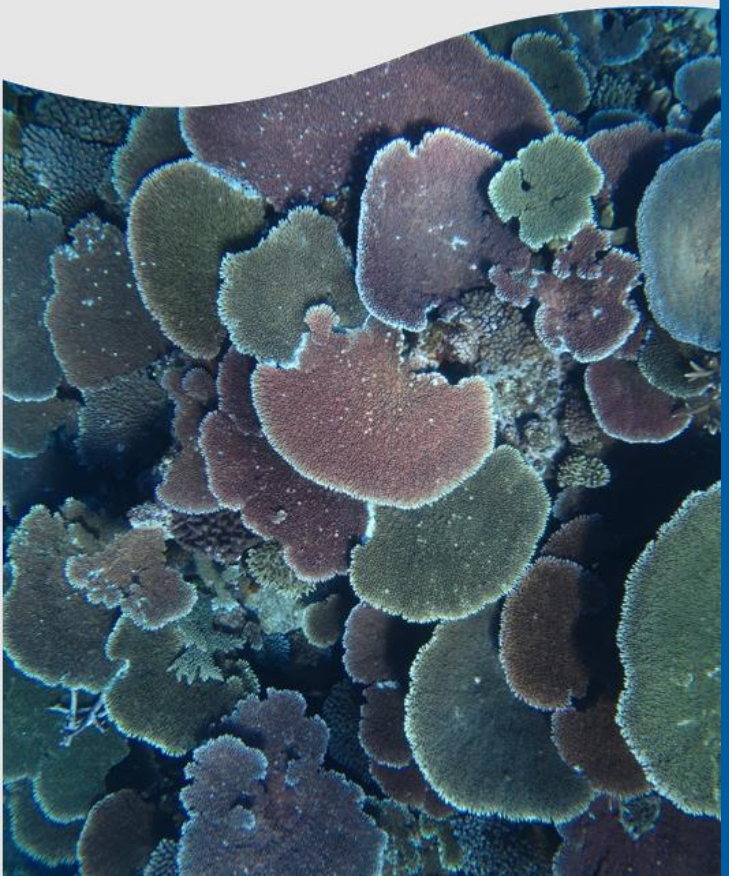

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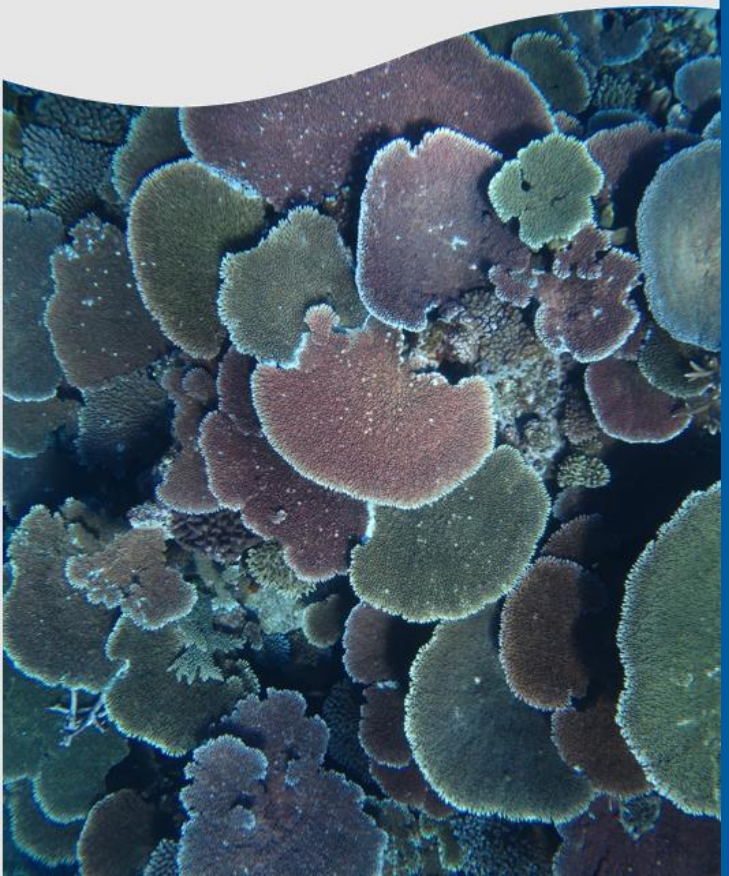

