



TREEFREE

BIOMASS SOLUTIONS INC.

NILE FIBER™

ONE PRODUCT, MANY SOLUTIONS.



THE ADVANTAGES OF NILE FIBER™ AS A BIOMASS CROP

Due to its very rapid growth (rates of 4-6 inches per day are common in the growing season), Nile Fiber™ is one of the most efficient plants available for removing carbon dioxide from the atmosphere and “fixing” it into plant tissue, above and below ground. This process is known as **carbon sequestration**, and it is fundamental to the mitigation of global climate change currently induced by excessive combustion of fossil fuels.

TreeFree is forging relationships with government, community, universities, public and private companies to launch an aggressive effort to confirm and further develop Nile Fiber's™ potential as a critical part of the solution to **energy dependency, replacing fossil fuels, protecting, enhancing and sustaining the environment** and provide economic development opportunities for rural communities.

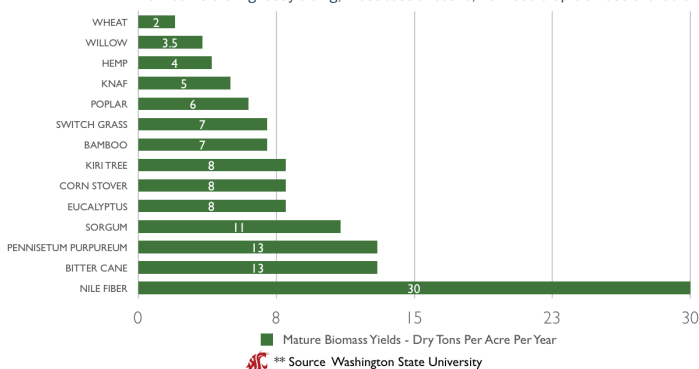
Our production systems offer us the opportunity to accommodate feedstocks needs to a diverse group of industries such as, liquid biofuels, materials used for thermal conversion into electrical energy, low impact, sustainable pulping material for use in paper manufacturing, building materials and many other uses. Many future uses are being developed which will maintain high demands for this crop. Such futures uses will be in bioplastics, chemical extracts, manufacturing of fertilizers and pharmaceuticals.

NILE FIBER™ PRIMARY STRATEGIC BENEFITS

- **Risk Reduction with Brand Name** – Trade Marked, Proprietary Cultivars
- **Distinguishable cultivar** – Easily controlled and identified outside of a cultivated field
- **Superior Proven Propagation Methodologies** – Exponential replication rates at low costs
- **Elite cultivars** – Selected for specialized performance in unique environments and focused end uses
- **Diverse genetic complement of cultivars and ecotypes** - Greatly reduces pressure from pathogens and environmental stresses
- **Perennial lifespan of plant** – needs planting only once every **20-30 years**
- **Low impact, self-sustaining, Carbon negative approach** utilizing proprietary and patented systems ensuring robust growth, consistent yields and superior performance, year after year

Competitive Outlook Biomass Yields

Nile Fiber is the highest yielding, most cost effective, non-food crop biomass available.



NILE FIBER™ SECONDARY BENEFITS

- Inexpensive propagation, as much a 60% less than other techniques with greater survivability and more plants per acre.
- Utilizes standard planting and harvesting techniques, requiring no specialized equipment.
- Yields per acre exceed other bio mass plants by as much as 300%
- Adaptable to many industries, energy, fuels, glycol's, pulp and paper, composite boards, phytoremediation, carbon sequestration, fertilizer production and animal feeds.
- Ability to propagate thousands of acres at a time at several locations with unskilled labor.
- Sustainable - Low impact, Self-Sustaining Yields Grows on Marginal Land.
- 0% Displacement of food crops on agricultural acreage Harvest on Demand - Only Harvest the acreage you need when you need it.
- High Yield with ambient rain fall.
- Minimizes crop soil erosion
- High Value Forage - Forage for Cattle (9% -14% crude Digestible Protein)
- Low Cost of Planting & Harvesting
- Localized Economic Investment - Keeping your Community dollars in your Community.
- Localized Job Creation - Creating family wage jobs for the Community.
- Carbon Negative - Removes carbon from the atmosphere.
- Minimal fertilizer or pesticide required
- Develops good soil structure





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NILE FIBER™ ENVIRONMENTAL BENEFITS

- **Phytoremediation and soil detoxifier** – Nile Fiber™ sequesters carbon from the atmosphere and phytoremediates **15 times faster per acre per year than any known plant or tree.**
- **Virtually eliminates soil erosion** – soil mass is bound tightly by a highly developed fibrous root system.
- **No tilling or disruption of the soil** – After initial planting the only mechanized component is gathering crop with a low ground pressure forage harvester.
- **Minimal chemical inputs** – No pesticides or fungicides needed
- **Low fertilizer requirements** – fertilizer applications are less than half that of conventional crops
- **Creates wildlife habitat** – Minimal disruption and long duration between harvests creates habitats for migratory birds and refuge from predators.
- **Reduces potential for drought** – Green belts cool the surface and draw moist cover from clouds increasing rainfall
- **Creates new soil** – Growing Nile Fiber creates new soil particles and increases soil depth and matrix over time.
- **Oxygenates the air and purifies the atmosphere** – high metabolism of Nile Fiber loads the environment with oxygen and reduces dusts and pollen

Our propriety propagation method is capable of producing **exponential platelets in 6 week cycles.**

OTHER ADVANTAGES OF NILE FIBER™

- No-till harvesting that maximizes annual carbon sequestration (120 tons Carbon per acre per year)
- Non-invasive, and not listed on the USDA noxious plant list for any state other than Texas
- Listed as a native species by the USDA for Hawaii
- Not considered a noxious or invasive plant by the Hawaii Department of Agriculture, and thus does not require any regulation
- Ability to grow at an accelerated rate (60 feet per year) ten months out of the year, allowing for 2-3 harvest cycles per year
- High energy output (8,300 BTU) that exceeds other biomass alternatives
- Ability to withstand extreme weather conditions including droughts and hurricanes
- Highest output of bioenergy per acre than any other biomass feedstock alternative
- Low cost (utilizing TreeFree technology) planting and harvesting costs that further validates Nile Fiber™ as the highest value (energy output divided by cost) biomass feedstock alternative

NILE FIBER™ 10,000 ACRE FARM CASE STUDY

10,000 acres Farm Case Study

Based on a 10,000 acres Farm, expected CO2 sequestration is expected to be 120 tons per year. That expected 10,000 acres farm, thus equates to 1.2 million tons of CO2 sequestered, resulting in the **equivalent of removing 210,526 cars from US roads**, and savings 2.97 million acres of rainforest — per year.

Soil Enhancement

Nile Fiber™ does an excellent job of preventing soil erosion as well as phytoremediation of the soil with its unique ability to absorb, degrade or eliminate pollutants in soils, water and air.

Land Conservancy

The high yield output of Nile Fiber™ provides the maximum amount of bioenergy per acre than any other biomass alternative, providing the maximum land conservancy while achieving the highest amount of bioenergy.

Research provided by University of Washington

Nile Fiber™ under optimal conditions.



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