

# AJ

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## AQUA JOURNAL



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SPECIAL FEATURE

## Nature Aquarium Starting with Q



SPECIAL FEATURE

# N<sub>Nature Aquarium</sub>A Starting with Q

*Aquascape Photographs by Takashi Amano  
Text by Masatoshi Abe / Tsuyoshi Oiwa*



## What is attractive about Nature Aquarium?

We feel beautiful when we see healthy, growing aquatic plants producing many air bubbles during photosynthesis. It is also fun to see fish swimming merrily in an aquascape with lush aquatic plants.

Not only the aesthetic appeal that attracts those who see it at a glance, Nature Aquarium also has various invisible attractions. The special feature of this issue discusses in-depth about the attractiveness of Nature Aquarium and know-how on creation of beautiful aquascape in a Q&A style.

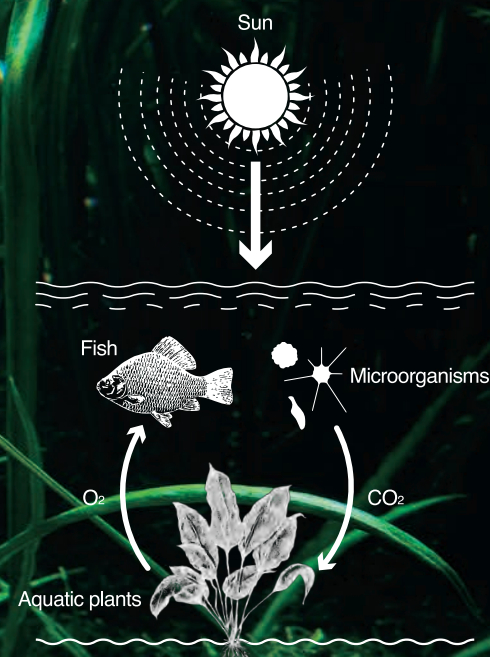
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What are the differences between Nature Aquarium and other layout styles?

[ Ecosystem Cycle Diagram ]



Nature Aquarium has the fundamental concept of "Learn from Nature". It means the incorporation of natural ecosystem and beautiful landscape into an aquarium. As can be seen from this, Nature Aquarium intentionally creates a conducive environment for fish as an "aquascape" and this is something different from other layout styles. Nature Aquarium is a world within an aquarium where fish, aquatic plants and microorganisms interact and coexist in mutual prosperity; and it is an aquarium hobby which connects people and natural environment.



1

What does "Learn from Nature" specifically mean?

From natural landscapes, we can get various information including fallen trees and how plants grow.



Moss grown on driftwood holds time passage and a sense of Wabi-Sabi.

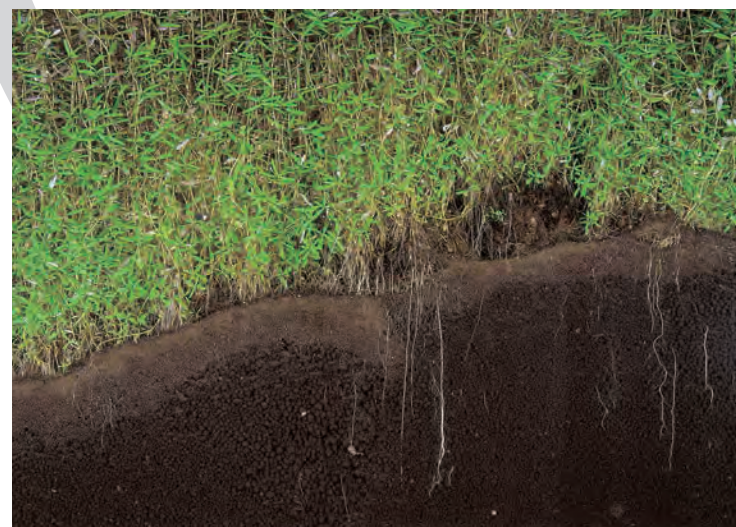
A

Through the observation of real nature, we input the information about the environment, biological diversity and aesthetic factors of landscapes. Then, we holistically combine these information and output it as a layout expression. From ecosystem and biological system supporting the natural environment to the stones we observe on rivers and sea shores, plant distribution including hierarchy in the forest, and rustic and profound landscape, every information and feeling we get when we place ourselves in nature will become a source of our creativity. We can feel Amano Takashi's own view on nature from his Nature Aquarium. It is absolutely because Amano has been observing nature more than anyone else through photographing of natural landscapes.

3

Do we have to change aquarium water and clean the aquarium?

Aquarium water is purified by leaves and roots of aquatic plants. In this way, a healthy environment is created in the aquarium. Dense aquatic plants serve as a filter.



A

Unlike diorama-like layout, Nature Aquarium is not a hobby to express a miniature of actual natural landscape. The most important thing is to create an aquascape layout which perfectly harmonizes with swimming fish and provides a conducive habitat environment for fish.

2

Is a realistic view of natural landscape recreated in Nature Aquarium?



