

Pavona Corals

Of all of the SPS type corals available in the hobby for Reefs and Nano-Reefs, this is one of the easiest ones to keep, with its low demand on light, and water quality & flow. Pavona is an excellent coral for the beginner and any hobbyist. It truly is an easy coral to grow, frag and maintain. Pavona corals are much hardier and tolerant than most other SPS corals and are also quite resistant to disease. They seem to be adaptive to different water qualities and Aquarium Nano-reef type set-ups, doing well under less intense light. Obviously, water conditions and quality should still be maintained with acceptable standards.

The Pavona spp. shown in **Photo #1** has two types of growth: 1) flat and thin expanding layer outward on a large rock and 2) branching and curling pieces growing upwards. With careful observation, you can see the short tentacles that the Pavona coral extends to capture food particles. **Photo #2** shows my fragging process with this coral. The middle piece shows a frag after about 3 days. **Photo #3** shows another frag after 4 days.

There are some unique characteristics in the Pavona genus. The genus contains some of the most “autotrophic” species known. Autotrophic is the ability to take simple inorganic substances, such as carbon dioxide, and turn them into organic substances that are used for food. This method allows Pavona corals to live with less light, without requiring high end LED or even more sophisticated types of lighting as is usually needed for other SPS type corals.



Photo #1 by Albert Thiel
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Photo #2 by Albert Thiel
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When nutrients or “food” from photosynthesis are lacking, they switch to this autotrophic mode and obtain nutrition from their symbiotic algae, dissolved organics from the water, and carbon dioxide. Under bright light they also do extremely well without extra feeding. Therefore, providing extra food will highly complement their fast growth.

Another unique characteristic, pointed out by several authors, including Moosleitner, Erhardt and Borneman, is their growth of uncanceled tissue buds, which look like prickly little balloons on the surface. Though these decorative growths are not a form of asexual reproduction, their purpose still remains unknown. I have also observed growths which seem to be made of calcified material.

Well over 50 species of Pavona are known but only a few are offered for sale in the trade: *P. cactus*, *P. decussata* (**Photo #4** on next page) and *P. maldivensis* are the ones most frequently encountered. The latter however is not as easily found and grows less leafy, but more stubby in its individual growths. The most frequently encountered one is *P. cactus*, which is probably the reason that the coral is generally referred to by the common name of Cactus coral.

As indicated, lighting for this coral needs to be bright but not extremely sophisticated. Mine are kept under 2 CFT (Compact Fluorescent Tubes) that are rated at 100 Watts and have a 6500 Kelvin degree rating. Water flow needs to be moderate to strong, and not laminar but somewhat varying in the direction it is coming from. Aiming the output of a power head pump directly at it, even from a distance, is not recommended. Temperature should be around 78°-80° F, pH should be 8.0-8.2, and dKH should be 8-12. In addition, magnesium (1250ppm to 1350ppm) and calcium (normally 420ppm to 450ppm, but up to 480ppm), should be adjusted together and maintained at the right levels. ♦



Photo #3 by Albert Thiel
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