Dipsastrea

- Separate walls
- Intra-tentacular budding
- Forms massive colonies

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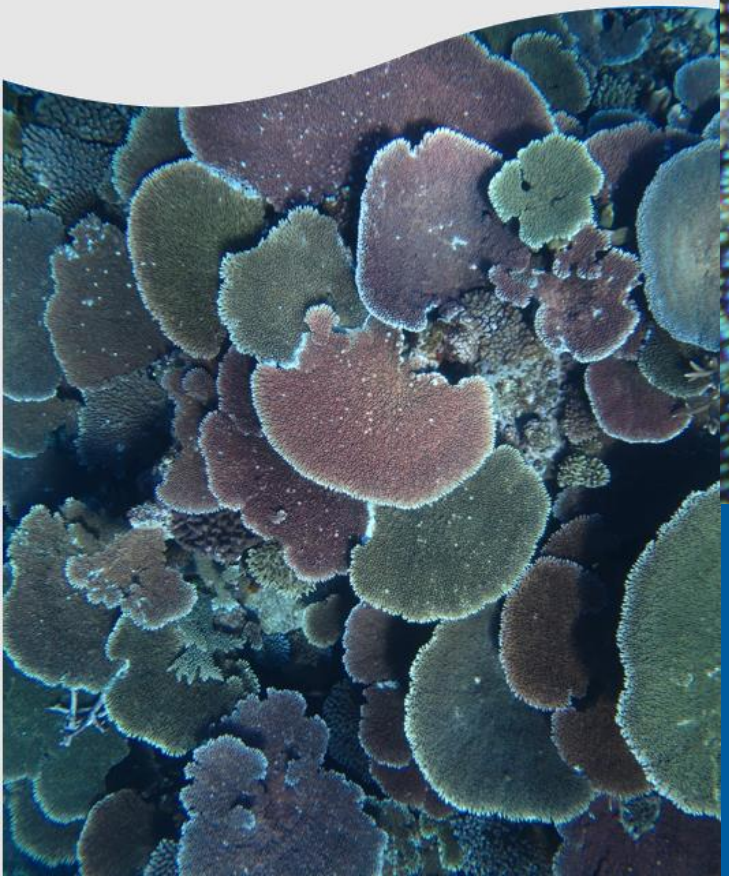
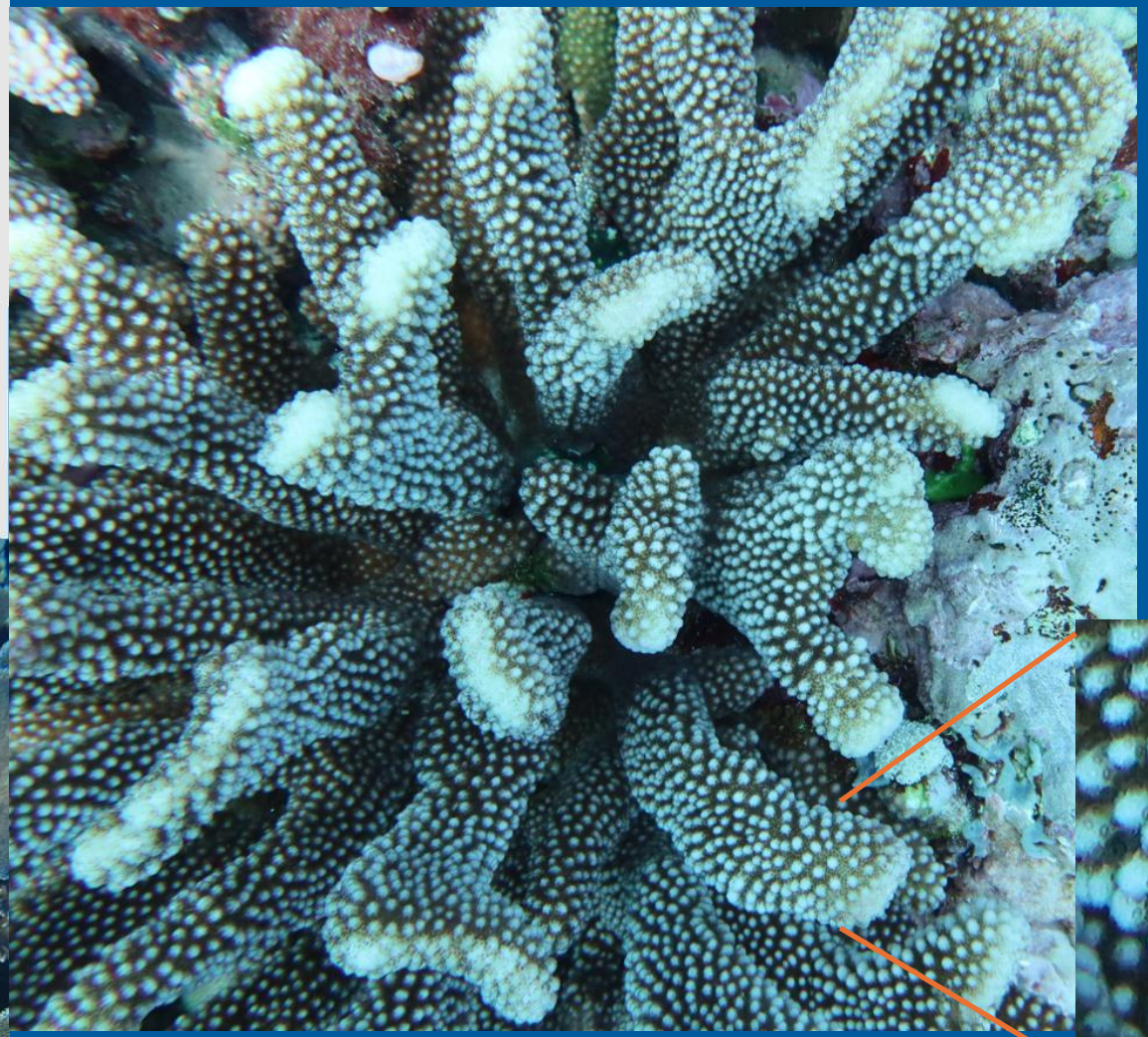
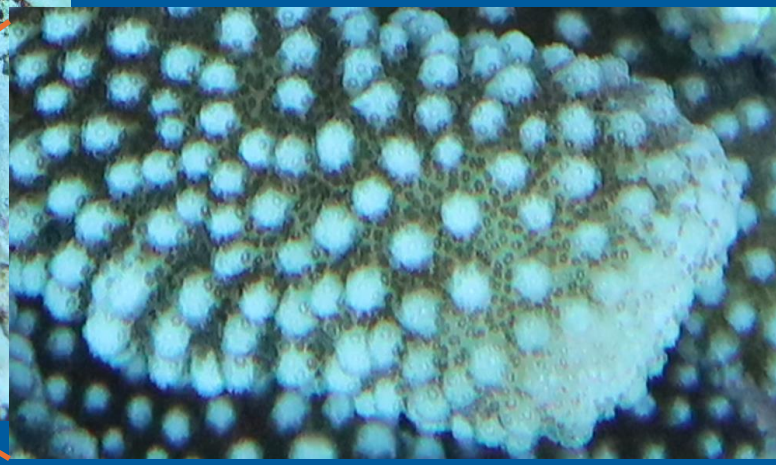
ReefCloud







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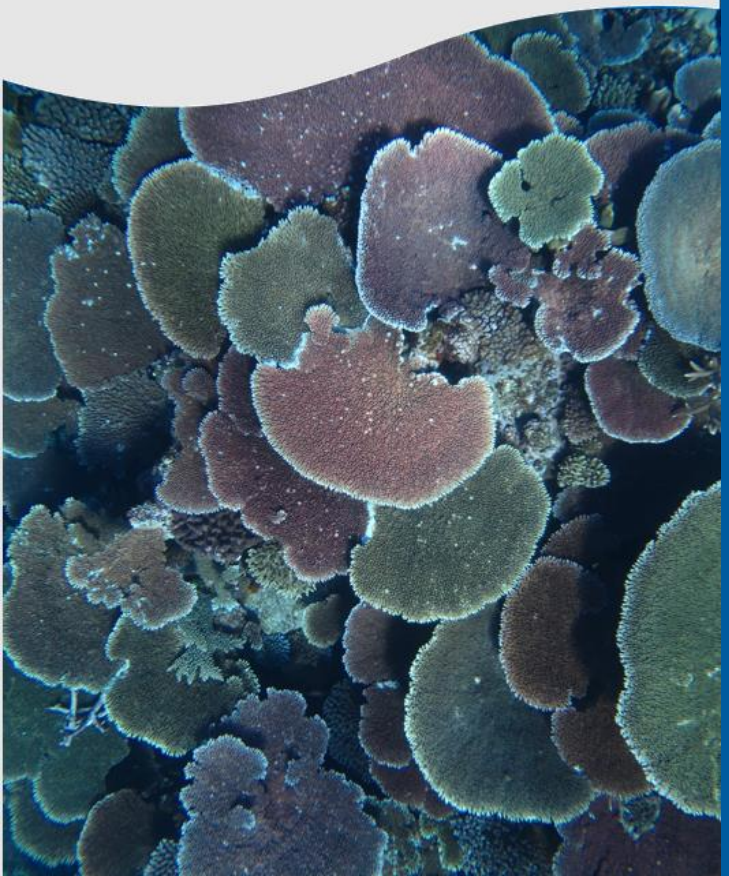

Pocillopora

- Ring like corallites on and around the verrucae (bumps)