This is an open-type Nature Aquarium for the better habitat environment for fish. A waterfront environment with a seamless link of emersed and submersed aquatic plants is recreated in this layout.

A

The aquarium environment is kept stable by the effect of ecosystem. Yet, periodical water change and cleaning of aquarium is essential to deal with dirt/sludge buildup and growing aquatic plants. Aquarium with lush aquatic plants has self-purification feature by various functions of aquatic plants, such as supply of oxygen by photosynthesis, water purification and inhibition of fish diseases, to name a few. Furthermore, the roots of aquatic plants, together with microorganisms, enhance and stabilize the substrate environment.



We need to fully understand the characteristics of each species of aquatic plants to do any maintenance work including trimming of plants. This will lead to further interest in nature and environment.



# [Ecosystem] Layout Creation

The first important thing to do is to maximize the functions of microorganisms and aquatic plants.

A “Aquarium ecosystem” means that aquatic plants, fish and microorganisms interrelate with each other and maintain a favorable environment. Aquatic plants perform photosynthesis and produce oxygen, and fish and microorganisms take in this oxygen as they breathe. Aquatic plants use CO<sub>2</sub> released by these living organisms and produce oxygen again. On the other hand, fish and shrimp waste accumulated on the substrate are decomposed by bacterial and will eventually be absorbed by aquatic plants as nutrients. In aquarium ecosystem, the balance of environment is maintained by these various biological effects.



Aquatic plants grow vigorously in environment with well-balanced ecosystem. Thriving aquatic plants contribute to better water purification.

1 What is “aquarium ecosystem”?



Aquatic plants perform photosynthesis to produce substances necessary for growth on their own. Oxygen is produced as a by-product of photosynthesis.

2 What should we do to make an ecosystem in an aquarium?

A Ecosystem usually comprises five elements: sunlight, water, air, soil and living organisms. For aquarium, they are light, water, CO<sub>2</sub> and oxygen, substrate and aquatic plant, fish and shrimp; and it is impossible to form a well-balanced ecosystem if even one of them is lacking. To make an ecosystem in an aquarium, it is crucial to prepare proper lighting, filter, CO<sub>2</sub> and substrate systems. On top of it, the aquarium needs to be maintained in a state where bacteria grow and are active in the substrate and filter.

Power Sand displays its beneficial effects as a substrate additive when there is a symbiotic relationship between aquatic plant roots and bacteria.



Bacter 100 and Bacter Ball contain bacteria in a dormant state, and they quickly become active once the aquarium is filled with water.



3 How can we effectively express an “aquascape” in a layout?

Natural underwater aquascape is created by making an aquascape according to the growth of aquatic plants without focusing too much on the detailed expression.



It is important to be conscious of the flow of water and make a stable composition. Be mindful of the flow and orientation of the driftwood branches.

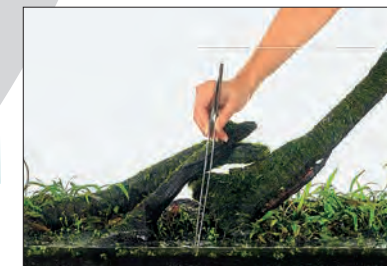
A In natural underwater environment, aquascape is formed by driftwood, stones and aquatic plants exposed to a flow of water. In view of this, we should be conscious of water flow when making driftwood/stone arrangement and keep a good balance between the portion with dense aquatic plants and open space. Tape-like aquatic plants which overhang along water surface are useful to express the flow of water. It is a good idea to use these plants to create an aquascape.

4 At what timing should we plant aquatic plants?



Cover the substrate with a lot of plants to minimize the exposed portion. Bamboo sticks are used to make sure the proper balance of planting space.

A Once the substrate has been set and stones and driftwood have been placed, it is time for planting aquatic plants. Planting must take place before pouring water into the aquarium tank. Planting work will be easier and more comfortable if the water is poured to the level at which the substrate is barely covered with water. Doing this prevents aquatic plants from being buoyant and hands from getting wet. It is advisable to plant aquatic plants as dense as possible from the beginning to have better water purification effect of aquatic plants and facilitate the establishment of aquarium with minimal failure. ADA's Pinsettes are useful for dense planting of aquatic plants.



For dense planting of aquatic plants, pour some water into the tank to have a shallow layer of water and carefully plant with Pinsettes.





What types of aquascapes can be created in Nature Aquarium to express nature?

Cosmetic sand

Expresses the brightness using white cosmetic sand in the foreground.

