Pneumatic Rain

The method described here has certain benefits compared to methods using water pumps: It is cheap. It does not pose any hazard to the inhabitants of the terrarium. It is fairly foolproof (correctly installed). Both water and air is blown into the terrarium. It can be run continuously without overheating. There is no damage should the system run dry. It needs no transformer, or special electrical components. The pump can be placed where it is out of the way and creates least disturbance.

Drawback: It does not produce mist.

You need

- An aquarium air pump, preferably one of the smaller types.
- Plastic tubing.
- A T-fitting.
- A back-valve.

All these items can be bought in shops selling aquarium utensils.

You may also need:

A water reservoir and nozzles.

The principle is simple:

When the pressure in the "air/water mix" tube is low, water can enter the T-fitting, and be blown up through the tube. When pressure builds up in the system the valve will prevent water from flowing back into the reservoir. This forces water and air to go up into the terrarium. When the water has been blown out through the nozzle, the pressure will fall and a new portion of water will flow into the T-fitting. A pulsating rain will result.

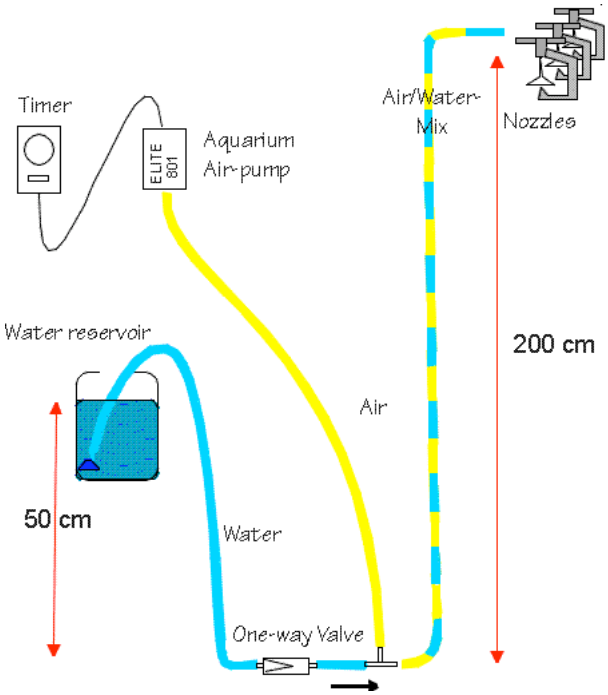
Variants

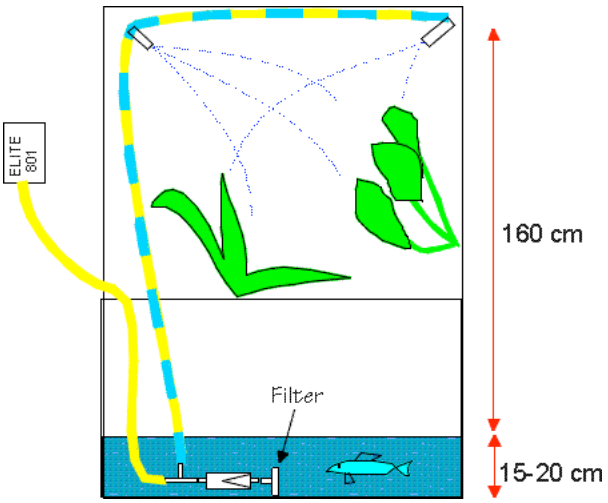
- A common variant has the rain falling from the top of the terrarium, either through many "micro-drip" nozzles, or through rotating sprinklers (Gardena makes both types).
- Sometimes it is preferable to have the water sprayed upwards from a lower position, e.g. on to a cliff to create a small waterfall. In such cases a funnel-shaped nozzle is a good choice.
- Another variant is the "Frog Jacuzzi". The tube delivers water and air into a small pond, which then has clean water at all times.

Circulating water - or "One-Time-Through"

A false bottom and an outlet from the lower part of the terrarium permits either the reuse of the water, or the one-time through method. If one wants a 15-minutes rain to fall from the top of the terrarium each day, the use of clean (=new) water is recommended. A 10 litre water bottle can last for 3-7 days, depending on how the system is trimmed. The terrarium must have an outlet so that flooding is avoided.

With a circulating system water is pumped up e.g. to form a waterfall, and then runs down through the false bottom - preferably filtered through a sand layer on its way - to be reused again and again. Water that evaporates or is taken up by the plants has to be substituted. If the volume under the false bottom is large, or if the vivarium is in the form of an aqua-terrarium, the adding of water has to be done only occasionally.


Timer
ELITE 801
Aquarium Air-pump
Air/Water-Mix
Nozzles
200 cm
Water reservoir
Air
50 cm
Water
One-way Valve


ELITE 801
160 cm
Filter
15-20 cm