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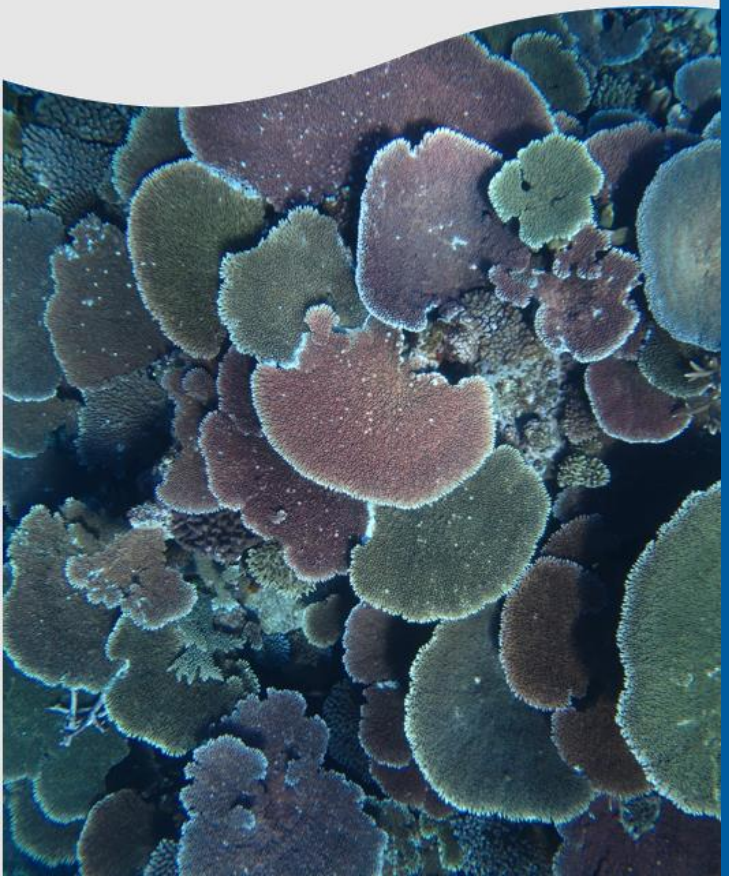

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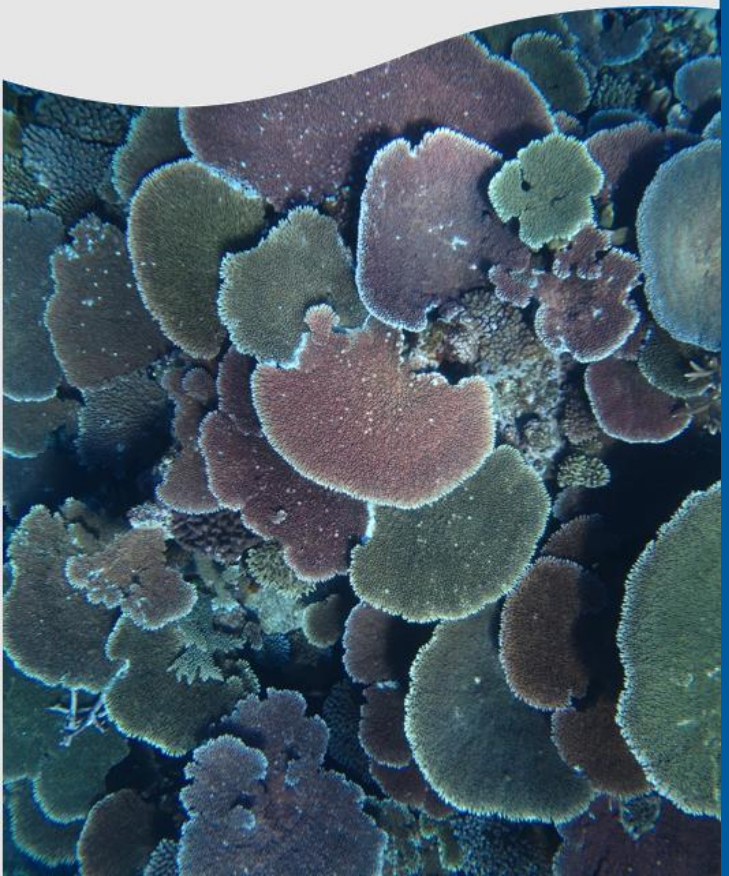

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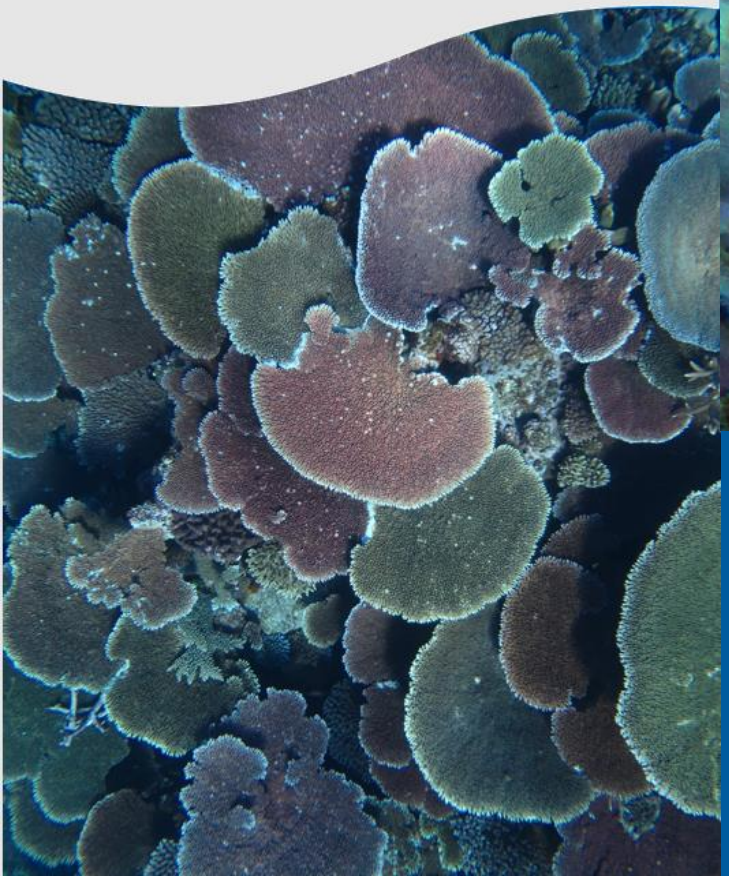