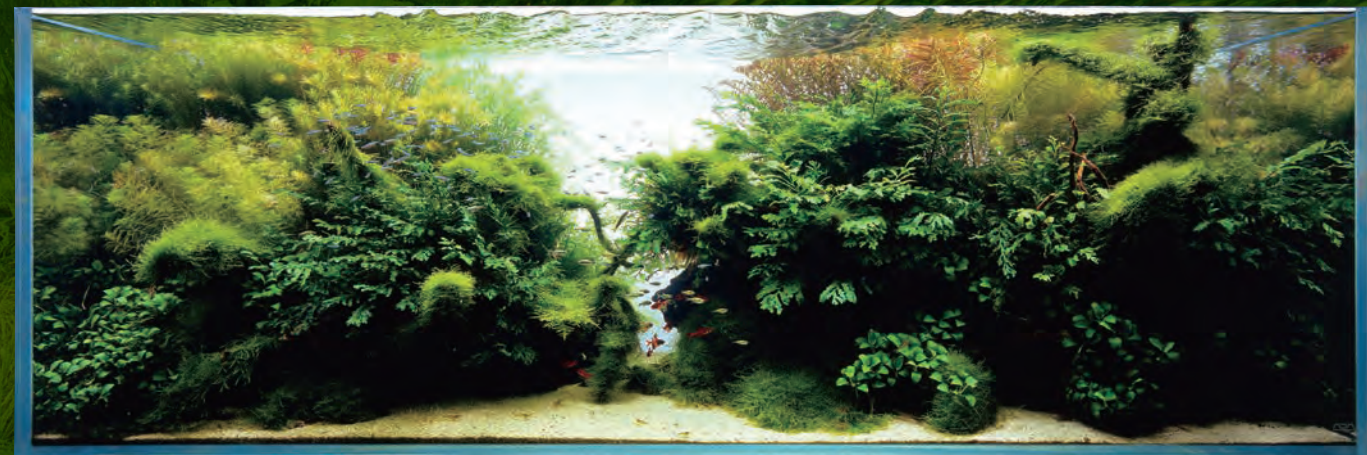
W120xD45xH45 (cm)  
Photographed in 1999



Cosmetic sand

Cosmetic sand leading towards the center background adds depth to the layout.

W180xD60xH60 (cm)  
Photographed in 2013



Driftwood

Bright and colorful stem plants add a joyful touch to the layout.

W60xD30xH36 (cm)  
Photographed in 2001



Iwagumi

Dynamic Iwagumi using Ryuoh stones is enhanced by the arrangement of aquatic plants.

W90xD45xH60 (cm)  
Photographed in 2007



Driftwood

Powerful driftwood layout uses ferns and mosses to produce a natural feel.

W90xD45xH60 (cm)  
Photographed in 2007

Iwagumi

Simple Iwagumi layout using Manten stones

W90xD45xH45 (cm)  
Photographed in 2003



Nature Aquarium started with an Iwagumi layout which used river stones to express an aquascape. After that, a rich variety of aquascapes have been created using various types of stones and driftwood for layout materials and more species of aquatic plants. The recent global trend of cosmetic sand also originated from Nature Aquarium. Open aquarium, which expresses not only underwater aquascape but also waterfront landscape, has been established as one of the unique layout styles of Nature Aquarium.



# [Composition] Choosing an Aquarium Tank

When choosing an aquarium tank, consider the difference in aspect ratio and glass used in addition to the size.

1

What size of aquarium is good for layout making?

W60×D30×H36 (cm)  
Photographed in 2005

Standard 60cm aquarium tank is easy to handle and good for planted aquarium beginners.



W90×D45×H45 (cm) Photographed in 2005

The use of 90cm aquarium tank with more depth gives greater latitude for layout expressions such as perspective.

A

Aquarium tank with W60×D30×H36 (cm) is ideal for Nature Aquarium beginners. 60cm aquarium tank has been the most standard size and is compatible with a wide range of equipment. This handy size of aquarium also has the advantage of the availability of layout materials in appropriate size. Meanwhile, aquarium tanks with W90×D45×H45 (cm) or larger are often used to create a full-scale layout. For upgrading from 60cm tank, it is recommended to use a 90cm tank which has a good balance and is useful for layout making.

3

What are the difference between Cube Garden and Cube Glass?

The concept of Cube Garden is "an aquarium tank which appears like aquascape elegantly cut into a cube shape".



A

Appropriate layout type varies depending on the aspect ratio of aquarium tank. The standard aspect ratio, such as that of W60×D30×H36 (cm) and W90×D45×H45 (cm) tank, is very stable and suitable for any type of layout. Panoramic aquarium tank such as W120×D45×H45 (cm) and W180×D60×H60 (cm) tanks are suitable for Iwagumi layout featuring large open space and driftwood layout created based on the wide composition. On the other hand, tall aquarium tanks, such as W90×D45×H60 (cm) tank, are suitable for dynamic layout having driftwood raised to a steep angle or Iwagumi layout with a standing large main stone (Oyaishi).

2

How does the aspect ratio of aquarium tank relate to the layout?



Panoramic aquarium tank is also suitable for wide layout evoking an image of extensive grassland.

W180×D60×H60 (cm)  
Photographed in 2006



W90×D45×H60 (cm)  
Photographed in 2010

A layout with high mound of substrate and standing driftwood in a tall "high-type" aquarium tank

Cube Glass      Cube Garden



Silicon work is practically invisible on both of the tanks. Cube Garden has almost no color.

