EXPLOITABLE FOREGROUND

Sweet Sorghum Variety to Produce New Female for Sweet Sorghum Hybrids in Mexico – WYR

Explanation and Purpose

This fertile genotype shows sterility reaction when crossed with females on C1 cytoplasm. This male was selected among other genotypes with the same reactions due to the superiority on ºBrix (ºBrix > 20) and more stable sterility reaction in different environments. It is a derivative of Rox Orange produced at the Facultad de Agomomía, UANL. It was used to produce the first sweet sorghum female line known in Mexico selected specifically for sweetness and juice production.

Exploitation Strategy

This genotype can be used as a male parent to produce new sweet sorghum females when crossed with other sweet sorghum males (with B reactions) using hand emasculation to produce new combinations. This approach can be effective using sweetness and juice production as selection criteria. The females being produced can be used to make better hybrids with top values for ºBrix and juice production.

IPR Measures

Patent application was initiated at SERVICIO NACIONAL DE INSPECCION Y CERTIFICACION DE SEMILLAS (SNICS), the Mexican National System for registration and certification of seeds.

Further Research

This male shows some variation due to the open pollinated characteristics. The variety needs to be more uniform through several self-generations. It is important to produce more homogeneous genotypes to produce more uniform sweet sorghum females and consequently more uniform hybrids. This male needs to be tested in a wide range of environments to evaluate the fertility reactions.

Impact of Exploitation

The use of this male variety will produce good forage quality and high yield. This male will increase the probability to find better sweet sorghum hybrids for ethanol production.

SWEETFUEL

Sweet Sorghum: an alternative energy crop

Contact for Exploitable Result:

UANL, Mexico
Francisco Zavala Garcia
francisco.zavalagr@uanl.edu.mx

Project Coordination:

CIRAD, France
Serge Braconnier
serge.braconnier@cirad.fr

Project Dissemination:

WIP – Renewable Energies, Germany
Rainer Janssen
Dominik Rutz
rainer.janssen@wip-munich.de
dominik.rutz@wip-munich.de

SWEETFUEL Website:
www.sweetfuel-project.eu

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