



2011 Products & Services

SG Biofuels offers a fully integrated portfolio of products and services for growers, energy companies, research agencies and governments interested in developing successful and profitable Jatropha projects.

JMax Jatropha Optimization Platform™

The JMax Jatropha Optimization Platform™ is a custom crop improvement program providing access to the highest yielding and most profitable Jatropha in the world, the sequenced Jatropha genome and advanced biotech and synthetic biology tools to optimize elite, high-performing seeds of Jatropha for unique growing conditions.



Through the platform, SG Biofuels serves as a valued partner to organizations looking to validate and maximize the performance of Jatropha for current and future projects.

The JMax™ platform draws on the strength of the largest and most diverse library of Jatropha genetic material in the world. JMax™ eliminates the risks associated with planting existing commercial varieties of Jatropha through a customized, region-specific selection, breeding and biotechnology program.

The JMax™ platform includes:

- Establishment of one or more JMax™ Centers - an on-site test plot including a diverse range of high-performing accessions and hybrids.
- Access to the Jatropha genome sequence to accelerate trait development.
- Access to SG Biofuels’ plant science team to optimize the selection, breeding, and agronomic program.
- A custom crop improvement program tailored to climatic, soil and growing conditions to optimize yield while reducing input costs.

JMax™ Hybrid Seeds

Through its JMax™ hybrid seed product line, SG Biofuels provides growers the highest yielding, most uniform and profitable Jatropha in the world. Hybrid seeds result in greater yield, uniformity and vigor while significantly reducing handling and deployment costs for growers.

JMax™ hybrid varieties have been tested and developed for a range of climate and soil conditions. Through its research and development program, SG Biofuels continues to expand the regions for which JMax™ hybrid seeds are available.

For plantation developers and growers, benefits of JMax™ hybrid seeds include:

- Significantly enhanced productivity and cost efficiencies in scaling large plantations.
- Better root development compared to other propagation methods.
- Superior logistics including reduced handling costs (.7 grams per seed vs. 100 grams per

Key Hybrid Attributes	Benefits
Higher Yield - Increased number of seeds per plant with higher oil content per seed	Increased profits
Improved Harvesting - Synchronous flowering and branching structure provides harvesting efficiencies	Decreased costs
Reduced Agronomic Inputs - Improved pest resistance, stress tolerance, disease resistance, fertilizer reduction	Decreased input costs



seedling compared to tissue propagation method), and more efficient shipping compared to cuttings, which must be in the ground at maximum of seven days after they have been cut.

- Superior plant uniformity & hybrid vigor resulting in greater, more consistent yields and profitability.
- Significantly reduced timeline to commercial scale development.

Agricultural Services

SG Biofuels' Agricultural Services combine over 100 years of research expertise in plant biology, more than a quarter century of experience in plantation development, management and agronomic best practices and the downstream expertise and resources of the some of the largest, most-successful brands in agribusiness to optimize the profitability of Jatropha plantations.

Available services include:

- Plantation feasibility studies
- Agronomic best practices
 - Site selection
 - Site preparation
 - Propagation
 - Transplantation
 - Fertilization
 - Pest & Disease Control
 - Weed control
 - Pruning
 - Irrigation/water requirements
 - Intercropping
 - Harvesting
- Plantation development & management services
- Downstream supply chain development and management
 - Seed processing and crushing
 - Crude oil processing and harvesting
 - Unique off-take agreements