A

Cube Glass and Cube Garden have different shades of color. Cube Glass is made of ordinary plate glass with a shade of turquoise, while Cube Garden uses clear glass with almost no color. This color difference has an impact on how the aquascape looks, and Cube Garden makes aquascape appears sharper and clearer. Cube Garden with practically invisible silicon work was born out of the pursuit of ideal aquarium tank for Nature Aquarium.



# [Environment] Choosing Aquarium Equipments

Choice of appropriate aquarium products is important for enhancement of light, water quality and other environments of Nature Aquarium.

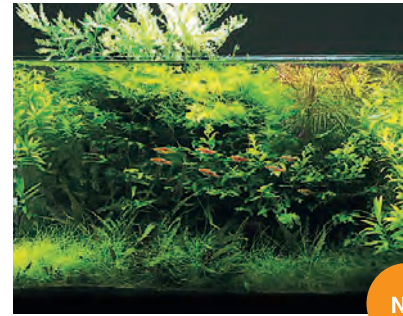
1

Which of the following lamps is suitable for aquarium lighting: metal halide lamp, fluorescent lamp or LED lamp?



NAG

NAG using metal halide lamp brings out vivid green color of aquatic plants. On the other hand, red color may look a little dull.



NA

NA Lamp Twin, a twin fluorescent lamp, features excellent color rendering properties and offers the natural red and green colors of aquatic plants.



LED

LED lamps used on AQUASKY are yellowish in color. They provide sufficient light intensity for healthy growth of aquatic plants.

A

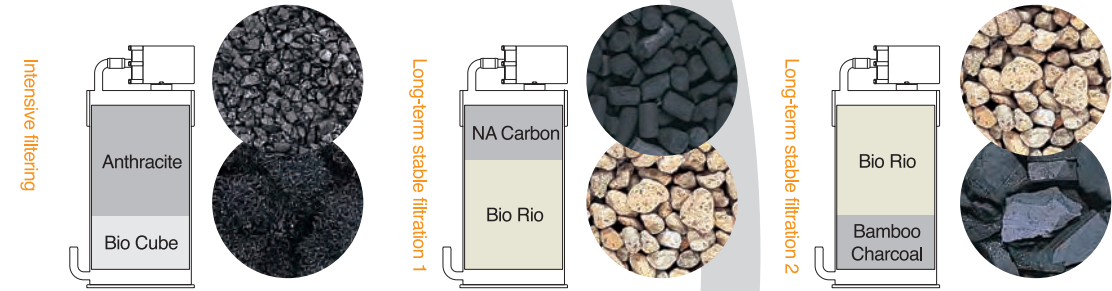
Each lamp has its own features. You can choose one according to the aquarium tank size or your preferred style. An advantage of metal halide lamp used for Solar I is high light intensity which can adequately illuminate even large and deep aquarium tanks. Fluorescent lamps such as NA Lamp Twin 36W have excellent color rendering properties and offer good light dispersion in water. LED lamp features excellent luminous efficiency (energy-saving effect) and its compact size. LED lamp is suitable for 60cm or smaller aquariums as its cost will be high if the lamp has many LED diodes. At the current moment, the color rendering properties of LED lamp fall short of those of metal halide and fluorescent lamps. Solar I and Solar II are recommended even for 60cm tank if you want to enjoy vivid colors of fish and aquatic plants.

2

What is the best combination of filter media?

A

Combination of filter media varies depending on the condition of aquarium and elapsed time since the initial setup. Aquarium water easily becomes dirty particularly in the initial stage of the aquarium. In this period, the filter media which physically and chemically remove contaminants should be used. This is why Super Jet Filter ES-150, ES-300 and ES-600, the popular filters among aquarium beginners, come with anthracite and Bio Cube. However, anthracite will eventually cause clogging as they are used for a long period of time. To avoid this problem, it is advised to replace anthracite with Bio Rio approximately one month after the setup of aquarium when Bio Cube has been colonized with beneficial bacteria and biological filtration starts to fully function. When another one month has passed and Bio Rio has already been colonized with bacteria, Bio Cube should be replaced with Bio Rio so that Bio Rio will be the only filter medium used. Doing this prevents clogging problem and leads to long-term stable filtration.



