

Very adaptable.

Prefers sunny, hot, and humid tropical climate

Tolerates:

- Acid, alkaline, or saline soils,
- Drought or flooding, (4) and
- High levels of heavy metals such as lead, aluminum, cadmium, arsenic, zinc, and manganese. (1)

It is also able to survive freezing and fire. (4)

Promoted by Vetiver Network International

Used in 100 countries

Agriculture

- Erosion control
- Water conservation
- Mulch

Engineering

- Slope stabilization
- Roads
- Dams and ponds
- Drains, Guts, and Gullies

Disaster Mitigation

- Landslide Prevention
- Land and water Rehabilitation – phytoremediation
- Coastal Protection

Erosion Control



Planted as a hedge along a contour line, vetiver forms a filter barrier that:

- Slows down the flow of runoff water so that the erosive velocity of water is decreased,

- Traps sediment behind the hedge.
- The sediment depositions increase and the slope gradient becomes less,
- Vetiver continues to grow and maintains effectiveness as these natural terrace risers gain height.
- Able to reduce soil erosion by up to 90%
- Reported soil loss reductions of over 100tons/ha have been reported
- Also acts as a windbreak,

Water Conservation



Vetiver Network International

Vetiver hedgerows will:

- Reduce water runoff by as much as 70% particularly in extreme rainfall events
- Improve water infiltration, and
- Increase soil moisture

Mulch



- Reduces Soil temperature by as much as 15 degrees.
- Increases SOM
- Prevents weeds

Roads



Vetiver Network International

- Stabilizes banks and edges of roads, gullies, guts.
- Prevents landslides and collapse of edges

Ponds



Vetiver Network International

- Stabilizes banks
- Prevents erosion and sedimentation
- Remediate pollutants

Storm Water Management



- Protects Guts and gullies
- Diverts water flow
- protects banks from water running over

Phytoremediation



- Vetiver's roots absorb heavy metals, Nitrogen, phosphorous, bacteria, and antibiotics from soil and water.
- It can be used to remediate polluted soil or water.

Coastal Protection



- Prevents drifting of sand
- Prevents erosion of the beach
- Protects the coast, mangroves, and reefs from pollution

Vetiver for Crop Management



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- Experimental works in India with vetiver grass showed significant increase of soil moisture and crop yields

Resources.

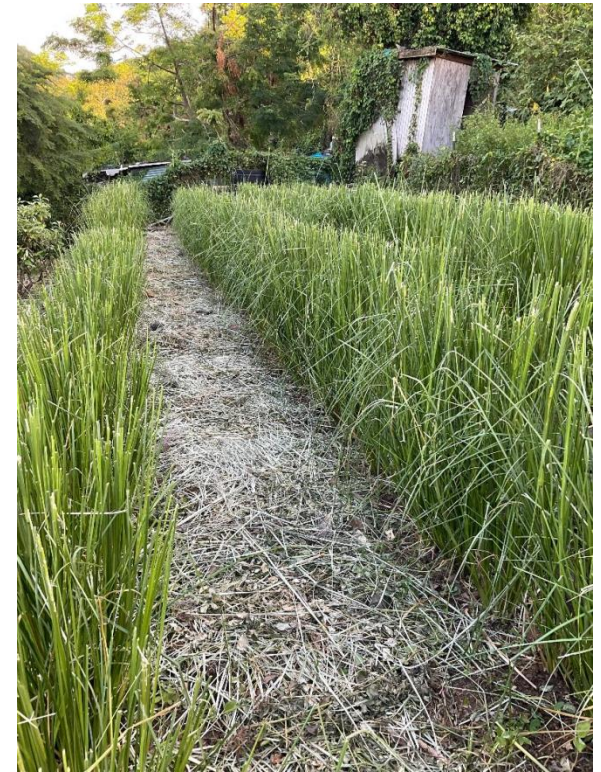
1. Guayacan Farms STX 340-998-7333
guayacanfarm@gmail.com
2. Laura Martin STT 240-277-2201
LM6419@aol.com
3. We Grow Food, Inc. 340-727-6684
<https://wegrowfoodinc.org/>
4. Vegetation for Erosion Control – A Manual for Residents. Coral Bay Community Council.
https://www.bviark.org/uploads/4/3/0/9/43091807/cbcc_landscape_manual_-_final_7_17_reduced.pdf
5. Vetiver for Soil and Water Conservation
https://www.youtube.com/watch?v=FzzB0G2_Aoc
6. Vetiver Network International - Vetiver.org
7. Vetiver facebook page

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Vetiver Grass for the Virgin Islands



- *Chrysopogon zizanioides* (L.) Roberty (1)
- Cultivar: Sunshine
- It is a fast-growing noninvasive tropical perennial bunch grass
- Develops an extensive fibrous and dense root system (6-12 ft deep).
- This root system does not produce lateral roots therefore the bunches do not spread laterally.
- It has associated nitrogen processing mycorrhiza, remains green throughout the year