VETIVER SYSTEM FOR ALGAL BLOOM CONTROL

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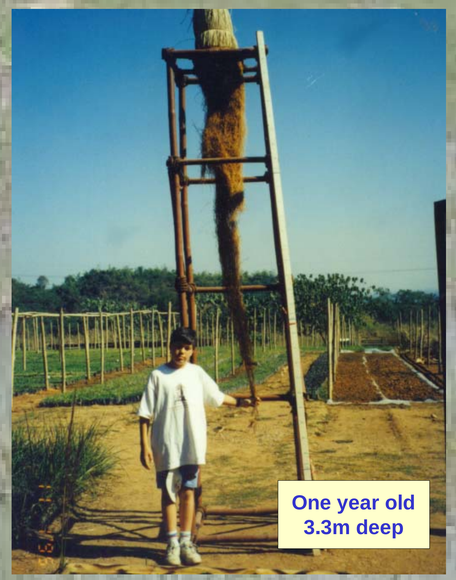
The following extraordinary characteristics make vetiver grass highly suitable for algal bloom control:

* Higher evapo-transpiration rate than most wetland plants
* Very high and fast absorption rate of nutrients, particularly Ammonia, total Nitrogen and Phosphorus
* Highly tolerant to salinity, acidity, alkalinity and sodicity
* Highly tolerant to heavy metal toxicity
* Highly tolerant to water logging and inundation



One year old 3.3m deep

Hydroponics

Left: Sewage effluent infested with Blue-Green algae due to high Nitrate (100mg/L) and high Phosphate (10mg/L)

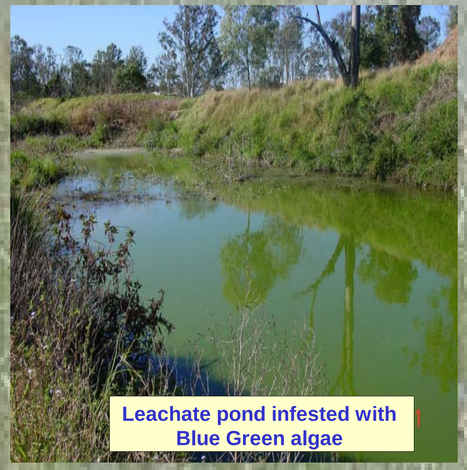
Right: Same effluent after 4 days treatment with vetiver, reducing N level to 6mg/L (94%) and P to 1mg/L (90%)

Removal rates of pollutants from polluted water (China)

Pollutants		River 1*	River **	Tap water
Total N	Concentration (mg/L)	13.8	10.5	0.1
	Removal %	71.0	58.1	
Total P	Concentration (mg/L)	0.94	1.03	ND
	Removal %	99.3	93.7	

* After 3 weeks ** After 2 weeks ND Not Detectable

Extensive one year old root system



Leachate pond infested with Blue Green algae

Wastewater Purification

Two month old roots (72cm) from a floating platform

Vetiver on a floating platform to treat waste water of a pig farm at Dong Nai Province,Vietnam

One month old vetiver in a pig farm pond in Vietnam

Pull in for repair and maintenance