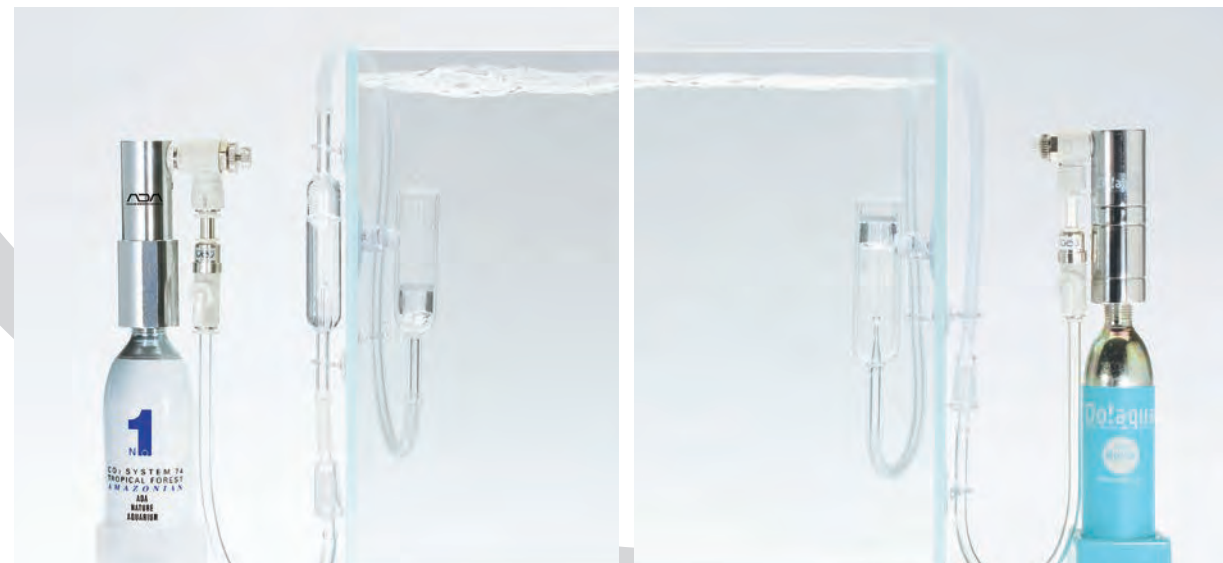
Fine grains of anthracite are effective to remove organic compounds and other contaminants during the initial stage of aquarium.

Set NA Carbon on top of Bio Rio to improve yellow water caused by driftwood.

Bamboo charcoal also has the effect of creating uniform water flow within the filter.

3

What are the differences between CO<sub>2</sub> Advanced System and CO<sub>2</sub> Starter Kit?



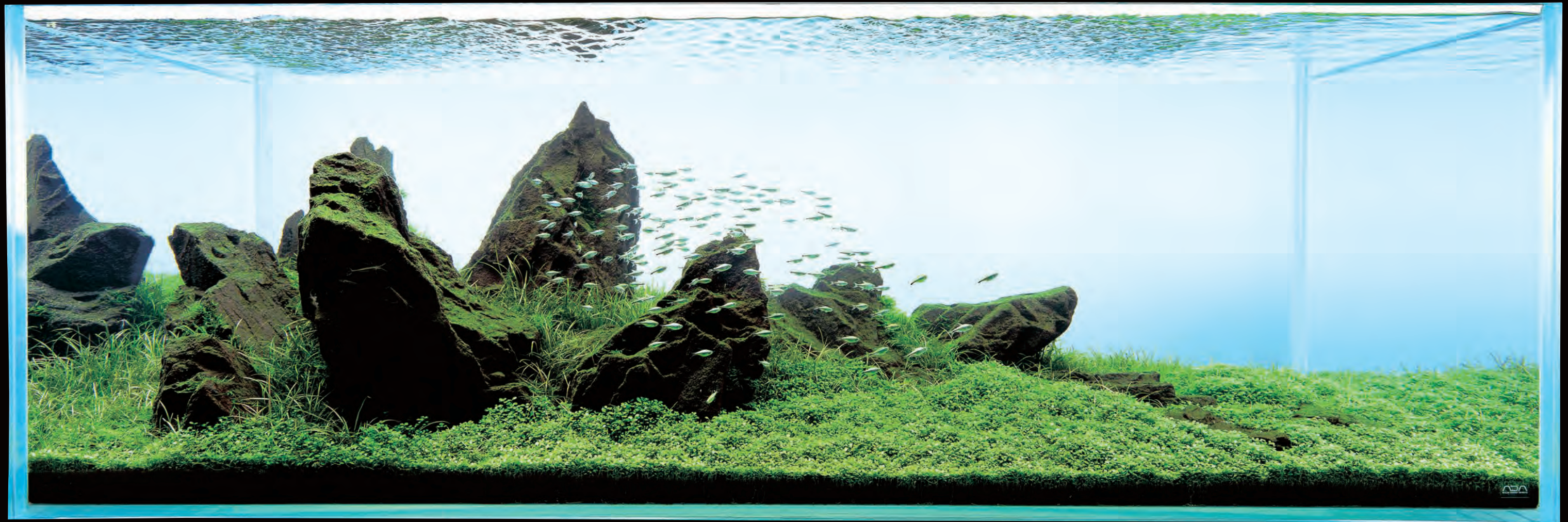
CO<sub>2</sub> Advanced System comes with standard Pollen Glass and CO<sub>2</sub> Bubble Counter.

