



# Unusual Leather Corals

By Anthony Calfo.

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The Alcyoniid family of soft corals, commonly called 'leather corals,' is familiar to all but the very newest reef aquarium hobbyists. They are popular for very good reasons. Most in the group ship well, are very sustainable from wild harvests, tremendously easy to propagate in captivity, and they are simply attractive and affordable. Alcyoniids were appropriately some of the earliest corals imported for the reef aquarium hobby.

The three principal genera observed are: *Sarcophyton* (Toadstool or Mushroom Leather), *Simularia* (Finger Leathers) and *Lobophytum* (Devil's Hand or Thick Finger Leather) species. Among this well-established group of corals, as with almost every other category of livestock imported for aquarium use, the majority of specimens collected are the same familiar faces, so to speak. So-called rare specimens, however, are usually not rare on the reef, but rather simply uncommon in the aquarium trade. It is an ironic reality that collectors only ship what retailers

order and retailers only order what customers buy, and customers only buy what they know and see. In other words, most aquarists that have never been to a reef do not know what is available, and as such do know what to ask for. Hence, the circle of retailers continues sell only what will sell well, and what sells well are the same staple species.

With a little bit of effort and encouragement, hobbyists can guide their local merchants to push their collectors to send new, uncommon and unusual species. Many are simply there for the asking.

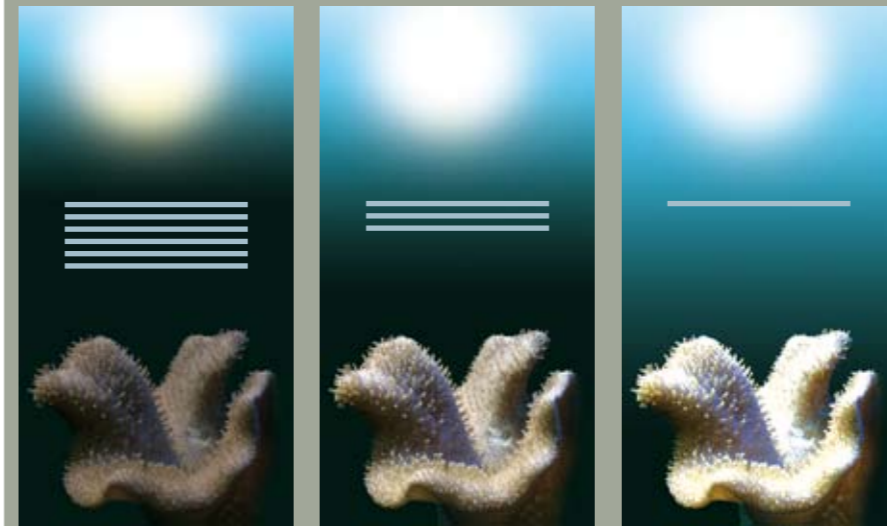
Studying field guides, chatting with experts on-line, and gaining experience in dive holidays can lead to a shopping list of new, aquarium-suitable species for which collectors will usually be happy to hunt for. It is their business to collect what sells, of course, and conversely the local fish store wants to earn sales by serving customers. But it all requires the support of consumers. If you don't buy it, they will not sell it (or reorder it)! So, support your local merchants... Teamwork aside, they are also the best way for a hobbyist to find (if not order) new and

exciting species for aquarium use that get collected and imported by expeditious and professional means.

Case in point, there are two lovely and quite different – from each other and from others in the family – leather corals that infrequently appear in the reef coral trade. They could easily appear more often with consumer support.

*Rhytisma* is sometimes referred to as the Encrusting Leather coral. It looks like its namesake in contrast to other Alcyoniids; *Rhytisma* has no stalk or distinct capitulum. It is simply an encrusting stoloniferous mass of feathery polyps, occurring in colours of purple, golden brown, yellow or grey. For lack of a better comparison, it could be described as resembling *Briareum* 'star polyps' in rudimentary ways. Bright yellow specimens are collected in shallow waters, golden brown specimens are slightly deeper, and the purple/grey colonies are from the greatest depths usually. You will find that this unique coral can adapt to a very wide range of aquarium lighting provided the adjustment period is gradual over time.

**TIP:** for acclimating corals from an unknown source or from known origins of lower light intensities, it is easy and effective to employ plastic screen (fiberglass window flyscreen, for example) to temper the attenuation of new lighting situations. Rather than manipulate an aquarium's photoperiod or intensity (moving fixtures higher or lower) each time a new coral is introduced to the display, instead use plastic screen as a shade cloth, as follows: Place the new specimen (after a proper quarantine period) into the display in the desired final resting place. Then cut a stack of screen sheets (about 6-12) in size slightly larger than the footprint of the new coral. Place the stack of screens in a strategic position above the water surface to cast a shadow on the new coral being acclimated below. For fluorescent lighting systems, no more than 6 sheets of screen will be needed. For more intense lighting systems, you may well need the full dozen sheets. At any rate, the obvious purpose here is to temper the brighter lighting for the new coral in a limited space (the footprint of the specimen) without reducing light elsewhere in the system for any of the other corals and photosynthetic species. In time, you can remove a sheet of screen every few days until the stack is exhausted over a period of weeks. It is an extremely inexpensive and effective way to prevent light shock to new or established corals during acclimation periods in a brightly lit reef aquarium.