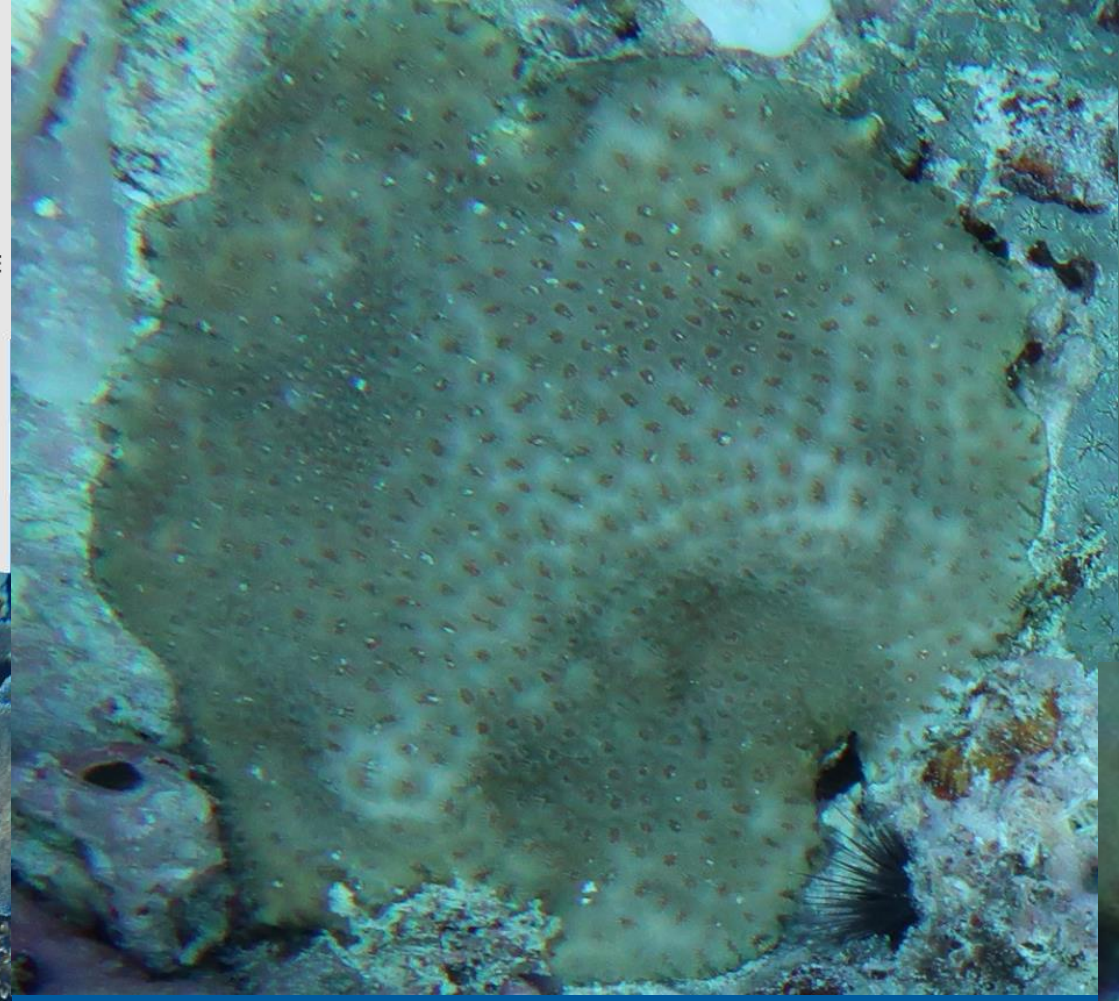

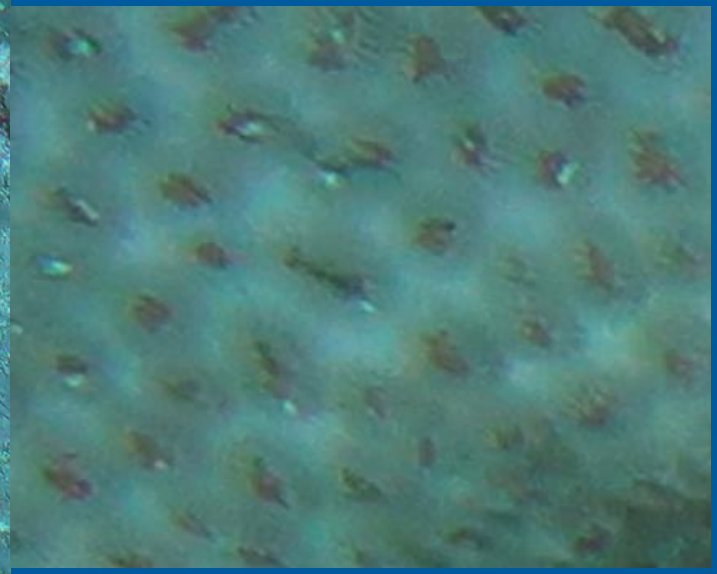

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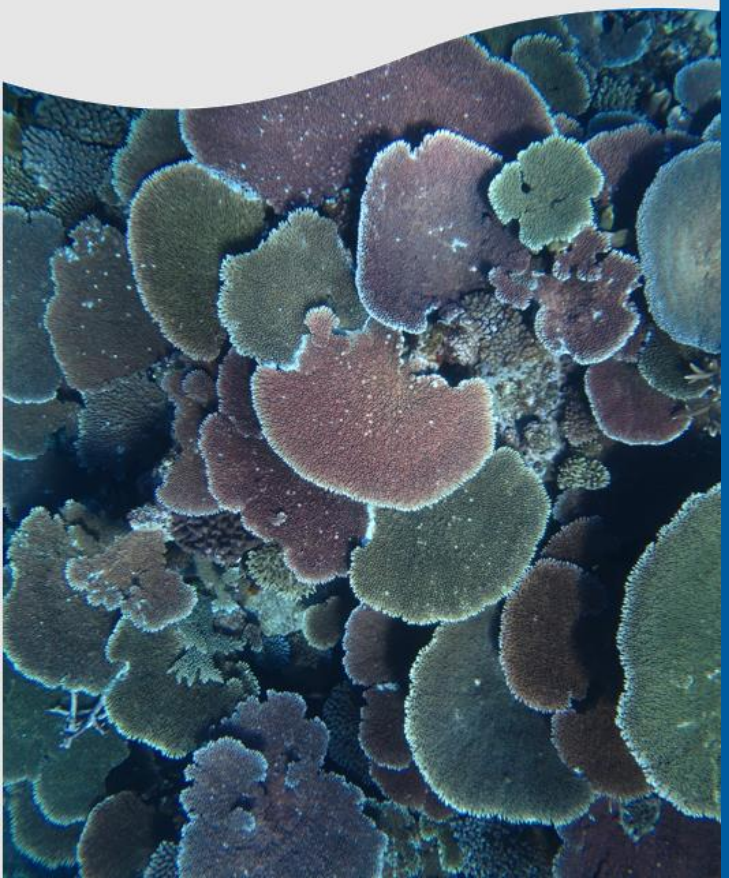

Goniastrea stelligera

- Used to be Favia stelligera before being reclassified
- Very small corallites
- Often confused with Cyphastrea due to small corallites
- Typically plain grey in colour like most Goniastreas
- Good way to tell from Cyphastrea is to look for intra-tentacular budding