A

Besides the glassware used, the differences between CO<sub>2</sub> Advanced System and CO<sub>2</sub> Starter Kit include expandability and the compatible CO<sub>2</sub> cartridge. CO<sub>2</sub> Advanced System uses Tropical Forest containing 74g of CO<sub>2</sub>. Tropical Forest has three additional features of deodorization, fragrance and sterilization to reduce the odor of aquarium. CO<sub>2</sub> Advanced System can also be connected to CO<sub>2</sub> Tower (CO<sub>2</sub> system for large aquarium tank) by adding a CO<sub>2</sub> Adapter. On the other hand, CO<sub>2</sub> Starter Kit is compatible only with CO<sub>2</sub> Bottle containing 35g of CO<sub>2</sub>. CO<sub>2</sub> Starter Kit is recommended to those who seek a simple CO<sub>2</sub> system for a small aquarium while CO<sub>2</sub> Advanced System is recommended to the hobbyists who are going to make a full-scale planted aquarium in a 60cm tank.

CO<sub>2</sub> Starter Kit comes with a CO<sub>2</sub> diffuser having a built-in counter. \*CO<sub>2</sub> Starter Kit is available only in Japanese market.





Sansui stone Iwagumi layout  
with a perfect blend of  
aquascape and  
terrestrial landscape

Nature Aquarium expresses beauty of nature in the form of aquascape. Some Iwagumi layouts depict magnificent terrestrial landscapes, such as mountain range and scenery of many odd-shaped rocks, and they blend well with aquascape by the presence of stone arrangement, soil mound and aquatic plants which create a flow of water. Sansui stone is the layout material which evokes both aquascape and terrestrial landscape.

Tank size: W180xD60xH60(cm) ©Takashi Amano





Sansui stone is reminiscent of rocky hill in Sansui painting. Nature Aquarium's Iwagumi layout depicts underwater scenery that perfectly blends with fish while leaving an impression of a terrestrial landscape.

©Takashi Amano





# Stone Arrangement Shows Water Flow while Making the Best Use of Sansui Stone's Features

Sansui stone with timber-like layered cross sections has unique features which cannot be found on other stones. As its name suggests, Sansui stone is reminiscent of rocky hill in Sansui painting. This impression is further enhanced by using different sizes of these stones in combination. In this layout, mosses are wrapped around and attached to the sharp edges of the stone to show a water flow from left to right.

Sansui stone features timber-like layered cross sections. To make sure that the stone's unique shape is visible, just a moderate amount of mosses are attached only to the sharp edges.

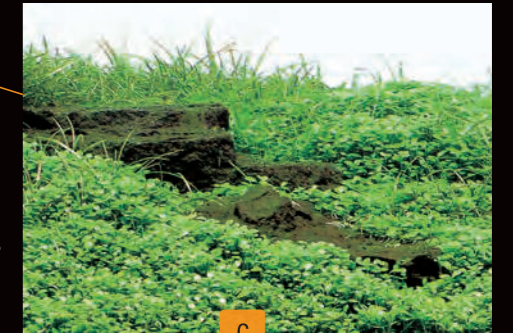


Stone arrangement



B

A large Sansui stone used as the main stone (Oyaishi) is tilted to express the flow of water. Its presence stands out with the help of the stones around it.



C

Sacrificial stones (Suteishi), which are almost buried in aquatic plants, are also an important factor to express water flow and add a natural touch to the Iwagumi layout.

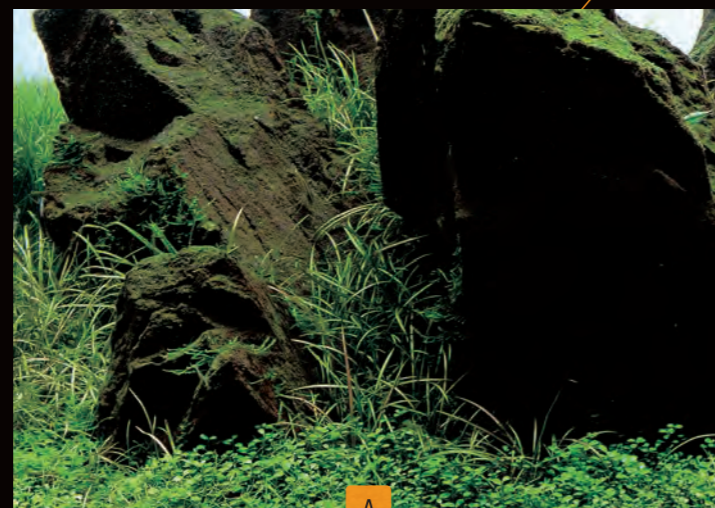


Composition



Completion

Echinodorus tenellus is planted between the stones to add a natural feel to the layout. A moderate amount of moss attached to Sansui stones produces Wabi-sabi sentiment.