Indeed, *Rhytisma* is like most corals: highly adaptable to a wide range of lighting. Please do not worry or fuss much on this issue as hobbyists already spend too much time on lighting issues, at the expense of greater concerns like feeding and water flow. Feeding *Rhytisma* is much like other hardy Alcyoniids. This genus is a very weak organismal feeder. Little to no target feeding is required. For the shallow specimens (bright yellows mostly) they do get much of what they need from zooxanthellate symbiosis.

If you can provide high PAR daylight lighting in the range of 1 watt per litre, you will likely be fine. If you have a yellow specimen that turns brown(er) in time, you should consider raising it in the tank slowly or improving light penetration through the tank by use of ozone and carbon to better remove colour from the water. Excessive nitrates can be a

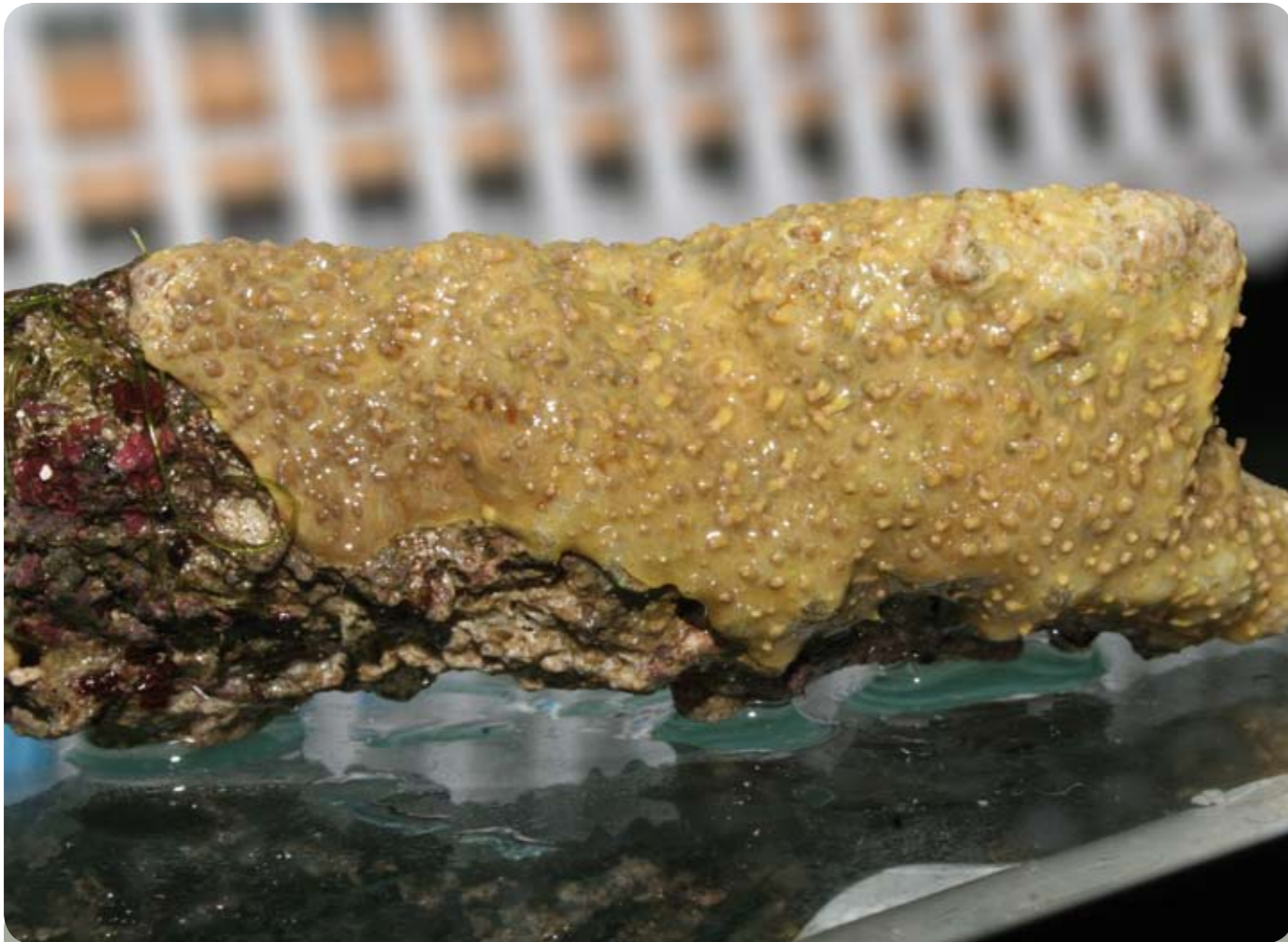
concern too, but please don't wholly dismiss the need for a source of nitrogen. All corals need it and *Rhytisma* will, to a greater extent than some other common corals such as Acroporids. I recommend that you allow a steady level of 5-10ppm of actual nitrogen (ionic) for best results with growing soft corals such as this.