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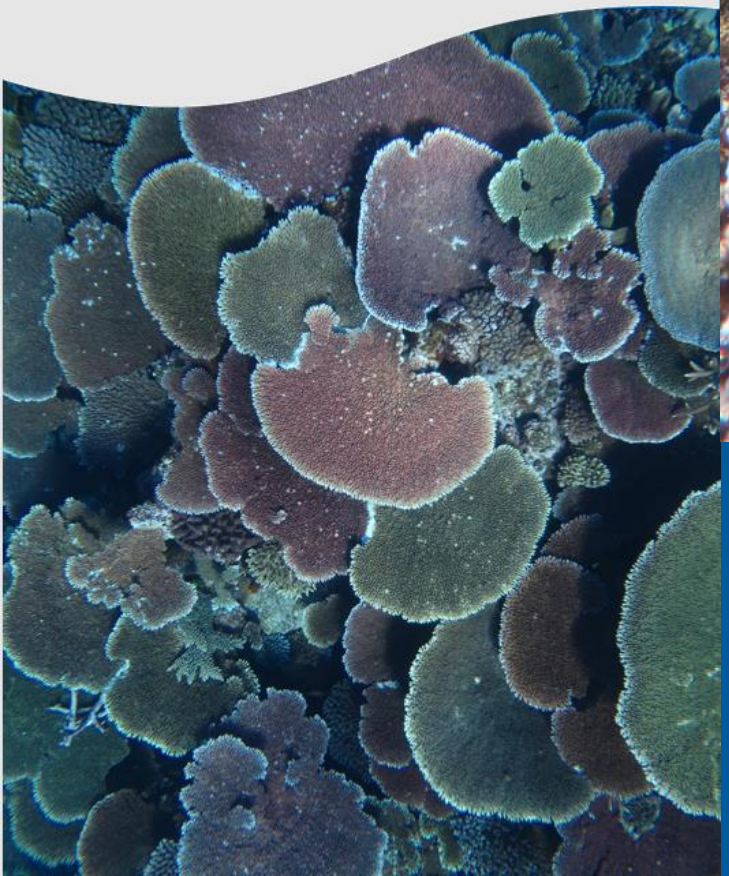
ReefCloud



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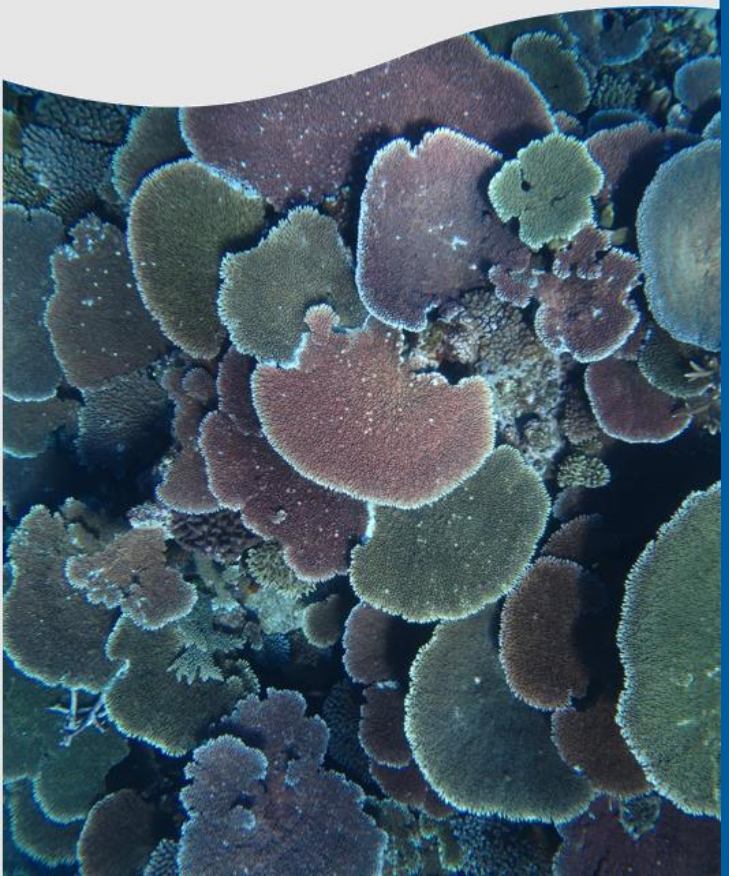

Lobophyllia

- Used to be Symphyllia
- Meandering valleys
- Often has a groove down the center of the walls (ambulacral groove)
- Walls have a texture like carpet

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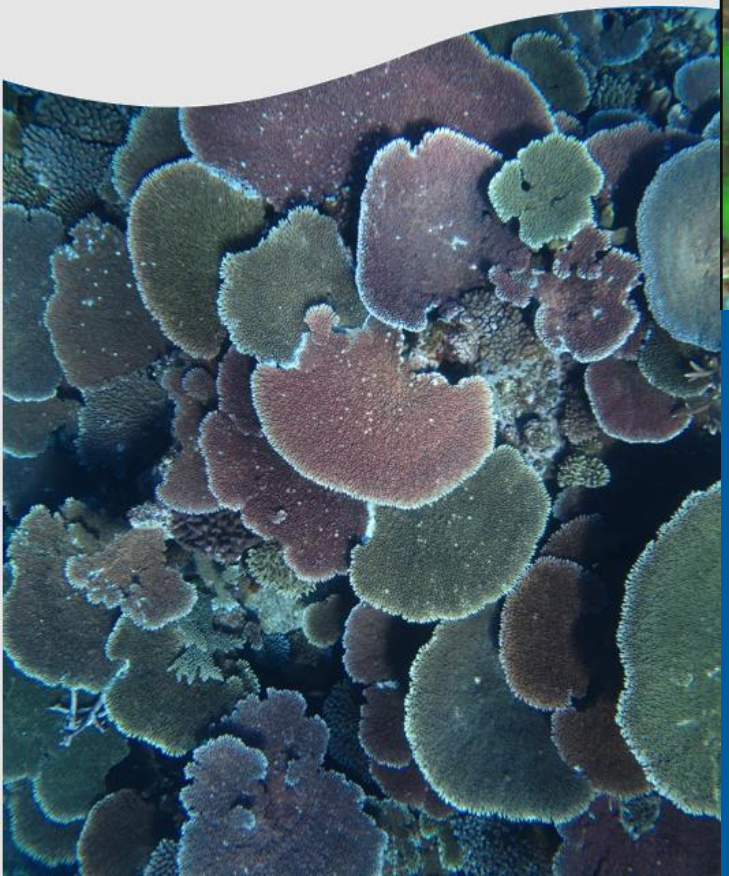
ReefCloud



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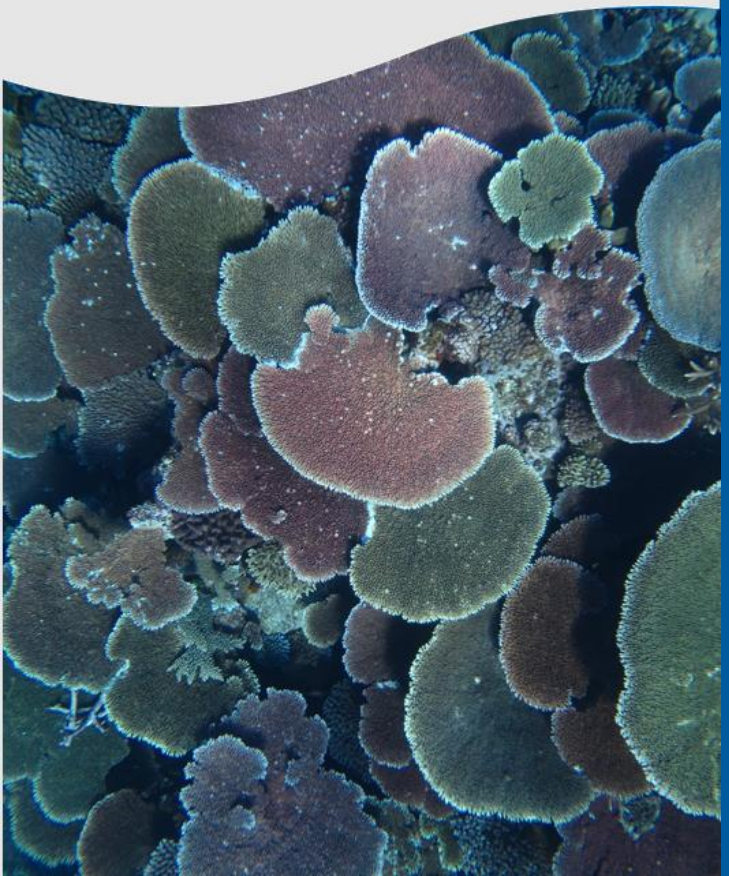