A

You can find the video of this aquascape on ADA view: [http://www.adana.co.jp/AJ/229/m1\\_180/](http://www.adana.co.jp/AJ/229/m1_180/)



## DATA

Tank	Cube Garden W180×D60×H60 (cm)
Lighting system	Grand Solar I (NAG-150W-Green ×1, NA Lamp Twin 36W x 2) × 3, Lighting for 10 hours a day
Filter system	Super Jet Filter ES-2400 (Bio Rio L and NA Carbon)
Substrate	Aqua Soil-Amazonia, Power Sand Special L, Bacter 100, Clear Super, PENAC W & PENAC P, Tourmaline BC
CO <sub>2</sub>	Pollen Glass Beetle 500, six bubbles per second with CO2 Beetle Counter (CO2 Tower used)
AIR	Aeration with Lily Pipe P-6 for 14 hours while lighting is OFF at night
Additives	Brighty K & Green Brighty STEP2
Water change	1/3 water change once a week
Water quality	Water temperature 25°C pH: 6.8 TH: 20mg/ℓ

Aquatic plants	Echinodorus tenellus Glossostigma elatinooides Fontinalis antipyretica
Fish species	Hemigrammus armstrongi Crossocheilus siamensis Otocinclus sp. Caridina japonica





Why is CO<sub>2</sub> supply necessary for Nature Aquarium?



By promoting photosynthesis, aquatic plants grow faster and the environment in the aquarium becomes better. Aquatic plants take in CO<sub>2</sub> and in turn, produce a lot of oxygen through photosynthesis. Since oxygen is used by fish, shrimp and microorganisms for breathing, the environment with more oxygen is better for living organisms and the water quality will be stable as filter bacteria become active. Appropriate amount of CO<sub>2</sub> supply is effective to maintain the ecosystem in the aquarium in good condition.



# [Plant Growth] Growing Aquatic Plants

Healthy growing aquatic plants are beautiful. Appropriate planting and trimming are important for plants' healthy growth.

1 What are the minimum necessary things to grow healthy aquatic plants?

A

Substrate where aquatic plants spread their roots and lighting which supplies light to plants are crucial. Substrate built with Aqua Soil-Amazonia and Power Sand is the best for optimum growth of plants and also suitable for long-term maintenance of the aquarium. For lighting system, AQUASKY and the Solar series offer adequate light intensity. In addition to this, install a filter system for maintenance of good water quality and supply CO<sub>2</sub> and liquid fertilizer to grow lush aquatic plants in good condition.



This is the full Nature Aquarium system for healthy growth of aquatic plants. A simple, sophisticated design is adopted throughout the entire system.

A more perfect layout can be created by the use of Pinsettes which help steady planting.



2 What type of tweezers is suitable to plant aquatic plants?

A

ADA Pinsettes with an easy-to-handle length are suitable for planting aquatic plants. The Pinsettes provide stress-free planting experience even in long hours. Pinsettes L are recommended as your first tweezers. Pro-Pinsettes Grip type is ideal for planting of clump-type aquatic plants which are hard to hold such as Cryptocoryne. There are similar non-genuine tweezers in market. However, you may not be able to hold aquatic plants properly with these tweezers due to their tips not matching perfectly or excessively hard spring, which can result in damage to stem or roots of aquatic plants.



With Pinsettes having perfectly matching tips, you can easily hold fine foreground plants and do the precise planting.

3 What is an effective way of applying liquid fertilizers?

A

It is effective to add liquid fertilizers, such as Brighty K and Green Brighty STEP 1, to the aquarium when turning on the aquarium light in the morning. When the light is turned on, aquatic plants start their photosynthesis and actively absorb nutrients. Adding liquid fertilizers for a few days' dosage in one shot is not effective because nutrients may be oxidized or absorbed onto the filter media. Make it a habit to apply liquid fertilizer every morning for the good health of aquatic plants.



Brighty K supplies potassium crucial for the growth of aquatic plants. Apply Brighty K daily and regularly.

4 Can we maintain aquatic plants just by trimming them?



Stem plants can be maintained for a long time by early trimming. Pro-Scissors are very useful for large aquariums.

A

Stem plants and foreground plants can be maintained for a certain period of time by repeated trimming (see the photos). However, the plant stem and roots get old in the course of repeated trimming and this slows the formation of new buds. For this reason, it is necessary to pull the plants from the substrate and replant the young and healthy part of aquatic plants (i.e., upper part of the stem of stem plants). After the plants are removed from the substrate, add some new Aqua Soil. For shade plants such as ferns and Cryptocoryne, snip off the large old leaves to maintain them.



Scissors with curved blades, such as Pro-Scissors Wave, are suitable for trimming foreground plants.



1

What fish can be added to aquarium?



Trigonostigma espei (Lambchop Rasbora)



Pterophyllum salare (Angelfish)

A large aquarium with a water depth of at least 60cm is required to keep angel-fish. Angelfish cannot be kept together with shrimps as this fish attack shrimp.



Paracheirodon innesi (Neon tetra)

A

Small tropical fish which seldom eat aquatic plants are suitable for aquarium. Angelfish and Discus can be added to a large aquarium. The fish that swim very actively, or dig the substrate soil as its nature, or harm other fish are not suitable to be kept in an aquarium. When mixing different species of fish in an aquarium, pay attention to their preferred swimming levels and food consumption rate.

2

What should we keep in mind when introducing new fish into an aquarium?



Before introducing purchased fish into an aquarium, float the plastic bag holding the fish in the aquarium for a while.