Of the three principal influences on coral growth, health and vigor (lighting and feeding being the first two mentioned in this article), water flow is perhaps the most grossly understood and mis-applied by aquarium hobbyists. Most aquarists simply do not have enough water flow in their aquarium, and sadly most of the few that do have enough volume have applied it incorrectly (namely from laminar sources like streaming powerhead pumps or blasting return pumps). What most corals really need is massive but diffused water flow.

Without elaborate pump and valve systems, the easiest way to achieve adequate water flow in the reef aquarium is to have multiple effluents (nozzles, pump outlets, sump return lines...) converging upon each other to create random turbulent flow. This is easier to accomplish in larger aquarium systems (over 200 litres). For any sized aquarium, do consider building a discreet closed loop manifold system (keyword Internet search for "CLM" or "Calfo loop") on the bigger reef hobby message boards...



Poor polyp extension - shown here - on newly imported specimens is often an indication of inadequate water flow.



Aside from the absence of a stalk, the “Encrusting leather” Rhytisma looks much like other Alcyoniids.

or reference the water flow section in the new *Book of Coral Propagation edition 2*. Do not underestimate the need for precise and adequate water flow; it brings food to corals and carries waste away. There is also a direct correlation between the amount of light a coral receives and the amount of water flow needed (the former increases with a rise in the latter).

*Paraminabea* is an especially unusual Alcyoniid. It is one of the only non-photosynthetic species collected for the aquarium trade. Most often it occurs in solitary finger-like projections from protected areas of the reef. It rarely branches but does occur in gorgeous colours of orange/red/yellow hues. It can be hardy in the aquarium if its specialized needs are met, but otherwise fails in typical garden reefs (non-biotope or species specific) displays. Their challenges are akin to keeping the gorgeous *Tubastrea* sun coral (stony) polyps.

Both azooxanthellate genera require extraordinary diligence with strong



water flow and daily target feeding. Live plankton drips (slow) are recommended for your convenience and the corals' welfare. With the extra effort, though, you can enjoy a beautiful and very uncommon Alcyoniid coral that few people

Like many other night-feeding (azooxanthellate) planktivorous corals, *Paraminabea* needs to be suspended upside down in the aquarium for best success



The polyps of *Paraminabea* are relatively large and will accept some of the new and improving plankton substitutes manufactured today. Nanoplankton is not required for this non-photosynthetic coral.

**“*Paraminabea* is an especially unusual Alcyoniid. It is one of the only non-photosynthetic species collected for the aquarium trade”**

will ever see in their life, in aquaria or on the reef! Freshly imported *Paraminabea* may not extend their polyps to feed at first (again... much like *Tubastrea*). When

they do, it will first be done only at night. Rest assured though, that this and most like-corals can be trained to feed any time of the day.

After a captive *Paraminabea* has begun to exhibit normal daily polyp cycles, offerings of fine zooplankton substitutes can begin with matter such as ‘Cylop-eeze,’ ‘Coral Frenzy,’ ‘Golden Pearls,’ or oyster eggs. Live copepod and rotifer cultures would be especially good too. Offer fine foods a minimum of three to five times weekly, if not daily in tiny portions. It will be most helpful to mount your specimen in the aquarium

upside down (this method is required for *Chironophthya* “red chilli coral”). This natural orientation will not only serve the animals’ needs better, but also make use of space in the aquarium that will not be utilized by almost any other corals.

If you try your hand at keeping these or other uncommon corals, please be sure to try and photo document the arrival and progress of your specimens in time. Share your observations online, at your local stores and hobby clubs, and in print publications. In this fashion, we can help each other and the reefs we admire so dearly. ■

**TIP:** for stimulating new or stressed zooplankton feeding corals to put their night feeding tentacles out, add a partial teaspoon of “shrimp juice” (thawed pack juice from frozen shrimp-based fish foods... or simply squeeze the head of a dinner prawn underwater in the aquarium). It is very important to do this at the same time every day; begin with evenings after the lights go out for night feeding corals (you can train them to come out by day later). This small addition of fragrant liquid each night is a tremendous stimulant that will yield results in less than 2 weeks if you do it faithfully each night. It also spares a considerable amount of water pollution from like attempts with actual meaty foods during the early days and weeks, when a coral is not yet enticed to feed.

