

Struvite Basics

Struvite has an NPK-value of approximately 6:29:0:(Mg)10.

Plant nutrient requirements: N>=K>P>Mg

Advantages:

- Volume and weight of carrying urine is reduced
- Nutrients can be stored over time
- Handling is more user-friendly in powder form
- Bio-available: The nutrients in struvite can be readily absorbed by the plant
- Slow-release: Due to its low solubility, struvite guarantees a slow but steady nutrient supply
- Highly pure: contaminants (e.g. pharmaceuticals or heavy metals), which may be present in the urine, do not precipitate with the struvite

Disadvantages:

- High cost for the set-up of the reactor and the urine collection system
- Dependent on the socio-cultural acceptability
- Limited knowledge on the part of the farmers

a city of 3 million like Montreal, wastes 75 000 kg of potential fertilizer every day, none of which is recovered by sewage treatment.

165000# = 82.50 Tons Every Day!

Red Worm Basics

double population every 90 days

hermaphroditic

photophobic

1# equals 1000 worms

eats their weight every day

Growing Power, Will Allen, Milwaukee

Biogas Basics

anaerobic fermentation

600 Btu per cf gas available

1 cow produces 50 gal gasoline equiv per year