A

If the temperature and pH greatly differ between the water in the plastic bag and aquarium water, thorough acclimation is necessary. In addition, the use of additives containing mucosa protection ingredients, such as Rio Base and be Relax, and Phytan Git containing disinfectant agent are recommended in view of the fact that the newly arrived fish sometimes have damaged mucous membrane on their snout and body surface due to rough contact with other fish when scooped with a net or in the plastic bag. Observe the newly introduced fish closely immediately after they are added to the aquarium.

3

What fish food should we use and how do we feed them?

A

SUIKEI FOOD is a flake-type fish food for a versatile range of fish species. For fish that eat only fine-granule food or avoid eating food floating on the water surface, Fish Food AP series and AP Gold series can be an option. Feed the fish only an amount that they can consume in a few minutes while observing how they eat. Ideal feeding of granule-type AP series is made easy with AP Glass.

It is important to choose fish food according to the size of fish's mouth and how they eat food.



The point of feeding is to feed an amount that is sufficient for all of the fish with minimum amount of leftovers.



Aeration can be done easily by fixing Lily Pipe in a position where almost half of its outflow port comes above the water surface.

A

Aeration is not necessary during the daytime when aquatic plants perform photosynthesis and produce a lot of oxygen. On the other hand, it is safer to do the aeration after the lighting is turned off at night because aquatic plants respire but do not perform photosynthesis during night time. When the dissolved oxygen level decreases, the activities of filter bacteria slow down and it can lead to an oil film on the water surface and cloudy aquarium water.

4

Is aeration necessary even for aquarium with fish?





How long can we maintain the layout?



More than 10-year old gigantic Nature Aquarium (W400xD150xD150cm)

A

Nature Aquarium created based on the concept of long-term maintenance can be maintained for years or even more than a decade. To maintain Nature Aquarium for a long period of time, appropriate maintenance work is crucial. The layout is maintained as well as trimming and replanting. If a part of Aqua Soil is replaced with new one during this trimming and replanting process, healthy growth of aquatic plants can be maintained. Other effective approaches to achieve long-term maintenance of layout include making use of slow-growing shade plants such as ferns and Anubias and the use of cosmetic sand or Aqua Gravel as the substrate material for the foreground portion of aquarium. It is also important to install a filter with a capacity slightly more than the adequate capacity.





# [Maintenance] Maintenance of Aquarium

Appropriate maintenance work is necessary for long-term maintenance of aquarium. Remove algae to keep the aquascape attractive.

**A**  
An excessive amount of sludge buildup on the substrate will lead to unhealthy plant roots and growth of blue green algae. An effective way to avoid these problems is to suction out sludge on the substrate during water change. Brown sludge can be suctioned out by bringing the tip of the water draining hose close to the substrate. Sludge can easily build up particularly at the substrate area covered with dense foreground plants. Focus on this area for sludge removal.



If sludge buildup on the substrate surface is left untreated, it may cause poor permeability of the substrate and increased growth of blue green algae.

**1**  
What should we do to maintain the substrate for a long time?



Sludge easily builds up between dense foreground plants. Suction out the sludge with a hose during water change.

**2**  
What should we do to keep the aquarium glass surface clean?

**A**  
The easiest and most secure way to remove algae on glass surface is to scrape them off with Pro Razor. You may observe white marks on the top portion and outer glass surface of aquarium after water is dried. This mark is caused by calcium carbonate and magnesium carbonate and it can be removed by dissolving with acid. Wipe off the mark slowly with a cloth or tissue paper dampened well with 'be Soft'.

Stubborn algae on the glass surface can easily be removed by scraping off with Pro Razor.



**Before treatment**  
Dried water drops leave a white mark due to the calcium carbonate contained in them.



**During treatment**  
Dissolve the mark and wipe it off with a cloth dampened with 'be Soft'.



**After treatment**  
Stubborn white mark was removed and the glass surface became clean.



**3**  
How do we remove black beard algae?



Drain water from aquarium and apply Phyton Git diluted with the same amount of water directly to the leaves with a brush. Algae will wither away.

Phyton Git



Beard algae on Anubias leaves are hard. Even Caridina japonica do not feed on them.

**A**  
Remove algae on stones and driftwood by scraping them off with Pro Picker or applying Phyton Git with a brush. When it comes to the plant, these methods can be used only on hard Anubias leaves (be careful if other aquatic plant leaves come into contact with Phyton Git). It is also advisable to add algae eater *Crossocheilus siamensis* to aquarium to prevent black beard algae.

**4**  
How do we remove filamentous algae?



Filamentous algae tangled with aquatic plants can also be removed by twisting them around a toothbrush.



Lightly rinse and clean filter media with aquarium water in a pail and then put them back in the filter.



**A**  
Basically, filamentous algae are removed by suctioning them out together with water. If they are tangled with aquatic plants, it may be faster to trim the plant. When filamentous algae grow in aquarium, the filter media are often dirty. It is advised to clean filter media at an earliest opportunity. Filamentous algae are vulnerable to phosphate. Add 'be Clear' to the aquarium to supply phosphate in order to prevent growth of filamentous algae.