

Keeping of small polyp stony corals from the genus
Acropora in the RIO Aquarium

(Опыт содержания содержания жёстких мелкополипных кораллов из
рода Acropora в Океанариуме РИО)

Ideal Parameters for Reef Aquarium:

Parameters	Aquarium recommendations	Ocean Values
Calcium	380-450 ppm	420 ppm
Alkalinity	8 - 12 dKH	7 dKH
Magnesium	1200-1400 ppm	1280 ppm
Phosphate	0.01-0.03/0.01-0.1 ppm	0.005 ppm
Nitrate	1-10/1-20 ppm	<0,1 ppm (varies)
Nitrite	0.0 ppm	<0.0001 ppm (varies)
Ammonia	0.0 ppm	<0.1 ppm (varies)
Salinity	32 – 35 ppm	34-36 ppm
Temperature	24-26 °C	Variable
pH	8.1-8.3/7.8-8.4	8.1-8.3 (varies in lagoons)
ORP	250-400 mV	variable
Iodine	0.06 ppm	0.06 (varies in lagoons)
Strontium	7-9 ppm	8 ppm
Iron	Below Kit Detection	0.000006 ppm
Boron	< 10 ppm	4.4 ppm
Silica	< 1 ppm	0.06-2.7 ppm



Essential conditions

stability

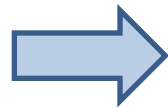
regularity

continuity

planning

control

human factor



Consequences

healthy

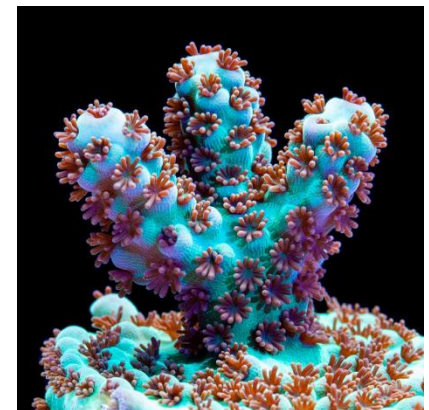
colorfulness

eating

growth

reproduction

attractiveness



Did you know, in the wild, around 99% of Acropora corals die within the first year?

REASONS:

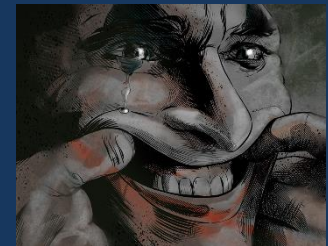
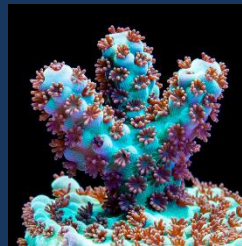
- CLIMATE CHANGES
- CHALLENGE CONDITIONS
- ADAPTATION
- WATER QUALITY
- OVERFISHING
- POLLUTION

Bad future



IF EVERYTHING IS SO SIMPLE AND THERE ARE MANY EXAMPLES OF CONTENT WHY IS IT DIFFICULT?

- phytoplankton
- zooplankton
- amino acids
- vitamines



ABIOTIC FACTORS FOR STRONG CONTROL

- **Temperature** (cannot tolerate extreme heat and extreme cold)
- **Alkalinity** (cannot tolerate extreme growth and level drop)
- **Currents and waves** (high level of currents)
- **Lighting** (very high illumination)

ACROPORA CORAL REEF TANK IN RIO

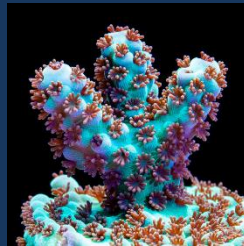
- Tank size (mm) 3000/800/1200
- 2800 liters
- 6 led lighting + 4 T5 lighting
- 6 wave pumps
- kalkwasser
- calcium reactor
- skimmer
- UV



There are the same conditions, but the state of health is different



RESUME



- strongly organized LSS
- stability control
- monitoring systems
- minimize human factor



Thank you
for your attention