Psammocora

- In this case encrusting
- Has fine, granular texture
- Can often be hard to see corallites

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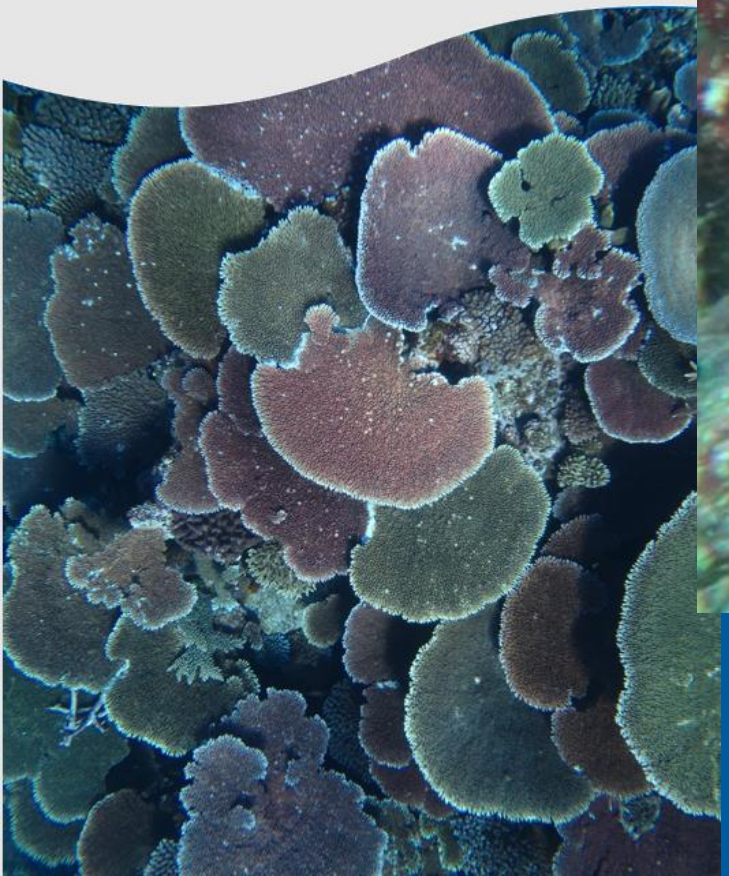

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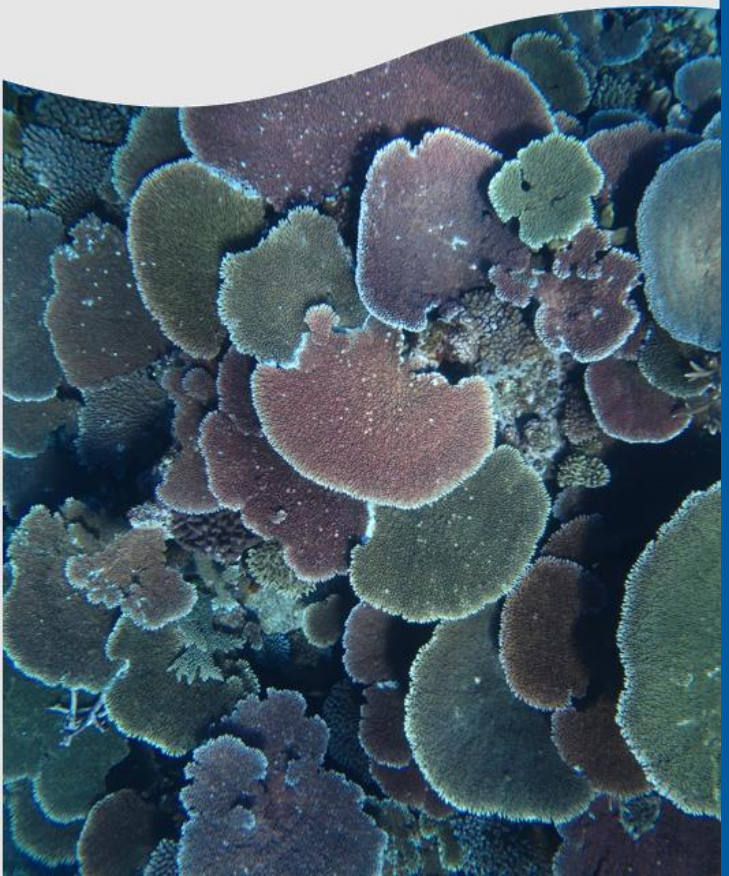

Psammocora

- Used to be Coscinarea
- Granular edges along the walls of the valleys
- Can grow as encrusting, or submassive
- Tentacles can be extended during the daytime

