

# nitrate limitation

3 steps to naturally unlock the deepest reds

# 1

## BASELINE CHECK

For this technique to work, baseline NO<sub>3</sub> / nitrate levels (no ferters and additives) **must be below 5ppm** to start.

If you exceed the 5ppm baseline:

- Take 3+ readings across > 3 days. NO<sub>3</sub> levels fluctuate.
- Measure tap water. May need RO system.
- Reduce feeding and/or fishload. Fish food and waste are the primary #1 contributors to nitrate levels.
- Increase plant mass significantly and retake readings after a week.

In a balanced eco-system, nitrates produced by fish and other animals are quickly absorbed by plants.

# 2

## APT PATHWAYS

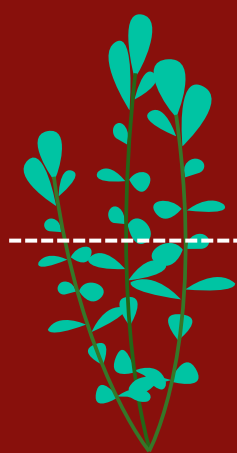
**NEW TANK:** Use APT1/ Zero for the first 3 months with fresh aquasoil. Add APT Jazz at the start for a super-boost, or add to rejuvenate substrate after 3 months.

**MATURE TANK (> 3 MTHS):** Use APT 3 / Complete, and add APT Jazz to rejuvenate substrate. If growing only rooted plants in aquasoil, OK to continue with APT 1/ Zero.

# 3

## 2HR HAIRCUT: 3X

This refers to the 2Hr Practice of trimming and replanting the healthy tops (~4") of stem plants, discarding old stems and roots. Repeat this process 3X for best results, and every time the older stems start to deteriorate.



1 Replant healthy tops after they grow tall.



2 Discard old stems and roots.

The benefits of Nitrate Limitation are most apparent for *Rotala rotundifolia* and its variants: *colorata*/H'ra/etc, *Rotala Goias*, *Hygrophila pinnatifida* & *H. araguaia*, *Ludwigia arcuata* & *Ludwigia brevipes*.

## DEDICATED TO YOUR SUCCESS

Check out [this page](#) for more details.



THE 2HR AQUARIST