A Milestone for Sorghum Research

Sorghum research reached a new milestone in October as energy crop company Ceres, Inc. committed to a multi-year, joint research initiative with Texas A&M University's Texas Agricultural Experiment Station (TAES). This commitment represents one of the largest sorghum research deals underway today. The project will focus on development and marketing of high biomass sorghum for biofuel production, bringing some of the brightest minds in the country together with one of the most innovative crop research companies in the United States.

High biomass sorghum

Plant scientist Bill Rooney of TAES has studied the biofuel potential of high biomass sorghum for several years and believes that sorghum is a near-ideal crop for cellulosic biofuel production. His first breeding lines can stretch up to 20 feet tall and produce more than 2,000 gallons of ethanol per acre.

"Sorghum produces high yields, is naturally drought tolerant, and can thrive in places that do not support corn and other food crops," says Dr. Rooney. "Sorghum also fits into established production systems and is harvested the year it is planted, unlike perennial grasses, so it fits well in a crop mix with perennial species and existing crops, like cotton."

ceres

Ceres and TAES will also work together to expand their marker-assisted breeding efforts. Markers allow plant breeders to identify useful traits in seed tissue when plants are still seedlings and provide a road map of the sorghum genome, reducing product development time by years.

"As cellulosic refining technologies mature, farmers will transition from growing as much grain per acre to producing as much biomass as they can per acre, with as little energy and agronomic inputs as possible," said Peter Mascia, Ceres Vice President of Product Development. "This means new crops and specialized hybrids like these high-biomass sorghum types will be needed."

Texas Agricultural Experiment Station
THE TEXAS A&M UNIVERSITY SYSTEM

As per the agreement, TAES will receive financial and technology support from Ceres as well as royalties on products developed as a result of the joint research agreement. Ceres will maintain exclusive commercialization rights to any high biomass sorghum hybrids developed during the course of the program.

JUST A GLIMPSE

These numbers represent some of the federal research funding that NSP has helped secure for the sorghum industry.

$750,000 *Great Plains Sorghum Initiative*
Texas A&M University
Kansas State University
Texas Tech University
general sorghum research

$135,000 *USDA-ARS*
Little Rock, Arkansas
children's nutrition research

$200,343 *USDA-ARS*
Kansas State University
Texas Tech University
West Texas A&M University
Tx. Ag Experiment Station
University of Minnesota
Ag Research Service
Texas A&M University
New Mexico State University
distiller's grain research

$261,884 *USDA-ARS*
Stillwater, Oklahoma
insect resistance

$883,595 *USDA-ARS*
Lubbock, Texas
cold & drought tolerance and genetic research

$240,000 *USDA-ARS*
Bushland, Texas
irrigation studies and cropping systems

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