Agrivida Presentation to TIMBR Conference

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Agrivida Delivers Low Cost Sugars from Cellulosic Biomass

Sugarcane
Sweet, forage, grain sorghum
Corn stover
Switchgrass, Miscanthus, perennial grasses

Biofuels: ethanol, butanol, synthetic diesels
Chemicals: monomers, polymers, plastics
Animal Feed
Enzymes, industrial proteins

Our engineered feedstocks enable production of a wide range of industrial biotechnology products.

Agrivida Energy Crops
Applications

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Biofuel Production

Current Feedstocks
- corn grain $$$
- cane sugar $

Future Feedstocks
- bagasse $
- corn stover $
- energy crops $

Agrivida's technology
- sugars
- grain / sucrose process $$
- ethanol
  - butanol
  - synthetic hydrocarbons
  - chemicals

Future Feedstocks
- cellulosic process $$$$

Agrivida provides benefits to the entire value-chain:
- Farmers: increased product portfolio
- Producers: ethanol production savings
- Consumers: reduced greenhouse gas emissions

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Agrivida GreenGenes™ Technology

1. Agrivida’s proprietary molecular engineering technology produces energy crops containing dormant enzymes.
2. The dormant enzymes are activated using a proprietary switch after harvest.
3. The activated enzymes degrade the cell wall, converting cellulose into sugar.

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Agrivida Capabilities

- Expression, characterization, and optimization of cell wall degrading enzymes
- Automated gene assembly, validation, and cloning
- High-throughput screening, candidate identification and characterization
- Plant transformation
- Protein engineering
- Mutagenesis
Commercialization Strategy

Agrivida
GreenGenes
Cellulosic Energy Crops

Technology Integration
Seed Generation and Regulatory Approval
Process Development and Construction
Product Launch

Trait Optimization
Today

Seed Partners
Field Trials

Engineering Partners
Process demonstrations
Facility operation
4-5 years

Trait license royalties
Biofuel royalties and production revenues

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