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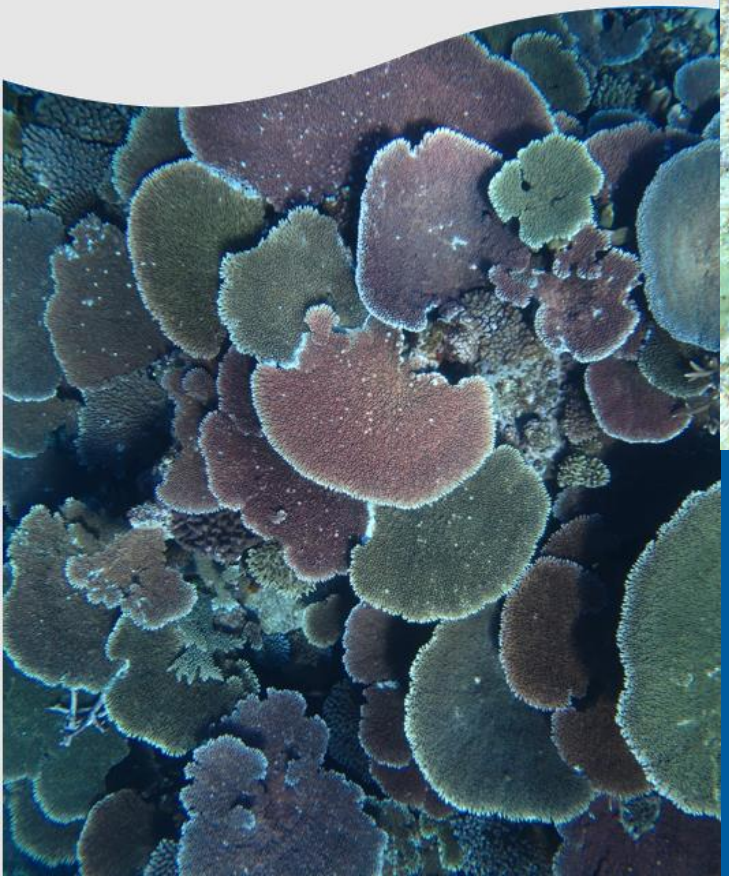
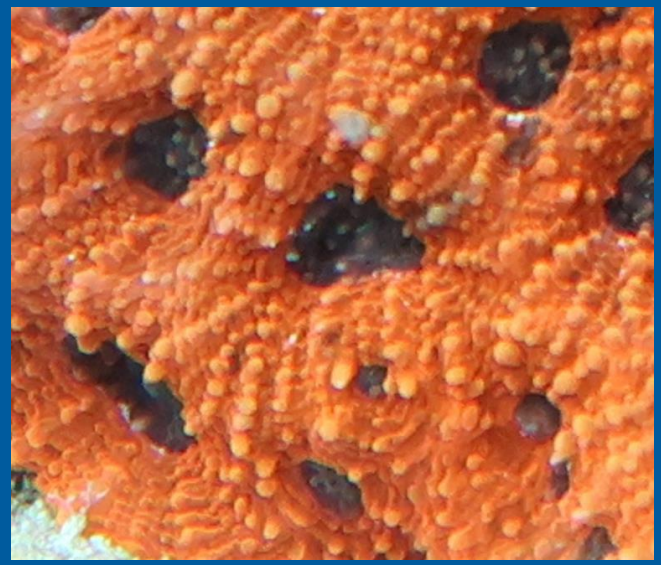
ReefCloud





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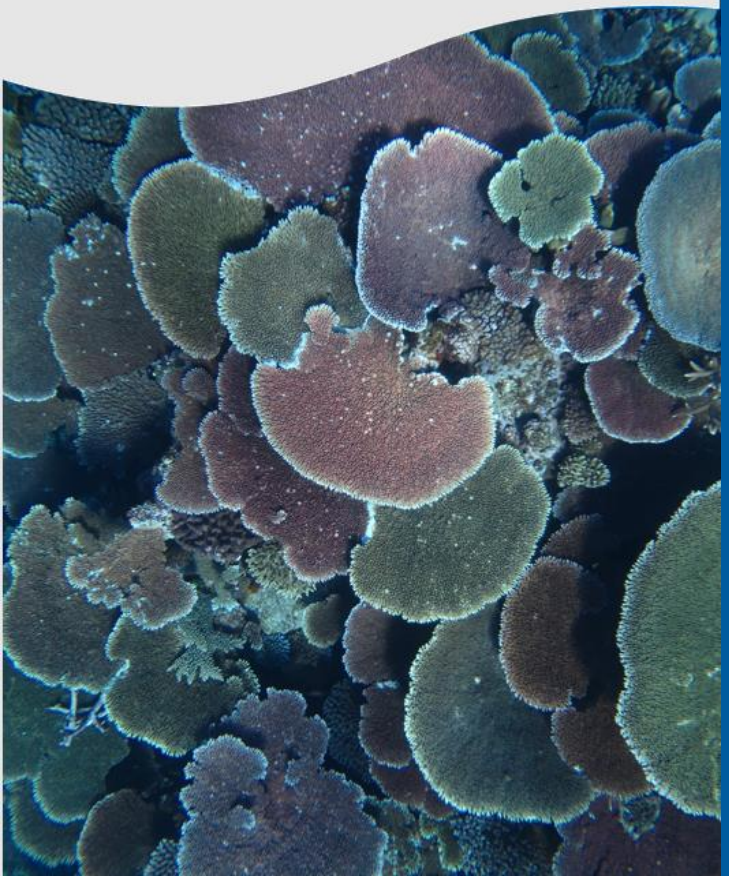
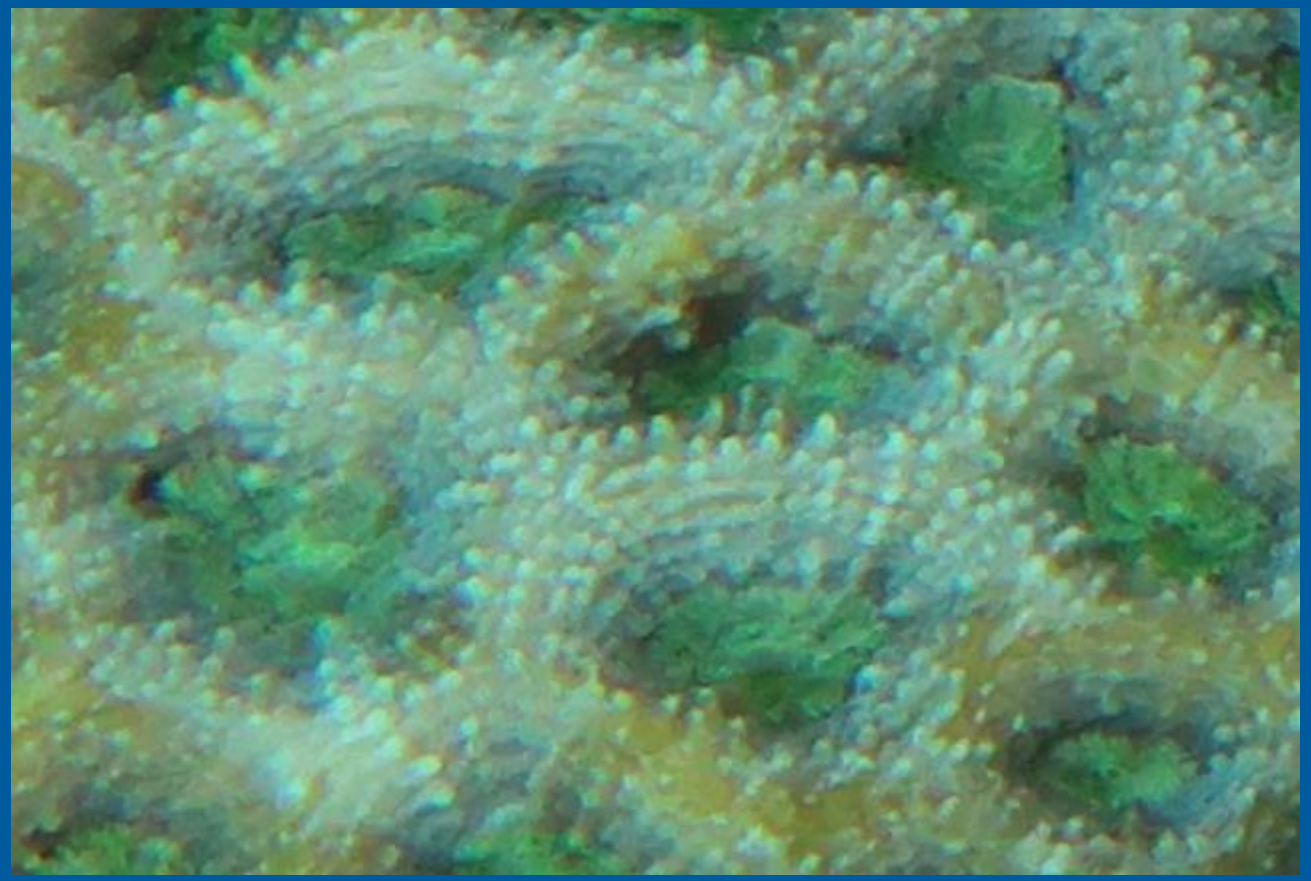


Acanthastrea

- Looks like favites
- Unlike favites, it has teeth coming through the walls forming concentric circles (seen below)



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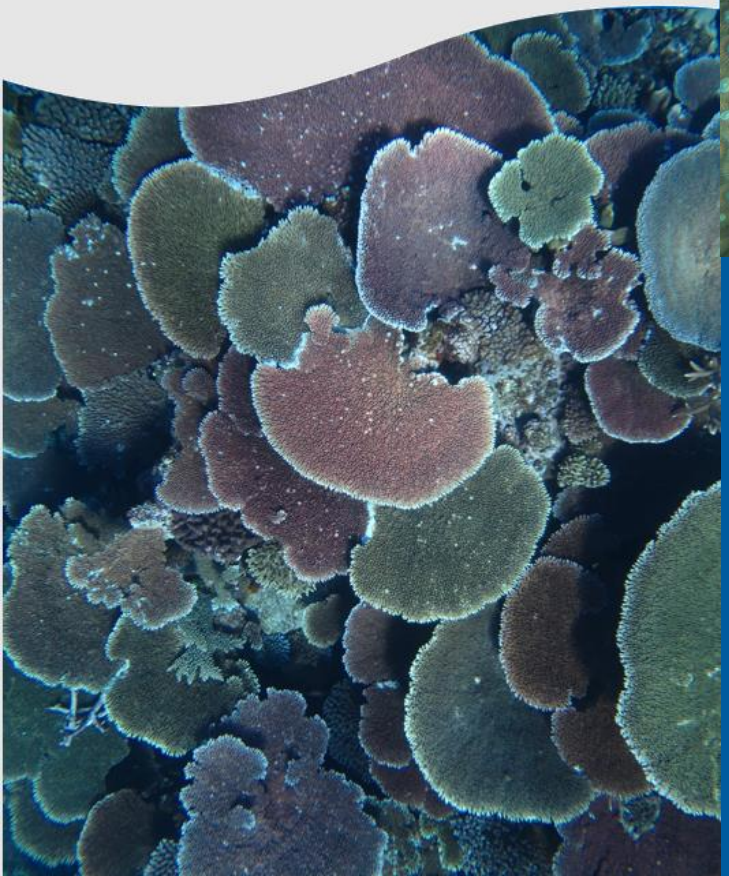

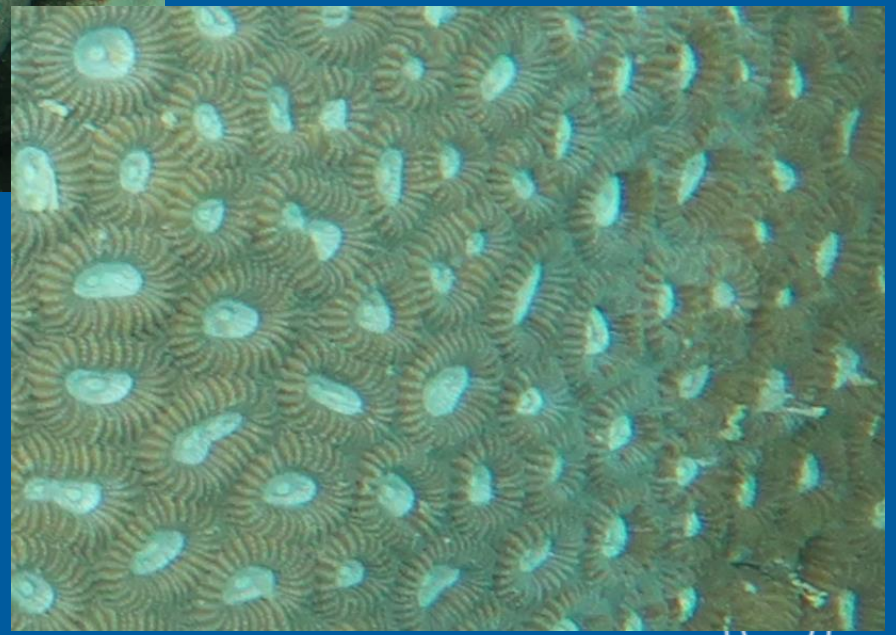

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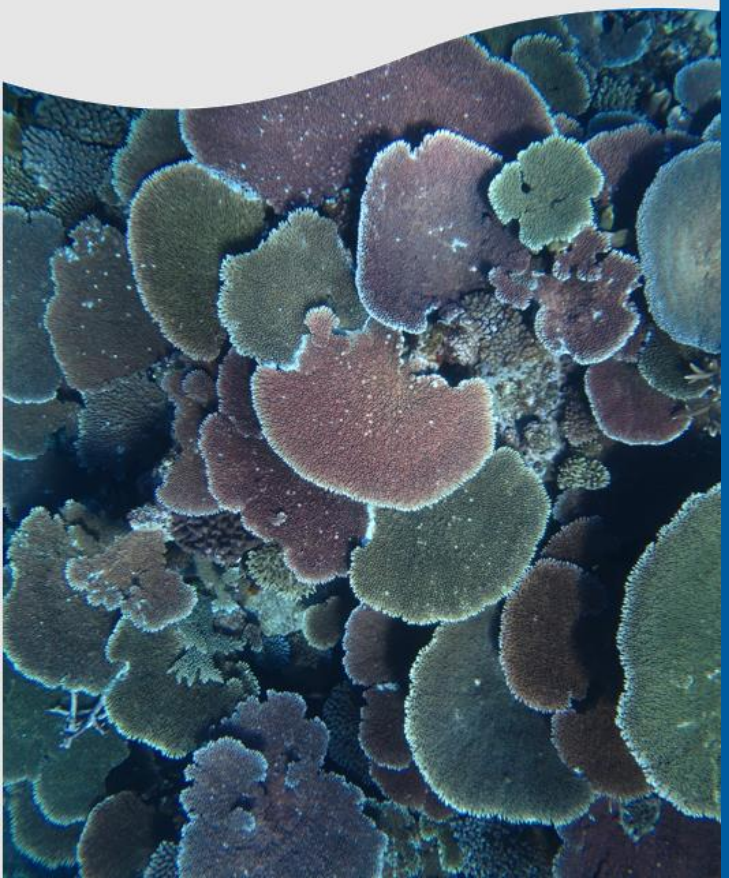

Dipsastrea

- Separate walls
- Intra-tentacular budding
- Forms massive colonies